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**Written submission from the
Algonquins of Ontario**

**Mémoire des
Algonquins de l'Ontario**

**Regulatory Oversight Report for
Canadian Nuclear Laboratories
Sites: 2020**

**Rapport de surveillance
réglementaire des sites des
Laboratoires Nucléaires
Canadiens : 2020**

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Photo Source: Algonquins of Ontario

TECHNICAL REVIEW OF THE CANADIAN NUCLEAR SAFETY COMMISSION REGULATORY OVERSIGHT REPORT FOR CANADIAN NUCLEAR LABORATORIES SITES: 2020



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1.0 INTRODUCTION

The Algonquins of Ontario (AOO) have completed a technical review of the Canadian Nuclear Safety Commission's (CNSC) Regulatory Oversight Report (ROR) for Canadian Nuclear Laboratories Sites: 2020. The ROR provides an overview of the CNSC staff's assessment of licensee performance at sites that are licensed to Canadian Nuclear Laboratories (CNL). Within the ROR, two of CNL's sites operate in the unceded AOO Settlement Area, these include Chalk River Laboratories (CRL) and Nuclear Power Demonstration (NPD) Waste Facility.

The AOO seek to ensure that the operations at CRL and NPD occur in a responsible manner that safeguards the environment, manages risks, protects health and safety, and respects the AOO's Aboriginal Rights and Interests, including title. This written submission to the CNSC includes a summary of the ROR, background on NPD and CRL sites, review findings, information requests, and comments and recommendations. As well, we outline several Algonquin practices and teachings that are vital to understanding the core issues that we have put forward. We want to ensure that you understand who we are as it is essential to any meaningful engagement on this matter.

1.1 ALGONQUINS OF ONTARIO OVERVIEW

The Algonquins of Ontario (AOO) are on a journey of survival, rebuilding and self-sufficiency – a journey of reconciliation. This journey began nearly 250 years ago when the first Algonquin petition was submitted to the Crown in 1772.

The Algonquins lived in present-day Ontario for thousands of years before Europeans arrived. Their territory originally extended from the St. Lawrence River to the French River in the west, south to the Adirondack mountains in New York State, and north above Lake Abitibi. Over the past several hundred years, the description of the unceded AOO Settlement Area has changed to be the lands and waters on both sides of the Ottawa River watershed from modern Hawkesbury to Lake Nipissing and north past the headwaters of the Ottawa River. Today, the following ten Algonquin communities comprise the Algonquins of Ontario:

- The Algonquins of Pikwakanagan
- Antoine
- Kijicho Manito Madaouskarini
- Bonnechere
- Greater Golden Lake
- Mattawa/North Bay
- Ottawa
- Shabot Obaadjiwan



- Snimikobi (Ardoch)
- Whitney and Area

Based on a protocol signed in 2004, these communities are working together to provide a unified approach to negotiate a modern-day treaty. The AOO land claim includes an area of nine million acres within the watersheds of the Kichi-Sibi¹ (Ottawa River) and the Mattawa River in Ontario. The majority of Algonquin Provincial Park lies within the Ottawa River watershed and thus within the unceded AOO Settlement Area.

The Algonquins of Pikwakanagan First Nation (known at the time as the Algonquins of Golden Lake) commenced the land claim by formally submitting the most recent petition with supporting research to the Government of Canada in 1983 and the Government of Ontario in 1985. The Province of Ontario accepted the claim for negotiations in 1991 and the Government of Canada in 1992. Since then the negotiations, which are intended to culminate in an Algonquin Treaty, have grown to include ten communities that comprise the AOO.

The Algonquin Negotiation Team consists of the Chief and Council of the Algonquins of Pikwakanagan First Nation, who are elected under the Pikwakanagan Custom Election Code, and one representative from each of the nine other Algonquin communities, each of whom is elected by the enrolled Algonquin voters of each community for a three-year term.

The unceded AOO Settlement Area, shown in Figure 1 below, includes an area of more than nine million acres within the watersheds of the Kichi-Sibi and the Mattawa River in Ontario, unceded territory that covers most of eastern Ontario, including Ottawa and most of Algonquin Provincial Park. More than 1.2 million people live and work within the unceded AOO Settlement Area. There are 84 municipal jurisdictions fully and partially located within the unceded AOO Settlement Area, including 75 lower- and single-tier municipalities and nine upper-tier counties.

¹ The Ottawa River, otherwise known as the Big River, has also been referred to in the Algonquin language as “Kichi-Sibi,” “Kichissippi” “Kitchissippi,” and “Kichissippi.”



- Truth (Tebwewin): Truth is to know all of these things

Our survival on this land for thousands of years required us to apply our teachings to ensure the protection of the lands and waters upon which we rely. These teachings serve as the original instructions or “natural laws” that were built into our way of life. “Sustainability” is a modern term, but sustainability was long in practice by our people and our ancestors. There were consequences that occurred when we strayed from our natural teachings, instructions, and laws. We were constantly monitoring the environment and if changes occurred, we would adapt. It was (and is) a matter of survival. We had, and continue to have, deep connections to the land.

Some examples of teachings related to the protection of the environment of today and yesterday include the following:

- Harvest one area for one season then move on elsewhere so the area that has been recently harvested can replenish.
- Be conscious of where your feet touch the ground (even as an individual, we can have impacts on the land).
- We are stewards of the land and have a responsibility to protect the lands and waters.
- Show love for all aspects of the environment, down to the smallest part.
- We are all part of nature – we are all equal.

Protection and interaction with the lands and waters of our territory have been central to our existence for thousands of years. We maintained this connection to the land in spite of the arrival of Europeans to our territory. However, this arrival dramatically impacted our way of life.

Harvesting of flora and fauna for food and trade has been integral to the Algonquin way of life since time immemorial. These practices embody an inherent respect for the environment and a fundamental commitment to the sustainable management of resources which have been passed from generation to generation.

The rights of Aboriginal people in Canada to engage in traditional activities, including the harvesting of wildlife, fish, migratory birds and plants, is recognized by the Constitution Act, 1982 and upheld by the Supreme Court of Canada. As stewards of our ancestral lands, the AOO recognize the importance of exercising this right in a responsible manner.

In 1991, the Algonquins of Golden Lake (Pikwakanagan) took a ground-breaking step with the establishment of its first Hunting Agreement which led into the development of today’s AOO Harvest Management Plan (HMP) for Algonquin Park and the Wildlife Management Units (WMU) within the Algonquin Territory in Ontario. The Harvest Management Plan is a living document, which is reviewed annually and updated as new information becomes available. Its primary purpose is to clearly articulate the framework in which the Algonquin harvest is conducted by Algonquin harvesters. In particular, the Harvest Management Plan contains clear provisions which specify the season and the geographic locations in which harvesting can occur, what the Sustainable Harvest Target is to be and who is eligible to participate.



Each year, the AOO establishes its Sustainable Harvest Targets for moose and elk for both Algonquin Park and each WMU for the Algonquin Harvest. These Sustainable Harvest Targets are established with input from the Ontario Ministry of Natural Resources and Forestry (MNRF) and are based upon data that addresses wildlife conservation and the sustainability of wildlife populations. The AOO is the one of the first Indigenous groups in Canada that has voluntarily enacted these types of harvest management practices.

In order to harvest moose and elk under the auspices of the AOO, eligible Algonquins have agreed to participate in a draw-based tag system that is coordinated by the ten individual AOO communities.

Our tradition of collectively sharing food and resources has been practiced by the Algonquins for millennia. In preservation of this long-held tradition, the sharing of food and resources continues to be commonly practiced today providing meat to Elders and other community members that are unable to participate in the harvest.

Despite such efforts as the Harvesting Agreement, we are now in great competition with many others on this land for the resources that are here.

1.3 AOO RIGHTS AND INTEREST AND THE CNSC ROR ON CNL SITES: 2020

1.3.1 HISTORICAL CONTEXT

As previously mentioned, CNL's CRL and NPD sites are located fully within the unceded AOO Settlement Area. Located directly on the shores of the Kichi-Sìbì, the CRL and NPD sites overlap and directly impact this culturally significant area to Algonquins for historical and contemporary land use and exercise of rights.

The unceded AOO Settlement Area has been impacted by Crown decisions to locate and operate uranium and nuclear processing facilities since the Second World War. The Chalk River, Ontario site was established by the Crown in 1944 to move nuclear research facilities from urban Montreal to a remote area with abundant access to water. A new community was built at Deep River, Ontario to provide residences and facilities for the Chalk River team members. The site was chosen for its proximity to the industrial manufacturing area of Ontario and Quebec and to a rail head adjacent to a large military base, Camp Petawawa. A pilot reactor known as ZEEP (zero-energy experimental pile) became the first Canadian reactor, and the first to be completed outside the United States, when it went critical in September 1945. ZEEP remained in use by researchers until 1970. A larger 10 MW National Research Experimental (NRX) reactor, which was designed during the Second World War, was completed and went critical in July 1947 (Canadian Science and Technology Museum 2014).

At the time of the Crown's decisions to establish and operate these first nuclear facilities in the unceded Algonquin Settlement Area, the Crown did not consult with the AOO or provide accommodation for impacts to the AOO's Rights and Interests. These Crown decisions resulted in an accumulation of nuclear reactors, research facilities, uranium containing materials, and nuclear processing facilities within the unceded AOO Settlement Area. The Crown's activities, via Atomic Energy of Canada Limited (AECL) and



its contractor, continue today with impacts that will continue for many thousands of years. These impacts are irreversible.

1.3.2 AOO RIGHTS AND INTERESTS AND TREATY NEGOTIATIONS

The AOO assert unextinguished and constitutionally protected Aboriginal Rights and Interests, including title to the Unceded AOO Settlement Area. Our land claim was accepted by the Governments of Canada and Ontario for negotiation in the early 1990s and is currently in the final stage of treaty negotiations. When ratified, the agreement will take the form of a modern treaty and will provide certainty about the ownership, use and management of land and natural resources for Algonquins across the unceded AOO Settlement Area.

In 2016, the signing of the Agreement-in-Principle (AIP), was a key step toward a Final Agreement, and a modern-day Treaty, of which negotiations remain ongoing and will eventually clarify the rights of all concerned. By signing the AIP, the AOO and the Crown expressed in a formal way their mutual intention and desire for a lasting partnership. This event signaled the beginning of a new relationship between the AOO and the Crown, one in which the mistakes of the past must be supplanted by a new type of mutual respect and cooperation.

Understanding the status and outcomes of regulatory oversight activities at CRL and NPD is critically important for the AOO given ongoing Treaty negotiations and the AOO's participation in various impact assessment processes for proposed projects on these sites. With respect to Treaty negotiations, the CRL and NPD sites either overlap or are in close proximity to lands that have been identified as proposed settlement lands. Given that these lands will be owned fee simple absolute by the AOO, the comments and recommendations provided in this submission should be seriously considered and implemented to support Crown-AOO's mutual interests in advancing Treaty negotiations.

1.3.3 LONG TERM RELATIONSHIP AGREEMENTS

The AOO has been steadfast in its calls on government, regulators, and private companies operating in the unceded AOO Settlement Area to adopt and meaningfully implement the Truth and Reconciliation Commission's (TRC) Calls to Action and the United Nations Declaration on the Rights of Indigenous People (UNDRIP). Although our calls are acknowledged and recognized as important by government and proponents working across the unceded AOO Settlement Area, the AOO have not witnessed the depth of change and collaborative partnerships we have been advocating for.

In the AOO's view, building equitable relationships with Indigenous Peoples, and making binding commitments with respect to those relationships, is essential to restoring trust and balance to our relationships with both the private and public sectors. Critical to this approach is moving beyond recognition and seeking firm commitments from government, regulators, and proponents to secure free, prior, and informed consent (FPIC) before proceeding with a project. With commitments from the Government of Canada to support UNDRIP (Government of Canada, 2016) and advance UNDRIP legislation (Government of Canada, 2021), as well as the TRC's Call to Action 92 outlining that the adoption of UNDRIP must also apply to the corporate sector (Truth and Reconciliation Commission, 2015), we call on the CNSC and CNL to be visionary leaders alongside the AOO to model what the implementation of FPIC could look like for proposed projects at the CRL and Nuclear Power



Demonstration sites. The AOO maintains that the CNSC should not make any final decisions about CNL projects currently in the environmental assessment process until a Long-Term Relationship Agreement is concluded with CNL and the AOO provides its consent for the Project.

2.0 SUMMARY OF THE REGULATORY OVERSIGHT REPORT

The following section provides a summary of the content presented in the ROR and does not reflect whether the AOO agrees with the report findings and content. The ROR for *CNL Sites: 2020* is a Commission member document (CMD) that presents the CNSC staff's assessment of licensee performance at sites that are licensed to CNL in the 2020 calendar year (CNSC, 2021). To assess the safety performance of CNL, the CNSC conducts regulatory oversight activities consisting of on-site inspections, technical assessments, reviews of reports submitted by CNL, reviews of events and incidents, and general communication with CNL (CNSC, 2021).

This report also provides an update on CNSC staff's activities related to public information, engagement with Indigenous communities, reportable events, and areas of increased regulatory focus. The report provides CNSC staff's assessment of the safety performance of CNL sites in 2020. The report focuses on three safety and control areas (SCAs): radiation protection, environmental protection, and conventional health and safety (CNSC, 2021).

CNSC has confirmed that CNL sites performed their licensed activities safely in 2020, and their performance related to each of the fourteen SCA's have been rates as "satisfactory" for both the Chalk River Laboratory (CRL), and Nuclear Power Demonstration (NPD) Waste Facility. In summary, CNSC has determined that the health and safety programs in place protect the workers at each site, environmental protection programs are effective in protecting both people and the environment, and radiation protection programs have controlled radiation exposure to keep doses as low as reasonably achievable (CNSC, 2021).

In 2021, CNSC staff spent over 36,300 cumulative hours working on licensing and compliance activities for CNL sites, including 23,000 hours performing licensing activities including drafting new licenses, drafting and revising license conditions handbooks, and preparing Commission member documents and 13,300 hours performing compliance activities including inspections, desktop reviews, and technical assessments. CNSC noted that the time spent on their regulatory efforts remained consistent with previous years but noted that there was a decrease in the number of hours allocated to compliance work due to the COVID-19 pandemic and the associated decrease in on-site compliance activities to meet health and safety restrictions.

In March 2020, CNSC used its business continuity plan, in response to the COVID-19 pandemic, to direct staff to work from home and suspend all travel to sites, except for critical activities. In April 2020, CNSC reviewed all planned on-site compliance activities to determine where other means (remote inspections, desktop reviews) were appropriate. CNSC's on-site oversight activities have resumed and are observant of the relevant provincial COVID-19 protocols and restrictions. In response to the COVID-19 pandemic, CNL reduced operations at all their sites in March 2020 and ensured that all sites were maintained, safe, and compliant with regulatory requirements (CNSC, 2021). CNL requested CNSC



provide regulatory flexibility due to the COVID-19 pandemic in April 2020. The CNSC temporarily allowed for flexibility around timelines for regulatory matters where acceptable.

CNSC uses the number of recordable lost-time injuries that occur per year, along with their severity and frequency, as key performance indicators for conventional health and safety. In 2020, there were four recordable lost-time injuries at CRL and none at NPD (CNSC, 2021).

In 2020, CNL reported zero action-level exceedances for releases of radiological or non-radiological substances to air or water at any of their sites. As well, no Event Initial Reports (events that the CNSC assess as meeting specific risk criteria) were reported in 2020 at any of the CNL sites.

At many of the sites covered by the ROR, CNL's activities include the generation, storage, and management of radioactive wastes. CNL started their land use program in 2020 to ensure the approach taken is consistent and the final land uses are achieved for decommissioned and remediated sites. According to the report, CNL has safely managed radioactive and hazardous waste from their licensed activities and decommissioning of its facilities (CNSC, 2021).

No activities for the Independent Environmental Monitoring Program were scheduled to take place around CNL sites in 2020 (CNSC, 2021). The results of the CNSC's 2019 IEMP activities indicated that the public and environment around the CNL sites are adequately protected.

Overall, CNSC concluded that the environmental protection programs at all CNL sites were effective in 2020 for protecting the environment, that radiation protection programs at CNL sites control radiation exposures to be as low as reasonably achievable, and conventional health and safety programs at CNL sites protect workers (CNSC, 2021).

2.1 CHALK RIVER LABORATORIES

CRL operates under a single licence that includes Class I and Class II nuclear facilities, a waste management area, radioisotope laboratories, along with support facilities and offices. Throughout the site, which is located approximately 160 kilometres northwest of Ottawa, CNL is shutting down and decommissioning old facilities and constructing replacements. Also, at the CRL site, CNL is proposing to construct and operate a Near-Surface Disposal Facility (NSDF), and Global First Power is proposing a small modular reactor. Both proposed projects will be subject to environmental assessments (CNSC, 2021). During the summer of 2020, CNL began site work (i.e., clean-up, soil studies, grading) at the Advanced Nuclear Materials Research Centre (ANMRC). The ANMRC will be one of the largest research laboratories in Canada and will merge the laboratories and hot cells located at the CRL.

In 2020, the International Atomic Energy Agency (IAEA) conducted 55 inspections and found no significant issues at CRL when verifying nuclear material inventories to assure the absence of undeclared nuclear material and activities. CNL completed the return of highly enriched uranium-bearing (HEU-bearing) liquid generated during the production of medical isotopes to the United States (CNSC, 2021).

In 2020, CNSC performed seven inspections at CRL, which resulted in 21 low risk notices of non-compliance (NNCs) being issued to CNL (CNSC, 2021). The CNSC determined that all the NNCs issued to CNL for the CRL site have been resolved or have appropriate corrective action plans in place (CNSC, 2021).



In 2020, CNL submitted 27 reportable events at the CRL site to the CNSC and the CNSC was satisfied with CNL's corrective actions and determined that there was no risk to the environment or public (CNSC, 2021).

2.1.1 HIGHLIGHTS FROM THE REGULATORY OVERSIGHT REPORT

- “At all CNL sites, airborne and waterborne releases of radioactive and hazardous substances remained below their respective regulatory limits in 2020.” (pg. 22; CNSC, 2021)
- “At no point during 2020 did the emissions from the CRL site exceed the constraint for dose to the public of 0.30 mSv/year (y) indicated in the CRL LCH.” (pg. 24; CNSC, 2021)
- “In 2020, no worker received a radiation dose in excess of the CNSC’s regulatory dose limits. The maximum individual effective dose received by a NEW across CNL sites was at CRL, with a dose of 7.97 mSv, which is approximately 16 percent of the CNSC’s regulatory limit for effective dose of 50 mSv in a one-year dosimetry period.” (pg. 19; CSNC, 2021)
- “Throughout 2020, CNL continued to execute decommissioning and remediation activities to reduce the legacy liabilities at all of its sites. These activities included... At CRL, decommissioning and environmental remediation activities to support the transformation of the site to a modern campus...” (pg. 26; CNSC, 2021)
- “No ‘Event Initial Reports’ were submitted by CNSC staff to the Commission in 2020. One event, a fire in the NRU reactor building was communicated to the Commission by CNSC staff in a memo.” (pg. 29; CNSC, 2021)
- “On January 25, 2020, a fire occurred in the NRU reactor building. CNL made a public notification regarding this event, and it was reported to the Commission via a memo from CNSC staff in June 2020. The investigation revealed that the most probable cause of the fire was a failure of a metal halide bulb in a light fixture. The hot pieces from the bulb melted and ignited some plastic sheathing on top of storage cabinets, which in turn resulted in damage to parts of the contents of the storage cabinets. An operating experience bulletin regarding this event was subsequently shared CNL-wide and with the CANDU Owner’s Group. CNL completed a review of light fixtures at all CNL sites and replaced older-style metal halide bulbs with new bulbs rated for open fixtures, and CNL revised supervisor responsibilities to include periodic checks of storage areas for excess combustible material throughout the CRL site. CNSC staff reviewed CNL’s response and found it satisfactory.” (pg. 25; CNSC, 2021)
- “Waste from institutions, including hospitals and universities from across Canada, is received at CRL on a commercial basis for safe long-term storage. This service ensures that wastes are managed in a safe, secure, and environmentally-sound manner. CNL received a total of 255.8 m³ of radioactive waste from external organizations in 2020. This includes 87.6 m³ of commercial waste and 168.2 m³ of waste returned from off-site waste



processors (i.e., secondary waste from the off-site treatment of CNL waste, such as ash from incineration of waste).” (pg. 26; CNSC, 2021)

- “In 2020, CNSC staff did not conduct independent environmental monitoring around CNL sites as no activities were scheduled in 2020 as part of the IEMP plan. In 2019, CNSC staff conducted independent environmental monitoring around the CRL, PHP, PGP and DP sites. IEMP results for the areas surrounding these sites indicate that the public and the environment in the vicinity of these sites are protected.” (pg. 23; CNSC, 2021)

2.2 NUCLEAR POWER DEMONSTRATION WASTE FACILITY (NPD SITE)

NPD is a partially decommissioned prototype CANDU power reactor located in Rolphton, Ontario. CNL manages low- and intermediate-level radioactive wastes at the NPD site. CNL submitted an application to the CNSC to modify their proposed decommissioning approach for NPD to in-situ decommissioning in attempts to accelerate the decommissioning process, which is currently under review by the CNSC and subject to an environmental assessment (CNSC, 2021).

In 2020, the International Atomic Energy Agency (IAEA) conducted one inspection and found no significant issues at the NPD site when verifying nuclear material inventories to assure the absence of undeclared nuclear material and activities.

In 2020, CNSC performed one inspection at the NPD site, which resulted in two low risk NNCs being issued to CNL (CNSC, 2021). The CNSC determined that all the NNCs issued to CNL for the NPD site have been resolved or have appropriate corrective action plans in place (CNSC, 2021).

In 2020, CNL submitted one reportable event for the NPD site to the CNSC and the CNSC was satisfied with CNL’s corrective actions and determined that there was no risk to the environment or public (CNSC, 2021).

2.2.1 HIGHLIGHTS FROM THE REGULATORY OVERSIGHT REPORT

- “CNSC staff continue to be satisfied with the level and quality of Indigenous engagement conducted by CNL with regards to its operations and proposed projects at its different sites. CNSC staff encourages CNL to continue to remain flexible and responsive to the requests and needs of the Indigenous communities and groups that have an interest in its sites, facilities and proposed projects.” (pg. 34; CSNC, 2021)
- “Throughout 2020, CNL continued to execute decommissioning and remediation activities to reduce the legacy liabilities at all of its sites. These activities included... At DP, G-1 and NPD, removal of clean waste and hazard reduction work under the respective storage with surveillance plans, significantly reducing the hazards and associated liabilities at these sites.” (pg. 26; CNSC, 2021)



- “NPD is no longer discharging liquid effluents from the facility sumps to the Ottawa River, and there were no such releases during the 2020 reporting period. All other releases of radioactive material in NPD effluents are a small fraction of their respective DRLs and thus, continue to indicate minimal impact on the public or the environment.” (pg. 88; CNSC, 2021)

3.0 REVIEW FINDINGS

As part of the AOO’s review of the ROR for CNL Sites: 2020, the AOO has put forward a series of information requests to CNSC and CNL to clarify and provide additional information where necessary. The AOO has also provided a set of comments and recommendations for the CNSC and CNL to consider following the review of the ROR.

3.1 INFORMATION REQUESTS

The AOO submits the following information requests to the CNSC to clarify or seek additional information on various topics included in the ROR.

#	ROR Reference	Information Request
1	Section 2.11 Major Activities at CRL “The transfer of spent HEU fuel was completed in 2019, and in 2020 CNL completed the transfer of the HEU-bearing liquid generated during the medical isotope production process.” (pg. 6)	The AOO are concerned with the transportation of radioactive materials through the unceded AOO Settlement Area. As a result, the AOO seek to understand if the potential transportation of HEU is anticipated in the future. Please provide additional information regarding approximately how much additional HEU CNSC is expecting to repatriate to the United States in future years.
3	Section 4.9.7 “As part of annual reporting to the CNSC, CNL provides data on dose to a hypothetical member of the public that is representative of someone who spends considerable time in proximity to the licensed site.” (pg. 24)	Please clarify what considerations, if any, CNL has made to ensure that the dose to a hypothetical member of the public is also protective of Algonquin community members who may use the lands and waters in proximity to the licensed sites more extensively and in different ways than members of the public. This includes Algonquin community members who may work on the sites, conduct traditional activities adjacent to the sites, or be part of AOO monitoring or cultural heritage activities at the sites.
4	Section 4.7.3 Radiation Protection Program Performance	The AOO is concerned by the lack of information regarding why the CNSC undertook corrective actions to change the dose and dose rate alarm rules. In the ROR, it is not a clear description of how these rules were lacking and how this could have impacted the effectiveness of protections for the



		<p>environment and Algonquin community members practicing their rights.</p> <p>Please provide additional details on both the context and outcome(s) of the “<i>revised rule for setting dose and dose rate alarms for all radiological activities</i>” that CNL implemented at CRL, as a corrective action in 2020.</p>
5	Section 4.7.3 Radiation Protection Program Performance	<p>The CNSC reports that in 2020, CNL reviewed their ALs for radiological exposures, which resulted in revisions to ALs for all CNL sites to assure consistency with regulatory guidance. This is concerning to the AOO as no further details were provided in the ROR regarding whether the ALs followed regulatory guidance. Without this level of detail, the AOO are unable to understand potential impacts on the effectiveness of environmental protection measures as well as the health of Algonquin community members.</p> <p>Please provide details on the newly revised ALs compared to those used previously at the CRL and NPD sites.</p>
6	Appendix E: List of Inspections at CNL Sites	<p>Appendix E of the ROR lists that there were a number of different enforcement actions and recommendations resulting from the CNSC-led inspections at both CRL and NPD; however, no details are provided on the nature or details of the enforcement actions and recommendations. In the spirit of truly meaningful and transparent reporting, please provide details on the nature of the enforcement actions and recommendations that resulted from the CNSC-led inspections at CRL and NPD.</p>

3.2 COMMENTS AND RECOMMENDATIONS

The AOO submits the following comments and recommendations to the CNSC following the review of the ROR.

Comment 1: (Section 4.9.4 Independent Environmental Monitoring Program) The ROR states that “In 2020, CNSC staff did not conduct independent environmental monitoring around CNL sites as no activities were scheduled in 2020 as part of the IEMP plan.” It is not clear from the report whether the IEMP sampling did not occur due to COVID-19 impacts or whether it did not occur because of the planned frequency of sampling.



Recommendation 1: The AOO requests that the CNSC provide clarity on the reasons why the IEMP did not occur in 2020.

Comment 2: (Section 4.10 Emergency Management and Fire Protection) According to the ROR, there was a fire incident at the CRL site on January 25, 2020 in the NRU reactor building, and CNL made a public notification on their website regarding the event. Luckily this event did not result in any injuries or releases to the environment; however, the incident does raise questions on the effectiveness of CNL's methods for communicating emergency situations to the AOO.

Recommendation 2: The AOO request to work collaboratively with CNL to establish an emergency management notification system that is mutually agreeable, to ensure that the AOO are notified in a timely and appropriate manner so that the AOO is aware of potentially dangerous emergency situations as soon as possible.

Comment 3: (Section 4.9.4 Independent Environmental Monitoring Program) The report indicates that as part of the IEMP, CNSC staff conducted monitoring around the CNL sites. The AOO commends the CNSC for the inclusion of AOO staff and Algonquin Knowledge into the IEMP sampling program at the NPD site in 2018. The AOO notes that no IEMP monitoring occurred during 2020.

Recommendation 3: The AOO recommends that the IEMP continue to engage the AOO for future sampling at CRL and NPD. The AOO must have input and involvement in all IEMP sampling efforts within the unceded AOO Settlement Area.

To facilitate this, the AOO recommends the following:

1. Where possible, CNSC's IEMP should coordinate with the AOO to integrate the Kichi-Sibi Guardians Program into IEMP sampling in the unceded AOO Settlement Area.
2. A formal protocol be developed between the AOO and CNSC around involvement in the IEMP.
3. Capacity funding be provided for the AOO to define a list of Valued Components of the environment that can be sampled as part of the IEMP and additionally provide a collaborative opportunity to review and provide insight on the design, schedule, frequency, and execution of the IEMP for the CRL site.

Comment 4: The historical and current nuclear activities and developments that have occurred within the unceded AOO Settlement Area have caused significant impacts to the AOO's Aboriginal Rights and Interests, including title. As a result of these historical and on-going impacts, the AOO seeks to have a greater level of involvement but are constrained by limited budgets and limited number of staff that are put under tremendous stress by numerous piecemeal requests for consultation and engagement by many different project proponents and governments. Because of this, it is not always possible for the AOO to meaningfully participate in the opportunities being made available with the CNSC.

Recommendation 4a: To reduce the burden that multiple and repeated interactions with proponents and CNSC representatives place on the capacity of the AOO, the CNSC should adopt a "one-window approach" through which all CNSC-regulated site-specific engagement, consultation, and oversight activities are convened. The AOO acknowledges that the CNSC has taken steps to adopt this "one-window approach," but that this approach still needs further development and consistent adherence on the part of CNSC staff. This approach should include stable funding to ensure the AOO's effective



participation in consultation processes and oversight reviews as opposed to the current piecemeal approach. Additionally, a “one-window approach” would lead to more effective implementation of the recommendations the AOO has provided to the CNSC in previous reviews of RORs.

Recommendation 4b: In considering the unique relationship described above and the associated recommendations, the CNSC and the AOO should co-develop a Terms of Reference (TOR) with the intention of initiating a joint advisory and monitoring committee as it relates to CNSC-regulated facilities in the unceded AOO Settlement Area. Advisory and monitoring committees have been deployed on major projects in western Canada (i.e., Trans Mountain Expansion, Enbridge Line 3 Replacement Program) to:

- Support the effective and active participation of the AOO in the monitoring of traditional, environmental, safety, and socio-economic aspects of major projects;
- Enable a reciprocal exchange of information relating to traditional, environmental, safety, and socio-economic aspects of major projects;
- Provide a collaborative forum, supported with resources for the AOO, regulators, and governments to enhance the environmental protection and safety of major projects; and
- In collaboration with the AOO, the CNSC should assess existing examples of co-developed TORs for advisory and monitoring committees and develop a distinct model that reflects the unique relationship between the AOO and CNSC, the on-going treaty negotiation process, and a nation-to-nation relationship based on recognition of rights, respect, co-operation, and partnership.

Recommendation 4c: The AOO notes that the CNSC Commission schedule has been developed for this project and others without consideration of the AOO’s internal governance process. The AOO request that for future projects, including ROR technical reviews, that the CNSC ensure that the project schedule take full consideration of the AOO’s internal governance structure and ensure that the time between release of PFP funding and deadlines/hearings allows for comprehensive reviews and approvals of Project-related documents by the AOO’s Planning and Environment Working Group and Algonquin Negotiation Representatives.

Comment 5: The AOO provided a number of recommendations to the CNSC in previous ROR technical review submissions and many of these recommendations have been left unanswered.

Recommendation 5: The AOO continues to request that the CNSC integrate the following recommendation measures into their regulatory oversight regime:

- Further opportunities for significant participation by the AOO;
- Involvement of the AOO in the ongoing environmental, cultural heritage, and human health monitoring in and around CNSC-licensed facilities and transportation routes;
- Accessible information for Indigenous Peoples, including Algonquin citizens, including communications protocols for informing communities about regulatory oversight participation opportunities, incidents such as spills, accidents, or malfunctions, and involvement in emergency planning and response;



- A framework for addressing the cumulative effects of CNSC-regulated projects and other activities in a region that affect the AOO's Rights and Interests across the unceded AOO Settlement Area;
- Collaborative decision-making with the AOO, based on nation-to-nation relationships and the obligation to secure free, prior, and informed consent. This decision-making must recognize and strengthen the jurisdiction that the AOO have with respect to the environment and culture; and
- Rules and criteria to encourage transparency, accountability, and credibility and to encourage good science and Indigenous Knowledge-based decisions.

The AOO request that the CNSC provide responses to information requests and recommendations within this technical review. If the CNSC is unable to adopt a recommendation the AOO request that they provide rationale as to why or why not they are unable to.

4.0 CONCLUSION

In concluding a technical review of the CNSC's RORs for Canadian Nuclear Laboratories Sites: 2020, the AOO has included a series of information requests, comments, and recommendations for the consideration of the CNSC and CNSC.

The AOO respectfully request that the CNSC provide responses to the information requests and to the recommendations noted in this technical review. As well, we request that the CNSC and the Crown provide an opportunity for the AOO to review and comment on any new policy, legislation, or guidance that seeks to implement these recommendations. The AOO appreciates and values the relationship it has with the CNSC, CNL, and AECL and acknowledges the collaborative work that has been completed to date to improve consultation with the AOO over the past several years. We appreciate the opportunity provided to us by the CNSC to provide perspectives about CNL sites that affect the well-being, health, and livelihoods of Algonquin community members.

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