Canadian Nuclear Safety Commission



Commission canadienne de sûreté nucléaire

Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held on January 29, 2025



Minutes of the Canadian Nuclear Safety Commission (CNSC) meeting held in person and virtually on Wednesday, January 29, 2025, beginning at 9:00 am (CST), at the Delta Hotel Saskatoon Downtown, 405 20th Street East, Saskatoon Michelangelo Ballroom. This meeting was webcast live via the CNSC website, and video archives are available on the CNSC website.

Present:

P. Tremblay, PresidentT. Berube (via Zoom)A. Hardie (via Zoom)M. LacroixV. RemendaJ. Hopwood (via Zoom)

C. Salmon, Commission Registrar C. Howlett, General Counsel

T. Takala, Recording Secretary

CNSC staff advisors: A. Viktorov, P. Burton, E. Lemoine, A. Bulkan, J. Stevenson, D. Trylinski, A. Levine, R. Lane, C. Dodkin, R. Snider, B. Johnston, R. Froess, J. Lam, R. Tennant, M. Fabian Mendoza, A. Ethier, S. Boser, U. Sampat, M. Healy, and D. Sauvé

Other contributors:

Bruce Power: M. Burton and A. LondonOntario Power Generation: S. Irvine and K. CarewCameco Corporation: L. Mooney, K. Nagy and K. CuddingtonOrano Canada Inc.: C. Braithwaite, C. Hyndman, B. Mitchell, and K. HughesSaskatchewan Ministry of Energy and Resources: K. BrechtSaskatchewan Ministry of Labour Relations and Workplace Safety: D. Rezansoff

Constitution

- With the notice of meeting <u>Commission Member document</u> (<u>CMD</u>) <u>25-M1</u> having been properly given and quorum for a meeting of the Commission being met, the meeting was declared to be properly constituted.
- For the meeting, <u>CMD 25-M4 to CMD 25-M7</u>, and <u>CMD 25-M4.14</u> were distributed to Commission Members. These documents are further detailed in Appendix A of these minutes.

Adoption of the Agenda

3. The revised agenda, <u>CMD 25-M2.B</u>, was adopted as presented.

Chair and Registrar

4. The President, P. Tremblay, chaired the meeting of the Commission, assisted by C. Salmon, Commission Registrar.

Participant Funding Program

- 5. In its <u>Notice of Participation at a Commission Meeting and</u> <u>Participant Funding</u>, the CNSC invited members of the public to intervene by way of written submission regarding the <u>Regulatory</u> <u>Oversight Report for Uranium Mines, Mills, Historic and</u> <u>Decommissioned Sites in Canada: 2023</u>. In the spirit of reconciliation and in recognition of the Indigenous oral tradition for sharing knowledge, Indigenous Nations and communities were invited to also make oral presentations regarding CNSC staff's Regulatory Oversight Report.
- The CNSC announced the availability of funds through the <u>Participant Funding Program (PFP)</u> to assist in the review of CNSC staff's Regulatory Oversight Report. A <u>Funding Review</u> <u>Committee</u> – independent of the CNSC – reviewed funding applications and made recommendations for funding to the eligible applicants.

Minutes of the Commission Meeting Held November 7, 2024

7. The Minutes of the Commission Meeting held on November 7, 2024, were not available at the time of this meeting and would be provided to the Commission for approval ahead of the next Commission meeting in February 2025.

STATUS REPORT ON POWER REACTORS

- 8. With reference to <u>CMD 25-M5</u>, which includes the Status Report on Power Reactors, CNSC staff presented the following updates:
 - Pickering Unit 6 was shut down on January 14, 2025, for a maintenance outage to repair a stuck closure plug on a fuel channel. The unit was synchronized to the grid on January 20 and returned to full power operation
 - Pickering Unit 7 was operating at 96% full power due to fuel handling unavailability
 - Bruce Power performed a single channel drip test on shutdown system 1 of Unit 5 on January 8, 2025. The channel being tested tripped as expected; however, a mercury rated relay contact malfunctioned, resulting in an unplanned outage. Bruce Power replaced the relay and returned the unit to service on January 10, 2025. Additionally, Bruce Power took Unit 5 offline for a planned maintenance outage on January 18, 2025
- 9. The Commission, noting the update with respect to hydrogen equivalent concentrations ([Heq]) in pressure tubes included in CMD 25-M5, requested that CNSC staff provide the Commission with a more detailed technical progress report, similar to a previous report (CMD 23-M3). The Commission directed that the report includes specific information on the crack initiation model, the fracture toughness model, and the crack growth rate model. CNSC staff responded that it would work with industry to provide an update on the requested topics.
- 10. The Commission asked Ontario Power Generation for additional information on the reported event at the Darlington Nuclear Generating Station (NGS) where 11,000 litres of lube oil leaked into Lake Ontario. CNSC staff and OPG representatives provided information on the following:
 - CNSC staff's follow-up in collaboration with Environment and Climate Change Canada (ECCC)
 - OPG's response to the leak, including corrective actions
 - that the 11,000 litres of lube oil leaked in small amounts over a long period of time and the concentrations of lube oil at the outflow would not have been detectable in the lake
 - OPG would review all aspects of its monitoring programs as part of the follow-up investigation of this event

ACTION By March 2026

- 11. The Commission had several questions regarding Bruce Power's mercury wetted relays. Bruce Power representatives and CNSC staff provided information with respect to the following topics:
 - the program for the replacement or maintenance of mercury wetted relays, and CNSC staff's regulatory oversight of same
 - the number of non-tin doped mercury wetted relays in service¹
 - the maintenance schedule of mercury wetted relays
- 12. The Commission requested information regarding the oversight of the decontamination of areas around Unit 4 prior to major component replacement. Bruce Power representatives and CNSC staff provided the following in response:
 - the chemical cleaning activity will be done as a high-risk evolution like that done on Unit 3, with additional monitors in place and more workers conducting radiation surveys
 - CNSC staff would use field inspections and follow-ups based on the lessons learned from the Unit 3 decontamination
- 13. The Commission, noting that there were several events related to Darlington NGS Unit 1's return to service, asked for more information on how those events were being investigated. Representatives from OPG and CNSC staff responded that:
 - OPG was conducting a common cause investigation on the refurbishment-related activities, including lessons learned from its process that was developed for the return-to-service evolutions
 - CNSC staff followed up on each event to ensure that OPG's response was satisfactory and, given the number of events, was developing an approach to assess OPG's performance more holistically

¹ Prior to the closure of the meeting, CNSC staff informed the Registry that Bruce Power had been systematically replacing all non-tin doped mercury-wetted relays on Shutdown System 1 for all units as part of its asset management program. CNSC staff noted that 24 non-tin doped mercury-wetted relays remained and that these would be replaced in the ongoing Unit 5 planned maintenance outage.

UPDATES ON ITEMS FROM PREVIOUS COMMISSION PROCEEDINGS

Update from CNSC Staff on the Decision regarding the inclusion of radionuclides as a chemical of mutual concern under the Great Lakes Water Quality Agreement (Action Item #19575)

14. With reference to <u>CMD 25-M6</u>, the Commission noted that it was satisfied with the information presented and had no questions.

INFORMATION ITEMS

<u>Updates to the Commission on Status of the Proposed Micro Modular</u> <u>Reactor Project at Chalk River Laboratories</u>

15. With reference to <u>CMD 25-M7</u>, the Commission noted that it was satisfied with the information presented and had no questions.

<u>Verbal Report to the Commission on recent incident at McArthur River</u> <u>Operation</u>

- 16. CNSC staff provided a verbal update regrading an event at Cameco Corporation's McArthur River Operation (MRO),² which resulted in a serious injury to a worker's hands. CNSC staff discussed the following topics:
 - a description of the mining method at the MRO
 - the activity that was being performed when the injury happened (fixing a steel plate to hold concrete)
 - the immediate response to the injury, and that the worker was treated in hospital and discharged the following day
 - that Cameco was required to submit a detailed report on February 8, 2025³
 - CNSC staff's response and future follow up actions
- 17. The Commission Members expressed their concerns for the injured worker, as well as the worker's coworkers and family.

² The <u>McArthur River Operation</u> is a uranium mine, located approximately 620 kilometres north of Saskatoon, Saskatchewan. The McArthur River Operation is located on Treaty 10 territory (1906) and the Homeland of the Métis, and within the traditional territories of the Denesultiné, Cree, and Métis peoples.
³ A full report is required 21 days following a licensee becoming aware of a situation, per subsection 29(2) of the *General Nuclear Safety and Control Regulations*.

- 18. The Commission asked Cameco for information on its response to the event, including root cause analysis and mitigating actions to prevent reoccurrence. A Cameco representative provided the following:
 - Cameco's actions included:
 - o freezing the incident scene
 - o standing down all high-risk activities at the facility
 - making a counsellor available to site personnel
 - conducting a job hazard analysis to safely restore the worksite
 - Cameco had a root cause investigation underway

CNSC staff informed the Commission that it was awaiting the detailed report to incorporate the findings into oversight activities at the MRO and other uranium mine and mill facilities.

- 19. The Commission asked several follow up questions. In response, Cameco representatives and CNSC staff provided information on the following:
 - the status of the MRO, noting that work had restarted
 - that Cameco would continue to look for opportunities to improve its work activities and risk analysis based on experience and worker feedback
 - how Cameco communicated lessons learned on job planning and hazard recognition to other Cameco sites
 - additional details on the work being performed at the time of the injury
 - that the steel plate becoming fixed to the concrete is unusual but not uncommon

Regulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned Sites in Canada: 2023

- With reference to <u>CMD 25-M4</u> and <u>CMD 25-M4.A</u>, CNSC staff presented its *Regulatory Oversight Report for Uranium Mines*, *Mills, Historic and Decommissioned Sites in Canada: 2023* (UMM ROR). The UMM ROR summarizes the safety performance of the following uranium mines and mills that were licensed to operate in 2023:
 - Cameco's Cigar Lake Mine (Cigar Lake)
 - Cameco's McArthur River Mine (McArthur River)
 - Cameco's Rabbit Lake Mine and Mill (Rabbit Lake)
 - Cameco's Key Lake Mill (Key Lake)
 - Orano Canada Inc.'s (Orano) McClean Lake Mine and Mill (McClean Lake)

Additionally, the UMM ROR includes reporting on the previous 3 years (2021-2023) of the Historic and Decommissioned Sites in Canada:

- Gunnar (Saskatchewan)
- Madawaska (Ontario)
- Lorado (Saskatchewan)
- Beaverlodge (Saskatchewan)
- Cluff Lake (Saskatchewan)⁴
- Rayrock (Northwest Territories)
- Port Radium (Northwest Territories)
- Agnew Lake (Ontario)
- Bicroft (Ontario)
- Dyno (Ontario)
- Elliot Lake Rio Algom Sites (Ontario)
- Elliot Lake Denison and Stanrock (Ontario)
- 21. The UMM ROR includes the following information:
 - an overview of CNSC staff's regulatory oversight activities
 - an overview of recent operational activities at each Uranium Mines and Mills (UMM)
 - CNSC staff's assessment of performance for each UMM, the decommissioned and historic facilities across all 14 CNSC <u>safety and control areas</u> (SCAs), with a focus on the radiation protection, conventional health and safety, and environmental protection SCAs
 - engagement with Indigenous Nations and communities
 - reportable events and other matters of regulatory interest, including public engagement and the CNSC's Independent Environmental Monitoring Program (IEMP)
 - a new set of dashboards summarizing results for each operating facility
- 22. In addition, CNSC staff's presentation provided:
 - key themes from interventions received regarding the UMM ROR, including Indigenous engagement and consultation and public access to reporting data
 - minor errata to the UMM ROR
 - an update on CNSC staff's collaboration with the Province of Saskatchewan
 - an update on the <u>2023 Inspector's Order</u> issued to Cameco regarding the use of expired personal protective equipment (PPE) by the Rabbit Lake Emergency Response Team

⁴ The UMM ROR covers the period up to the site being released from CNSC licencing on May 10, 2023.

- an update on the <u>2024 Administrative Monetary Penalty</u> (AMP) issued to Cameco regarding Cameco's failure to inform the CNSC of a delay in implementing the CSA group standard N393-13, *Protection for Facilities That Process, Handle, or Store Nuclear Substances*, at Cameco's UMMs
- 23. In 2023, CNSC staff rated all SCAs for each operating UMM as "satisfactory". For the historic and decommissioned sites, CNSC staff rated the radiation protection, conventional health and safety, and environmental protection as "satisfactory" from 2021-2023. The Dyno and Madawaska site was rated "Below Expectations" in 2022 for management systems, and Port Radium had "Below Expectations" from 2021-2023 for operating performance. CNSC staff noted that the lower performance ratings had low safety significance.
- 24. CNSC staff concluded that in 2023, workers at each facility were protected from radiation and conventional health and safety hazards, and that there were no environmental releases that could harm the environment or the health and safety of people.
- 25. Representatives from Cameco and Orano made oral comments on the UMM ROR. The representatives noted their organizations' agreement with the conclusions of the UMM ROR, provided additional information on the activities of their respective organizations in 2023, and highlighted their organizations' commitments to building meaningful relationships with Indigenous Nations and communities. The Cameco representative also acknowledged the AMP and Inspector's order issued to Cameco.
- 26. The Commission sought additional information on the following topics:
 - Cameco's delay in implementing CSA Group standard N393-13, *Fire protection for facilities that process, handle, or store nuclear substances*
 - licensees' protective measures against wildfires
 - licensees' use of expired fire protection equipment and PPE
 - communications and efforts made to translate information to Indigenous languages
 - the cause of the increase in maximum effective dose at the operating facilities
 - if licensees make counselling services available to workers when serious events occur
 - the rise of non-compliances over the 2022 and 2023 period
 - CNSC staff's oversight of licensee corrective actions

- 27. In their responses, CNSC staff, Cameco representatives, and Orano representatives provided the following:
 - Cameco representatives explained that Cameco had underestimated the complexity and time required for the inperson third party assessments that were required to implement CSA N393-13; the required assessments have since been completed and Cameco is addressing the findings of those assessments
 - Cameco and Orano representatives stated that the licensees work closely with the Saskatchewan Public Safety Agency to manage wildfire response
 - a Cameco representative stated that Cameco increased oversight of its programs because of the 2023 inspector order regarding the expired PPE and initiated audits that will lead to broader systemic changes
 - CNSC staff described its oversight of licensee management systems and the monitoring of corrective actions
 - CNSC staff stated that it has been making efforts on translation, such as live translation in Cree and Dene; CNSC staff noted that Indigenous Nations have communicated that written translations were not as helpful as live oral translation
 - Cameco and Orano representatives confirmed that the licensees also provide simultaneous translation when communicating with Indigenous communities, with a focus on oral communication
 - an Orano representative stated that the loss of experienced workers, absenteeism and high turnover led to the increase in maximum effective dose at McClean Lake, and that Orano has increased staffing levels in response
 - a Cameco representative noted that 2023 was the first full year of production after coming out of care and maintenance at Key Lake and McArthur River, and that there was a significant number of new workers; Cameco expects the maximum effective dose to plateau over time
 - CNSC staff added that 4 of the 5 maximum effective doses across the sites were for workers involved in events that led to unplanned intakes and action level exceedances; CNSC staff noted that the average worker doses were stable, which indicates that the maximum effective doses were clearly related to the events
 - Cameco and Orano representatives stated that subject matter experts and counselling services are available to workers involved in incidents at sites

- Cameco representatives stated that the increase in instances of non-compliance was related to a combination of the restart of facilities, an increase in inspections, and an increase in new workers
- CNSC staff described the changes to its inspection process to allow for more efficiency in inspections; CNSC staff reiterated that the safety significance of many of the non-compliances was low, and not indicative of the performance of the licensee's programs

Interventions

- 28. With respect to the CNSC's <u>PFP availability for the 2023 UMM</u> <u>ROR</u>, the Funding Review Committee recommended that <u>up to</u> <u>\$144,440.60 in participant funding</u> be provided to 7 applicants. These applicants, along with their interventions, are listed below:
 - English River First Nation (<u>CMD 25-M4.4</u>)
 - Ya'thi Néné Lands and Resources Office (<u>CMD 25-M4.5</u> and <u>CMD 25-M4.5A</u>)
 - Manitoba Métis Federation (<u>CMD 25-M4.8</u> and <u>CMD 25-M4.8</u>)
 - Athabasca Chipewyan First Nation (<u>CMD 25-M4.9</u> and <u>CMD 25-M4.9A</u>)
 - Nuclear Transparency Project (<u>CMD 25-M4.10</u>)
 - Northwatch (<u>CMD 25-M4.11</u>)
 - Kineepik Métis Local #9 (CMD 25-M4.12)
- 29. In addition to the interventions received from PFP recipients, the Commission also received the following interventions regarding the UMM ROR:
 - Métis Nation Saskatchewan (CMD 25-M4.13)
 - Saskatchewan Mining Association (CMD 25-M4.1)
 - Northern Saskatchewan Environmental Quality Committee (NSEQC) (<u>CMD 25-M4.2</u>)
 - Canadian Nuclear Association (CMD 25-M4.3)
 - Athabasca Joint Environmental Subcommittee (<u>CMD 25-M4.6</u>)
 - Township of Nairn and Hyman (<u>CMD 25-M4.7</u>)
 - Chris Houston (<u>CMD 25-M4.14</u>)

- 30. English River First Nation (ERFN) provided the Commission with an oral presentation and written submission that included a report by R. Kusch, an environmental scientist hired by ERFN to review the technical aspects of the UMM ROR. The report reviewed the findings of the UMM ROR and provided several recommendations and requests for clarification. ERFN reported that it had no reason to object to CNSC staff's conclusions in the UMM ROR.
- 31. The Commission sought additional information regarding ERFN's submission, including:
 - the CNSC's Independent Environmental Monitoring Program (IEMP), and areas for improvement
 - arsenic loading at Cigar Lake
 - the design of the water treatment facilities at UMMs
 - the public availability of information on the Saskatchewan Institutional Control program
- 32. In their responses, ERFN, CNSC staff, Cameco representatives, Orano representatives and representatives from the Saskatchewan Ministry of Energy and Resources provided the following:
 - ERFN expressed the desire for the CNSC to expand the IEMP to include items like willow trees, cedar and pine; medicines like sage and sweetgrass; and land-based items that are used in ceremonies
 - CNSC staff reaffirmed the CNSC's commitment to the IEMP and working with communities to ensure that it is a meaningful program for them to participate in
 - Cameco and Orano representatives highlighted the licensees' participation in the Eastern Athabasca Regional Monitoring Program as an avenue for community involvement in sampling in the region
 - Cameco representatives explained that Cameco had undertaken multiple measures to reduce the arsenic loading to the environment, and while arsenic loadings in 2023 were above the Environmental Risk Assessment (ERA) range prediction, the levels remain below regulatory requirements, and are stable
 - CNSC staff reviewed the effluent and environmental monitoring data provided by Cameco for Cigar Lake, with a focus on arsenic, and concluded that Cameco has been effective in reducing arsenic loadings to the environment; CNSC staff added that the environment around Cigar Lake is adequately protected

- Orano and Cameco representatives described the methods and technology used for water treatment at their facilities
- the representative from the Saskatchewan Ministry of Energy and Resources clarified that sites identified by ERFN were in the process of being added to the Saskatchewan Institutional Control Program and committed to updating the program registry once the process has been completed for those sites
- 33. The Commission noted its appreciation of ERFN's detailed intervention and for the ERFN's elders opening of the meeting.
- 34. Ya'thi Néné Lands and Resources Office (YNLR) provided the Commission with an oral presentation and written submission. YNLR acknowledged that many non-compliances were low risk but contested CNSC staff's assertion that there were no "concerning trends between 2023 and previous years" as the number of notices of non-compliance increased over the past two years. YNLR also recommended that the CNSC expand IEMP efforts throughout the Athabasca basin and noted its strong opposition to the long licence terms issued for the Key Lake, McArthur River and Rabbit Lake facilities. YNLR noted that it's looking forward to continuing collaboration with CNSC staff through its terms of reference.
- 35. The Commission sought additional information regarding YNLR's submission, including on:
 - improvements to the IEMP
 - efforts and initiatives being made to improve conventional health and safety outcomes at UMMs
 - Cameco's approach to supervisors carrying out field observations
 - how the experience of Nuclear Energy Workers at the licensee facilities are incorporated into the overall population's view of health
- 36. In their responses, YNLR, CNSC staff, Cameco representatives, Orano representatives and representatives from the Saskatchewan Ministry of Labour discussed the following:
 - YNLR suggested that the IEMP could be applied throughout their territory and to new proposed mines and exploration programs
 - CNSC staff explained that the current scope of the IEMP is focused on active nuclear facilities, and sampling further afield has not been considered. CNSC staff noted its support for the Eastern Athabasca Regional Monitoring Program, which does sample further from the facilities

- Cameco representatives explained the initiatives Cameco uses to improve conventional health and safety, including a Stop, Think, Act, Review (STAR) program and fatigue management
- Orano representatives explained that a pathway to safety program, as well as an operational focus on hazard operability studies and identifying risks, are used to improve conventional health and safety
- Saskatchewan Ministry of Labour representatives noted that the Saskatchewan Mining Association annual safety summit, in which licensees participate, is a positive forum for sharing health and safety lessons learned within the Saskatchewan mining sector
- CNSC staff outlined its collaboration with the Saskatchewan Ministry of Labour
- Cameco representatives explained that front line supervisors are relied on for field observations and layered audits where higher level supervisors review job requirements and discuss those requirements in the field
- a Cameco representative stated that the licence term does not change Cameco's commitment to protect the environment and its workers, or its communications with rights-holders and communities in northern Saskatchewan
- CNSC staff explained the work conducted by the CNSC in relation to assessing the overall health of Nuclear Energy Workers through the <u>Canadian Uranium Workers Study</u>
- 37. Kineepik Métis Local #9 (KML) provided the Commission with an oral presentation and written submission that focused on partnerships, professional development, cultural integration and the safety concerns that community members face due to industry development. During its presentation, KML noted its appreciation for the increasing support from the CNSC's capacity funding and participant funding, impact benefit agreements with UMM licensees, and engagement opportunities with the Province of Saskatchewan. KML also expressed its view of the importance of developing science, technology, engineering and mathematics (STEM) capacity in Indigenous Nations and communities. KML explained that an increase in STEM capacity would enable long-term community sustainability by preparing community members for technical and leadership positions in the mining industry.
- 38. The Commission sought additional information regarding YNLR's submission, including on:
 - road conditions on public highways

- training programs run by licensees for leadership for Indigenous women around the mines
- the ways in which Indigenous communities are able to engage with licensees at the leadership level
- 39. In their responses, CNSC staff, Cameco representatives and Orano representatives discussed the following:
 - a Cameco representative explained Cameco's use of northern contractors, compliance with seasonal restrictions on northern roads and the heavy haul agreement Cameco has in place with the Province of Saskatchewan; Cameco has been working with the Province of Saskatchewan to increase maintenance funds for the northern roads that Cameco utilizes
 - an Orano representative stated that Orano uses the roads and meets with the Province of Saskatchewan to raise concerns that it has heard from communities through public outreach
 - CNSC staff noted that, while road conditions are outside the mandate of the CNSC, licensees are required to have programs for the transportation of dangerous goods; materials must be packaged and transported safely, and road conditions are taken into account
 - a Cameco representative described Cameco's training program, including a 3-month work placement at a Cameco facility, which has priority for qualified candidates from local communities like Pinehouse, as well as Cameco's inclusion and diversity program, which involves northern community leadership as part of the discussions to shape the program
 - an Orano representative stated that Orano executives meet with community leadership on an annual basis
- 40. Further to the question regarding road conditions, Commission Members noted that representatives from the Saskatchewan Ministry of Transportation and Transport Canada should be invited to the next UMM ROR to share their perspective.
- 41. Métis Nation Saskatchewan (MN-S) provided the Commission with an oral presentation that focused on the recognition of Métis Nation Saskatchewan's jurisdiction and self-governance.
- 42. The Commission asked CNSC staff for more information on the CNSC's engagement with MN-S. CNSC staff confirmed that the CNSC views the MN-S as rights-holding, and noted that it would continue to engage with MN-S.

- 43. Athabasca Chipewyan First Nation provided the Commission with an oral presentation and written submission that focused on the protection of ACFN's Aboriginal and treaty rights from the environmental impacts of industry developments within ACFN's territory. ACFN made 11 recommendations for the Commission and licensees, including the following:
 - that the UMM ROR should address the risks and health of Indigenous peoples with respect to site preparation
 - that the characterization of risks to health and the environment needs to involve input from local Indigenous communities and reflect their real usage of the land and resources
 - enhancing engagement by reassessing timelines to ensure they allow for adequate participation and exploring more effective methods to communicate operational activities and updates
 - that the CNSC should provide feedback to ACFN and other Indigenous Nations on their input even if changes are not made to CNSC process and regulations
 - removing any statements suggesting that remediation efforts can fully restore historic mines and mills to their original environmental conditions or previous land uses

ACFN also acknowledged CNSC's commitment to meaningful and ongoing engagement with Indigenous groups.

- 44. The Commission sought additional information regarding ACFN's submission, including on:
 - how a safety assessment of country foods may change if assessed from the usage of a heavy user rather than that of a "typical consumer"
 - the terms of reference that ACFN and CNSC staff were developing and how the agreement might facilitate the adoption of Indigenous knowledge into water monitoring programs
 - the CNSC's and licensees' communication strategies for engaging with ACFN
- 45. In their responses, CNSC staff, Cameco representatives and Orano representatives provided the following:
 - CNSC staff explained that the intention of the human health risk assessment is to calculate the exposure to the most sensitive receptor; the models for determining the exposure are being updated by licensees on a 5-year cycle and the current health risk assessments are based on a traditional lifestyle and the consumption of country foods

- CNSC staff confirmed that it's safe to continue to eat country foods and to use the land in a traditional way
- CNSC staff confirmed that, in 2024, ACFN and CNSC staff signed a long-term terms of reference for engagement, and that CNSC staff has monthly meetings with ACFN to discuss issues and concerns
- a Cameco representative noted that Cameco has adapted its engagement to allow for opportunities for dialogue and to respond to questions and comments received from the ACFN
- 46. Further to the safety assessment of country foods, CNSC staff mentioned that the CSA Group standard N288.6, *Environmental risk assessments at Class I nuclear facilities and uranium mines and mills,* was updated in 2022 and now includes enhanced guidance on how to incorporate traditional foods and Indigenous lifestyles into risk assessments.
- 47. The Manitoba Métis Federation (MMF) provided the Commission with an oral presentation and written submission which focused on providing a review of the facilities and decommissioned sites in Saskatchewan. MMF provided 9 recommendations/comments, including on the following topics:
 - compliance and non-compliance trends
 - enhancing emergency preparedness
 - improving environmental protection and communication
 - advancing waste management and decommissioning practices
 - strengthening oversight of packaging and transport
 - addressing psychosocial concerns

The MMF expressed the view that CNSC staff's lack of engagement with MMF on UMM files was a key gap that must be addressed for proper engagement with Métis rights holders.

- 48. The Commission sought additional information regarding MMF's submission, including on:
 - the terms of reference agreement between the CNSC and the MMF
 - the processes that are used to determine which events are posted to the CNSC's or licensees' public websites

- 49. In their responses, CNSC staff, Cameco representatives and Orano representatives discussed that:
 - CNSC staff and the MMF were close to formalizing a terms of reference agreement and have identified key areas of focus for engagement
 - the CNSC has a process for determining how events are reported on the public CNSC website, and that CNSC staff use the ROR for a comprehensive record of all reportable events during the calendar year
 - Orano and Cameco representatives explained the processes established by their public information program and public disclosure protocols

Discussion

- 50. The Commission asked for further information on the following matters related to the UMM ROR:
 - clarity on the concerns around the Agnew Lake Tailings Management Area (Agnew Lake TMA) raised in the written interventions by Northwatch (<u>CMD 25-M4.11</u>) and the Township of Nairn and Hyman (<u>CMD 25-M4.7</u>)
 - an ammonia leak event at the Cigar Lake Operation
 - the concern identified in the written intervention by Chris Houston (<u>CMD 25-M4.14</u>) around trace levels of uranium around the former Madawaska site and the potential risks
- 51. Representatives from the UMM licensees provided the following responses to the Commission's questions:
 - Cameco representatives stated that, in addition to immediately fixing the ammonia leak, Cameco also assessed the condition of other similar infrastructure, and shared information to its other facilities
- 52. CNSC staff provided the following responses to the Commission's questions:
 - in response to concerns identified by the Township of Nairn and Hyman and Northwatch, CNSC staff provided details on the work conducted in relation to the facility and CNSC staff's environmental risk assessment; CNSC staff concluded that the deficiencies in the Agnew Lake tailings cover and the plans for the transfer of niobium material to the Agnew Lake TMA for the repair do not pose a risk to the environment or public health

- a human health risk assessment conducted for the Madawaska facility by the licensee in 2012, which considered key contaminants of concern, concluded that there were no human health concerns; CNSC staff continue to review environmental monitoring data from the licensee
- 53. Regarding Saskatchewan UMM operations in 2023, representatives from the Saskatchewan Ministry of Environment and the Saskatchewan Ministry of Labour Relations and Workplace Safety noted that their organizations also inspected the UMM facilities in 2023. The representatives stated that there were no safety concerns with the operation of the facilities.
- 54. The Commission recognized the quality of the UMM ROR and expressed its appreciation for the information provided by CNSC staff, licensees and intervenors during the question period. Commission Members commended CNSC staff on the Dashboards for the UMM ROR.

Closure of the Public Meeting

55. The public meeting closed at 5:08 pm (CST), on January 29, 2025. These minutes reflect both the public meeting itself and the Commission's considerations following the meeting.



Recording Secretary



Commission Registrar

APPENDIX A

	Date	e-Docs No.		
25-M1	2025-01-10	7432163		
Notice of Meeting of the Commission on January 29, 2025				
25-M2	2025-01-13	7433008		
Agenda of the Meeting of the Canadian Nuclear Safety Commission (CNSC) to be held on January 29, 2025, at 405 20 th Street East, Saskatoon, Saskatchewan				
25-M2.A	2025-01-17	7440915		
Revised agenda of the Meeting of the Canadian Nuclear Safety Commission (CNSC) to be held on January 29, 2025, at 405 20 th Street East, Saskatoon, Saskatchewan				
25-M2.B	2025-01-24	7449441		
be held on January 29, 2025,	ng of the Canadian Nuclear Sa at 405 20 th Street East, Saskat			
25-M4	2024-10-07	7289425 – English 7357194 – French		
Information Item				
Regulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned Sites in Canada: 2023				
Written submission from CNSC Staff				
25-M4.A	2025-01-17	7423226 – English 7442799 – French		
Information Item Regulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned Sites in Canada: 2023 Presentation from CNSC Staff				
25 M4 1	2024-12-08	7422217		
25-M4.12024-12-087423217Information ItemRegulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned Sites in Canada: 2023				
Written submission from the Saskatchewan Mining Association				
25-M4.2	2024-12-09	7424036		
Information Item Regulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned				
Sites in Canada: 2023 Written submission from the Northern Saskatchewan Environmental Quality Committee				

Information ItemRegulatory Oversight Report for U Sites in Canada: 2023Written submission from the Cana25-M4.4202Information ItemRegulatory Oversight Report for U Sites in Canada: 2023Presentation from the English Rive25-M4.5202Information ItemRegulatory Oversight Report for U Sites in Canada: 2023Presentation from the English Rive25-M4.5202Information ItemRegulatory Oversight Report for U Sites in Canada: 2023Written submission from the Ya'th 25-M4.5A25-M4.5A202Information ItemRegulatory Oversight Report for U Sites in Canada: 2023Written submission from the Ya'th 25-M4.5A202Information ItemRegulatory Oversight Report for U Sites in Canada: 2023	dian Nuclear Association 4-12-09 Jranium Mines, Mills, Hi er First Nation 4-12-10 Jranium Mines, Mills, Hi	1 7408681 storic and Decommissioned 7408696			
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25-M4.5A202Information ItemRegulatory Oversight Report for U Sites in Canada: 2023		0.00			
Information Item Regulatory Oversight Report for U Sites in Canada: 2023	Written submission from the Ya'thi Néné Lands and Resources Office				
Regulatory Oversight Report for U Sites in Canada: 2023	5-01-15	7443379			
Presentation from the Va ² thi Néné	Regulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned				
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25-M4.6 202 Information Item	4-12-10	7425111			
Regulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned Sites in Canada: 2023 Written submission from the Athabasca Joint Environmental Subcommittee (AJES)					
25-M4.7 202	4-12-10	7425207			
Information Item		1			
Regulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned Sites in Canada: 2023					
Written submission from the Township of Nairn and Hyman					

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25-M4.8	2024-12-10	7408730		
Information Item				
Sites in Canada: 2023		Mills, Historic and Decommissioned		
Written submission from	n the Manitoba Métis Fede	ration		
25-M4.8A	2025-01-15	7443690		
Information Item				
Regulatory Oversight R Sites in Canada: 2023	eport for Uranium Mines, I	Mills, Historic and Decommissioned		
Presentation from the N	Ianitoba Métis Federation			
25-M4.9	2024-12-10	7408704		
Information Item		· · · · · ·		
Sites in Canada: 2023	eport for Uranium Mines, I n the Athabasca Chipewyar	Mills, Historic and Decommissioned n First Nation (ACFN)		
25-M4.9A	2025-01-15	7444191		
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Regulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned Sites in Canada: 2023				
Presentation from the A	thabasca Chipewyan First	Nation (ACFN)		
25-M4.10	2024-12-11	7408718		
Information Item				
Sites in Canada: 2023		Mills, Historic and Decommissioned		
Written submission from	n the Nuclear Transparency	y Project		
25-M4.11	2024-12-11	7425570		
Information Item				
	eport for Uranium Mines, I	Mills, Historic and Decommissioned		

CMD	Date	e-Docs No.		
25-M4.12	2025-01-15	7408745		
Information Item	·			
Regulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned Sites in Canada: 2023				
Presentation from the Kineep	ik Métis Local #9			
25-M4.13	2025-01-15	7443709		
Information Item				
Regulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned Sites in Canada: 2023 Presentation from the Métis Nation – Saskatchewan				
	1	7 450(10)		
25-M4.14 Information Item	2025-01-24	7450619		
Regulatory Oversight Report for Uranium Mines, Mills, Historic and Decommissioned Sites in Canada: 2023 Written submission from Chris Houston				
25-M5	2025-01-21	7439399		
Status Report				
Status Report on Power Reactors				
Written submission from CN				
25-M6	2024-12-17	7437716		
Information Item Update from CNSC Staff on the Decision regarding the inclusion of radionuclides as a chemical of mutual concern under the Great Lakes Water Quality Agreement (Action Item #19575) Written submission from CNSC Staff				
25-M7	2025-03-12	7459812 – English 7441044 – French		
Information Item				
Updates to the Commission on Status of the Proposed Micro Modular Reactor Project at Chalk River Laboratories Written submission from CNSC Staff				