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Date: 2026-01-28

Written Submission from the Canadian Environmental Law Association

Mémoire de l'Association canadienne du droit de l'environnement

In the matter of the

Regulatory Oversight Report for Canadian Nuclear Laboratories Sites: 2024

Regulatory Oversight Report for Canadian Nuclear Power Generating Sites for 2024

Commission Meeting

March 2026

À l'égard du

Rapport de surveillance réglementaire des sites des Laboratoires Nucléaires Canadiens : 2024

Rapport de surveillance réglementaire des sites de centrales nucléaires au Canada : 2024

Réunion de la Commission

Mars 2026

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Canada

Canadian Environmental Law Association
EQUITY. JUSTICE. HEALTH.

SUBMISSION BY THE CANADIAN ENVIRONMENTAL LAW ASSOCIATION TO THE CANADIAN NUCLEAR SAFETY COMMISSION REGARDING THE *REGULATORY OVERSIGHT REPORT FOR CANADIAN NUCLEAR LABORATORIES SITES: 2024,* AND THE *REGULATORY OVERSIGHT REPORT FOR CANADIAN NUCLEAR POWER GENERATING SITES: 2024*

January 28, 2026

Prepared by:
Sara Libman, Legal Counsel to CELA

January 28, 2026

Sent by email interventions@cnsc-ccsn.gc.ca

Senior Tribunal Officer, Secretariat
Canadian Nuclear Safety Commission
280 Slater Street, P.O. Box 1046, Station B
Ottawa, Ontario K1P 5S9

Dear Sir or Madam:

Re: Comments on Regulatory Oversight Reports for Canadian Nuclear Laboratories Sites 2024 and Canadian Nuclear Power Generating Sites for 2024

The Canadian Environmental Law Association ("CELA") has enclosed its written intervention providing comments on the two following Regulatory Oversight Reports:

- Regulatory Oversight Report for Canadian Nuclear Laboratories Sites: 2024; and
- Regulatory Oversight Report for Canadian Nuclear Power Generating Sites for 2024

Please find below our submission for your review.

By this letter, and pursuant to the CNSC's *Rules of Procedure*, CELA request status to participate as an intervenor in the public Commission meeting through the provision of this written intervention.

Sincerely,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION

Sara Libman

Sara Libman
Legal Counsel to CELA
Sara@Libman.Lawyer

I. INTRODUCTION

This submission is filed in response to the Canadian Nuclear Safety Commission's ("CNSC") Notice of Participation at a Commission Meeting and Participant Funding dated July 9, 2025 in respect of the five Regulatory Oversight Reports prepared by CNSC staff (herein after "ROR"). A meeting with respect to these matters is scheduled for the week of March 23, 2026.

Unlike previous years in which there would be several Commission meetings at various dates to address the each ROR and intervenors would. provide separate comments per ROR of interest, the July 2025 Notice of Participation invited members of the public to provide comments on one, all, or a combination of the RORs, which would be addressed at one Commission Meeting.

CELA's submission addresses two of these RORs, namely the:

- *Regulatory Oversight Report for Canadian Nuclear Laboratories Sites: 2024* (herein after "CNL ROR 2024")[1]; and
- *Regulatory Oversight Report for Canadian Nuclear Power Generating Sites for 2024* (herein after "NPGS ROR 2024")[2]

Expertise of the Intervenor

The Canadian Environmental Law Association ("CELA") is a non-profit, public interest law organization. For over 50 years, CELA has used legal tools to advance the public interest, through advocacy and law reform, in order to increase environmental protection and safeguard communities across Canada. CELA is funded by Legal Aid Ontario as a specialty legal clinic, to provide equitable access to justice to those otherwise unable to afford representation.

CELA has engaged in detailed research and advocacy related to public safety and environmental protection by seeking improvements to nuclear emergency preparedness. We have also appeared before the CNSC on a number of licensing matters, as well as the federal environmental assessment proceedings for multiple Nuclear Power Generating Sites ("NPGS") and proposed projects, including projects proposed by Canadian Nuclear. Laboratories ("CNL"). CELA also has an extensive library of materials related to Canada's nuclear sector which is publicly available on our website.[3]

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[1] CNSC, *Regulatory Oversight Report for Canadian Nuclear Laboratories Sites: 2024,* CMD 26-M4 **[CNL. ROR 2024]**
[2] CNSC, *Regulatory Oversight Report for Canadian Nuclear Power Generating Sites for 2024,* CMD 26-M5 **[NPGS ROR 2024]**
[3] Canadian Environmental Law Association, online: www.cela.ca

Structure of Comments

CELA has routinely participated in the annual Commission meetings for both the CNL RORs and the NPGS RORs. In the past, our comments on these RORs have been separate documents. However, with this new approach to the RORs this year, this submission will consist of our comments and recommendations for both RORs. Each ROR discussion is contained within its own section of this submission, however our approach to reviewing and commenting on each ROR is similar.

In response to the CNL ROR 2024 and the NPGS ROR 2024, CELA raises a number of issues relating to the RORs' scope and content. Our comments are organized largely by examining certain Safety Compliance Areas ("SCAs") and considering the compliance issues across the various nuclear sites covered within each ROR. In addition to our review of SCA compliance, we touch upon a number of general comments and concerns stemming from reviewing the entirety of the reports. Our findings, are set out below, accompanied by either requests or recommendations to the Commission and CNSC staff.

Our comments on these two RORs are set out as follows:

- **Section II. GENERAL FINDINGS**: contains comments that are applicable to both RORs, i.e., regarding the scope and process for regulatory oversight reports, and public engagement issues. This is to prevent repetition within the discussion pieces of each ROR. A summary of the recommendations from this section is provided in **APPENDIX A.**
- **Section III. COMMENTS ON THE REGULATORY OVERSIGHT REPORT FOR CANADIAN NUCLEAR LABORATORIES SITES: 2024**: provides the comments and recommendations specific to the CNL ROR 2024. A summary of the recommendations from this section is provided in **APPENDIX B.**
- **Section IV. COMMENTS ON THE REGUALTORY OVERSIGHT REPORT FOR CANADIAN NUCLEAR POWER GENERATING SITES: 2024:** provides the comments and recommendations specific to the NPGS ROR 2024. A summary of the recommendations from this section is provided in **APPENDIX C.**
- **Section V. CONCLUSION:** this section provides concluding thoughts on the entirety of this submission.

II. GENERAL FINDINGS

The following comments are intended to provide insight and recommendations that are applicable to the overarching regulatory oversight process, and to drafting future editions of the CNL ROR and the NPGS ROR.

A. Scope and Process for Regulatory Oversight Reports

CELA has reviewed the RORs in detail and finds it necessary to reiterate our ongoing concerns with the ROR process, its utility and use. As a review of these RORs demonstrates, there is a wide range of activities—each with varying levels of risk, timelines, scope and environmental assessment applicability – demonstrating the crucial need for opportunities to review CNL activities and sites and NPGS activities and sites.

A number of our recommendations are aimed at making RORs more accessible and informative, and enhancing the data and analysis in support of the CNSC Staff's conclusions. These recommendations are based on the ROR's recognition that:

> The *NSCA* mandates the CNSC to disseminate objective scientific, technical and regulatory information to the public concerning its activities and the activities it regulates. CNSC staff fulfill this mandate in a variety of ways, including hosting in-person and virtual information sessions and through annual regulatory reports.[4]

Last year's RORs underwent a substantial template and formatting overhaul, and CELA notes that the changes CNSC staff implemented to the ROR templates have greatly improved accessibility and readability of the RORs. This year's RORs follow the same template improvements, while also building on feedback presented at last year's Commission meetings. The following sections will touch upon changes and recommendations that would improve the ever-evolving ROR (with these comments being applicable across the board for topics that are covered in various RORs.

Type I and II Inspections

In CELA's submission for the NPGS ROR 2023, we noted that the ROR did not provide the reader with a description of the different types of inspections, and in particular, there was no explanation of what a Type I inspections was compared to a Type II inspection. This year, the NPGS ROR 2024 contains a section titled "1.7.3 Inspections", which discusses the four different types of inspections (Type I, Type II, Desktop, and field), and clarifies the difference between Type I and Type II inspections:

> Type I inspections are infrequent and reactive, often triggered by new or significantly changed programs or systemic issues. They are not part of the baseline inspection plan. In contrast, Type II inspections are regular and included in the baseline plan.[5]

[4] CNL ROR 2024, p. 73, NPGS ROR 2024, p. 145.
[5] NPGS ROR 2024, p. 18

CELA is appreciative of this clarification on inspections; it helps the reader to understand how the different NPGS are being inspected, and how different activities and events at these sites are influencing the monitoring and inspection priorities by the CNSC. CELA notes that this explanation should be provided in future RORs as well, to ensure that an individual who may be unfamiliar with RORs can follow along with the inspection process for these sites.

When reading through the CNL ROR 2024 however, CELA notes that there is no discussion on the types of inspections being conducted at the CNL site. The discussion of inspections is brief in the ROR:

> The CNSC uses inspections and surveillance and monitoring for compliance verification. Table 2 presents CNSC staff's inspection efforts for CNL facilities for the reportable year. For a full list of inspections, SCA covered, and number of non-compliances, refer to Appendix C.[6]

Last year's CNL ROR had labelled each type of inspection as either Type I, Type 2, Desktop, or field inspection within Appendix D (List of Inspections at CNL Sites).[7] This year, the CNL ROR 2024's Appendix C: List of Inspections at CNL Sites omits details about the type of inspection.[8] CELA seeks clarification on the inspection process for CNL facilities; are these sites subjected to the Type I and Type II inspections? If so, we **recommend** that future RORs provide the helpful blurb about types of inspections that is provided within the NPGS ROR in all RORs discussing inspections. We also **recommend** that RORs discuss the types of inspections being prompted at the sites they are discussing. For example, in the NPGS ROR 2024, the ROR highlights when a Type I inspection was triggered at the Darlington Nuclear Generating Station in relation to the Management System SCA: "in 2024, a reactive inspection related to the Molybdenum-99 Target Delivery System (TDS) at Darlington NGS was carried out in response to a configuration management issue in late 2023."[9]

Performance Ratings

An ongoing concern presented in CELA's submissions to the CNSC is the use of the binary rating system consisting of either "satisfactory" ("SA") or "below expectations" ("BE") being assigned to licensee performance ratings for the 14 CNSC SCAs. CELA has previously **recommended** that the CNSC consider developing a performance rating system based on measurable indicators, as has been used in previous years, or alternatively the performance ratings for each NPGS or CNL site in the ROR include an evaluation of the set criteria.

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[6] CNL ROR 2024, p. 5
[7] CNL ROR 2023, p. 97
[8] CNL ROR 2024, p.92
[9] NPGS ROR 2024, p. 27

Appendix A in the CNL ROR 2024 provides an summary of the current safety performance levels. An SA rating occurs when a licensee is meeting all the following criteria: performance meets CNSC staff expectations; licensee non-compliances or performance issues, if any, are not risk-significant; and any non-compliances or performance issues have been, or are being, adequately corrected. Meanwhile a BE rating occurs when one or more of the following criteria apply: performance does not meet CNSC staff expectations; Licensee has risk-significant non-compliance(s) or performance issue(s); and/or non-compliances or performance issues are not being adequately corrected.[10]

CELA once again **submits** that the current performance rating system lacks truly measurable indicators, and there no stated thresholds for what constitutes an event constituting as being "not risk-significant." CELA **recommends** that the CNSC consider developing a performance rating system based on measurable indicators, as has been used in previous years. In the alternative, CELA **recommends** that performance ratings for each CNL site or NPGS in an ROR include an evaluation of the set criteria outlined in the above paragraphs.

Status of Issues, Concerns and Requests from Intervenors

CELA's submission from last year commenting on the NPGS ROR 2023 discussed the inclusion of Appendix D, which provided an overview of the issues raised in the interventions in relation to the previous year's ROR. This appendix has been included once again in the NPGS ROR 2024,[11] and has also been included in the CNL ROR 2024, as Appendix F.[12] CELA is pleased to see this information being included in multiple RORs, as it is valuable for both Commission Members and the public to see the trending concerns that arise in an ROR. However, CELA once again **submits** that to improve the dissemination of information, the ROR would greatly benefit from providing a detailed breakdown of the issues raised by all Intervenors, and how they have been answered or responded to should be provided in RORs annually in a disposition chart or table of action taken and underway.

Last year, CELA **recommended** that rather than providing this information in a separate document, as seen in CMD 23-M36.B – Supplementary submission from CNSC Staff – 2022, this information should be directly within the ROR—even if included within an appendix. Doing so would make this information much more accessible to the public, and especially to those who are new to reviewing RORs. We continue to recommend that the ROR include a detailed breakdown of the issues raised by all intervenors, as well as how the issue/recommendation is being addressed.

[10] CNL ROR 2024, p. 88
[11] See NPGS ROR 2024, p. 170
[12] See CNL ROR 2024, p. 116

Recommendations

1. The intervenor seeks clarification on whether CNL sites are subjected to Type I and Type II inspections.
2. All RORs would benefit from an explanation of the types of inspections being utilized in the monitoring of the various nuclear activities and sites across Canada. Furthermore, when discussing the inspections for each SCA, the ROR should detail which type of inspections are being triggered.
3. The CNSC should consider developing a performance rating system based on measurable indicators. In the alternative, performance ratings for each CNL site or NPGS in an ROR include an evaluation of set criteria such as key performance indicators, compliance with licence conditions, events, repeat non-compliances, and licensee action in response to events, as well as the nature of the events themselves.
4. The ROR would greatly benefit from providing a detailed breakdown of the issues raised by all intervenors, and how they have been answered or responded to should be provided in RORs annually in a disposition chart or table of action taken and underway.

B. Public Participation within the ROR Process

A recurring request within CELA's ROR submissions is the need for expanded public participation opportunities. In 2023, the NPGS ROR 2022 and Mid-Term Update of the Pickering Nuclear Generating Station invited intervenors to provide oral submissions at the meeting, in addition to providing written comments. CELA embraced this opportunity and presented comments virtually. Being able to not only observe the Commission member's discussion of our written submission, but to engage in the discussion greatly improved our experience with the ROR process. Allowing intervenors to present and provide closing remarks allows intervenors to emphasize key issues to Commission members, as well as provide unique insight and responses to issues that arise during the question period.

By allowing intervenors to engage in a dialogue with the Commission members, there is a more transparent and accurate record of concerns and how they are being addressed by either NPGS operators, or CNSC staff.

CELA is disappointed that once again intervenors were not afforded the opportunity to present orally at the Commission meeting this year. After experiencing a more transparent and publicly engaging Commission meeting in 2023, the intervenor continues to **recommend** that the CNSC revisit the notion of offering oral intervention opportunities at future Commission meetings to intervenors.

Should the CNSC proceed with this new approach of all RORs being discussed at the same meeting (and an intervenor's ROR submissions being consolidated into one document), there is a unique opportunity for intervenors to bring forward key concerns to the CNSC spanning across various nuclear topics—whether it be a discussion nuclear power plants or uranium mines and mills—in an engaging discussion with the Commission and licensees.

Recommendation

5. Intervenors who provide comments on an ROR should have an opportunity to present orally before the Commission.

III. COMMENTS ON THE REGULATORY OVERSIGHT REPORT FOR CANADIAN NUCLEAR LABORATORIES SITES: 2024

A. Inspections and Reportable Events

In 2024, there were 34 inspections conducted across the different CNL sites, with the number of inspections at each site being:

- Chalk River Laboratories: 17 (in addition to 68 Surveillance and Monitoring walkdowns)
- Whiteshell Laboratories: 8
- Port Hope Area Initiative: 5
- Douglas Point Waste Facility: 1
- Gentilly-1 Waste Facility: 2
- Nuclear Power Demonstration Waste Facility: 1.[13]

As a result of these inspections, there was a total of 101 Notices of Non-Compliance (NNC) issued across CNL Sites in 2024. While this is a slight decrease in the total number of NNC issued compared to 2023 (there were 119 issued in 2023), this is still aa high number when compared to previous years, like 2022, which had 73 NNCs issued through 21 inspections.[14] Despite this continuing trend of issuing an abundance of NNCs, the CNSC determined: "…the notices of non-compliance (NNCs) from inspections were adequately addressed either through closure or an appropriate corrective action plan and did not impact the safety of CNL sites."[15] Even more concerning is that of the NNCs issued in 2024, 58 of them were issued to Chalk River Laboratories—an increase from 2023, which saw 48 NNCs issued to Chalk River.[16] Regardless of the severity of non-compliance, and regardless of whether the NNCs have been closed, this year's ROR reveals a continuing trend of non-compliance at CNL sites. It is now two years in a row that every single CNL site was issued at least 1 NNC.

CELA reiterates the concern expressed in our comments on the CNL ROR 2022, that there is an inappropriate weighting of the Safety Control Areas such that CNSC staff ought to be viewing them from the perspective of those that indicate warning signs and red flags in terms of the adequacy of CNL management and conduct of the necessary controls on all of the facilities. For example, several of the significant event reports – almost all of them in fact – occurred in areas dealing with fire and electrical as well as emergency readiness. These are fundamental "basics" for nuclear facilities and their inattention should result in much higher weighting to such red flags and therefore downgrading of the rating for the SCAs. The current rating system appears to wait

[13] CNL ROR 2024, p. 6
[14] See CNL ROR 2022, p. 1
[15] CNL ROR 2024, p. 6
[16] CNL ROR 2024, p. 6 and CNL ROR 2023 Appendix E

for actual releases before reporting the SCAs as unacceptable. By the time there is such a problem it is too late and public / environment has been impacted.[17]

Furthermore, we once again **submit** that CNSC staff ought to be viewing SCAs from a perspective of those that indicate warning signs and red flags in terms of adequacy of CNL management and conduct of the necessary controls on all facilities. As we will discuss in greater detail with each CNL site, while CNSC staff have deemed the NNCs to not be of concern for risk to the health and safety of the environment or the public, each minor NNC speaks volumes of the safety culture at each site, with non-compliances being linked to safe practices in radiation protection, human performance, and emergency management and fire protection. CELA continues to **recommend** CNSC staff take a look at the results of inspections and reportable events from a cumulative impacts lens, and from a safety perspective, as each act of non-compliance reveals complacency or other root causes in work place safety and emergency management.

Recommendation

1. CNSC staff should evaluate the results of inspections and reportable events from a cumulative impacts lens, and from a safety perspective, as each act of non-compliance reveals complacency or other root causes in work place safety and emergency management.

B. Chalk River Laboratories ("CRL")

Despite being issued 58 NNCs, all 14 SCAs for Chalk River Laboratories ("CRL") received a rating of "satisfactory."[18] This section highlights some of the issues of non-compliance at CRL that we would suggest mean that this site is not operating in a fully satisfactory manner—a concern we have repeatedly raised in our comments on previous CNL RORs.[19]

Radiation Protection SCA

There were 11 inspections related to the Radiation Protection SCA in 2024, with 11 NNCs being issued to CNL. These issues of non-compliance were concerned with the following:

- processes lacked clarity for ensuring conduct of annual reviews of radiological zone plans;
- absence of written communication provided to workers regarding their annual dose to the lens of the eye;

[17] CELA Submission 2023, p. 2
[18] CNL ROR 2024, p. 7
[19] See, CELA Submission 2023, p. 1 and CELA Submission 2024, p. 7

- inconsistencies in labelling and registering long-term non-staging storage areas with the site's radiation protection organization as required by CNL's process;
- an assessment missing on the placement of tritium air monitors;
- labelling missing to indicate an out of service fume hood;
- *inaccessible ways to contact radiation protection staff near personnel contamination monitoring equipment at the exit of the National Research Universal (NRU) reactor rod storage bays or unavailability of personnel protective equipment at the whole-body monitor to limit any potential spread of contamination within the building;*
- high hazard monitors in the NRU reactor facility were not connected to Class III or Class II emergency power;
- process was inconsistent for bringing food and medication into controlled areas;
- labels on some radioactive source storage containers and for some areas with fixed surface contamination lacked information;
- missing required radiation field measurements as per the CECEUD Test Facility Storage with Surveillance Plan;
- missing required information on labels on some radioactive source storage containers.[20]

While the ROR notes that because of the immediate actions taken by CNL, these examples of non-compliance did not pose a risk to the health and safety of the workers.[21] The intervenor is concerned by the nature of these examples of non-compliance, in particular with there being "inaccessible ways to contact radiation protection staff near personnel contamination monitoring equipment." We disagree with the statement alleging that because CNL took immediate action, a non-compliance such as this did not pose a risk to the health and safety of the workers. It only wasn't a risk because an emergency didn't happen before the inspection caught the non-compliance. Had something occurred before this non-compliance was caught by CNSC inspectors, the intervenors are concerned with what the implications of this issue could have been.

The ROR notes that "CNSC staff will continue to maintain regulatory oversight and monitor CNL's progress on the remaining open NNCs."[22] CELA requests that at the upcoming Commission meeting, an update be provided on which NNCs have been closed, and which remain open, as well as a timeline for CNL to resolve the remaining NNCs.

These NNCs reinforce our concerns highlighted in last year's submission for the CNL ROR, namely that the issues seem to stem from a diminishing safety culture, as all of these issues arose through inspection, rather being identified through CNL's own monitoring of the work CRL work environment. CELA **recommends** that CNL conduct an internal review of its safety culture, with

[20] CNL ROR 2024, p. 8-9, *emphasis added.*
[21] CNL ROR 2024, p. 9
[22] CNL ROR 2024, p. 9

CNSC reviewing these findings, and providing regulatory oversight and guidance to rectify this issue.

Emergency Management and Fire Protection SCA

Through 12 inspections at CRL for the Emergency Management and Fire Protection SCA, the CNSC ended up issuing 21 NNCs to CNL.[23] These NNCs include issues such as: "lack of adequate sealing to maintain the integrity of the fire separation of fire compartments"; "exit doors not in good working condition"; inadequate levels of training for fire brigade members"; and "absence of functioning latching hardware for some designed closures," to identify just a few alarming issues.[24]

While the CNSC has determined that CNL has adequately risk-managed the safety concerns raised by CNSC staff and have implemented appropriate actions for each NNC,[25] the intervenor is left wondering how CNL allowed these non-compliances to accumulate in the first place. The non-compliances seem to point to a work culture of inadequate equipment maintenance, record-keeping, and taking shortcuts when completing tasks (e.g., "inappropriate materials stored in flammable cabinets").[26] Issues like this suggest a diminishing safety culture concerning work responsibilities, or lack of training or supervision. CELA **requests** that CNSC and CNL discuss how the CRL site accumulated so many emergency and fire protection hazards, and what is the root cause of CRL workers not taking due care for their own safety.

Security SCA

In 2023, the CNSC had issued 13 NNCs associated with cyber-security at CRL, and CNL has been working to close all of these NNCs. As of 2024, there were 2 NNCs still active. CELA requests an updated on these NNCs—whether they are still open, and if they are, when are they anticipated to be closed?

Recommendations

2. At the upcoming Commission meeting, an update should be provided on which Radiation Protection SCA notices of non-compliance have been closed, and which remain open, as well as a timeline for CNL to resolve the remaining NNC for Chalk River.
3. CNL should conduct an internal review of its safety culture, with CNSC reviewing these findings, and providing regulatory oversight and guidance to rectify this issue.

[23] CNL ROR 2024, p. 17
[24] CNL ROR 2024, p. 18
[25] CNL ROR 2024, p. 18
[26] CNL ROR 2024, p. 18

4. CNSC and CNL should review and discuss how the CRL site accumulated so many emergency and fire protection hazards, and what is the root cause of CRL workers not taking due care for their own safety.
5. CNL and CNSC staff should provide an update on the 2 remaining cyber-security NNCs that arose from the 2023 inspection—whether they are still open, and if they are, when are anticipated to be closed?

C. Whiteshell Laboratories ("WL")

Last year, Whiteshell Laboratories ("WL") received ratings of "Below Expectations" for two SCAs: Human Performance Management, and Emergency Management and Fire Protection.[27] In 2024, these two SCAs have maintained ratings of "Below Expectations", which is deeply troubling, as these SCAs point to serious health and safety issues arising if non-compliance persists.

Human Performance Management SCA—Below Expectations

According to the Event Initial Report from 2023 identifying the deficiencies found during a self-assessment conducted by CNL of WL's Fire Protection Program, the deficiencies associated with the Human Performance Management SCA were raised regarding training of personnel.[28] In addition, there were shortfalls in minimum staff complement not being maintained for Emergency Management and Fire Protection. Upon review of CNL's efforts to resolve these issues, while finding that CNL has implemented processes that ensure a sufficient number of licensee personnel, CNSC staff has determined that "further improvement is needed for CNL's performance in the specific area of personnel training to meet CNSC staff's expectations. Gaps continue to be observed in some training programs using the Systematic Approach to Training."[29]

With these continued shortfalls in compliance, it is reassuring to note that "CNSC staff will maintain increased regulatory scrutiny on CNL's training program, including semi-annual meetings with CNL's training department, desktop and technical reviews, and the addition of a Facility Specific Personnel Training Inspection to the compliance verification plan."[30] CELA is interested in a detailed update about the progress on this SCA at the upcoming Commission meeting. CELA is also interested in hearing from CNSC staff about what is being done at other CNL sites to ensure the Human Performance Management SCA does not show the same trend, especially considering sites like CRL have non-compliance issues linked to personnel not following protocols and not keeping records up to date, as seen above.

[27] CNL ROR 2023, p.24
[28] CNL ROR 2024, p. 29
[29] CNL ROR 2024, p. 29
[30] CNL ROR 2024, p. 29

Emergency Management and Fire Protection SCA—Below Expectations

As stated, WL received a "Below Expectations" rating in 2023 for the Emergency Management and Fire Protection SCA, and that rating persists in 2024. According to the CNL ROR 2024, there are still findings of non-compliance such as "emergency response plans not being maintained as required", and "non-compliance with pre-fire planning requirements" at WL, as a result of 4 inspections in 2024.[31]

Again, CNSC staff have noted in the ROR that they will "maintain increased regulatory scrutiny on Emergency Management and Fire Protection programs for WL for the duration of the licence period, including the conduct of an Emergency Management and Fire Protection Program inspection."[32] From this statement, this question arises: what happens next if WL continues to be rated "Below Expectations" for this SCA? What will the CNSC's next steps be, and is there a timeframe for CNL to improve their compliance with Emergency Management and Fire Protection Program? The intervenor **submits** that this is an extremely important SCA to comply with, as inadequate emergency planning and fire protection can quickly snowball into other areas of non-compliance, putting workers, the public, and the environment at risk for serious harm.

Recommendations

6. A detailed update is requested regarding the progress at WL to improve compliance with the Human Performance SCA at the upcoming Commission meeting.
7. CNSC staff is requested to provide an update on what is being done at other CNL sites to ensure the Human Performance Management SCA do not fall into this issue of non-compliance, especially considering sites like CRL seem to be having non-compliance issues linked to personnel not following protocols and not keeping records up to date.
8. The intervenor seeks clarification on what happens next if WL continues to be rated "Below Expectations" for the Emergency Management and Fire Protection SCA? What will the CNSC's next steps be, and is there a timeframe for CNL to improve their compliance with Emergency Management and Fire Protection Program?

D. Port Hope Area Initiative ("PHAI")

In 2024, the Port Hope Area Initiative ("PHAI") was subject to 5 inspections, resulting in CNSC staff issuing 7 NNCs.[33]

[31] CNL ROR 2024, p. 30
[32] CNL ROR 2024, p. 30
[33] CNL ROR 2024, p. 6

Environmental Protection SCA

CELA is relieved to read that there were no NNCs issued as a result of 2 inspections concerning the Environmental Protection SCA.[34] This is an improvement from last year, which had 1 NNC arising from one of the 4 inspections conducted in 2023.[35] However, there is an effluent monitoring event that CELA seeks clarification on. According to the ROR:

> all airborne and liquid effluent releases of radiological and hazardous substances remained well below their regulatory limits *except 1 occurrence where copper and zinc exceeded the Environmental Compliance Approval ECA limits for the Potable Water Treatment System located at the Port Hope Harbour and Centre Pier*. This was not considered to be a Reportable Event.[36]

CELA **requests** more detail about this event be provided at the upcoming Commission meeting. For instance, how much was the exceedance, how long did the exceedance last, how did it happen, and why was it not considered to be a Reportable Event?

Physical Design SCA

There was 1 NNC issued for this SCA during an inspection in 2024 as a result the PHAI "not having a monitoring plan for the newly constructed harbour walls or sufficient evidence that the toe pins for the steel sheet pile wall and combi-wall are compliant with design requirements."[37] CELA **requests** an update on this NNC, and in particular, why it happened in the first place.

Fitness for Service SCA

According to the ROR, an inspection for the Fitness of Service SCA revealed that the monitoring equipment and sensors at the Port Granby long-term waste management facility were not functional at the time of the inspection, along with maintenance deficiencies.[38] The intervenor seeks clarification on this NNC, specifically about how long the equipment and sensors were not functioning, and whether there is an update on the engineering firms assessment of this malfunction.

[34] CNL ROR 2024, 36
[35] CNL ROR 2023, p. 39
[36] CNL ROR 2024, p. 37, *emphasis added.*
[37] CNL ROR 2024, p. 40
[38] CNL ROR 2024, p. 41

Recommendations

9. CELA requests more detail about an exceedance of copper and zinc at the Portable Water Treatment System located at the Port Hope Harbour and Centre Pier be provided at the upcoming Commission meeting. For instance, how much was the exceedance, how long did the exceedance last, how did it happen, and why was it not considered to be a Reportable Event?
10. An update should be provided on the Physical Design SCA notice of noon-compliance issued to the PHAI.
11. Seeking clarification on Fitness for Service NNC at the PHAI, specifically about how long the equipment and sensors were not functioning, and whether there is an update on the engineering firms assessment of this malfunction.

E. Douglas Point Waste Facility ("DPWF")

As the result of one inspection in 2024, Douglas Point Waste Facility ("DPWF") was issued 6 NNCs.[39] Four of these NNCs were associated with the Emergency Management and Fire Protection SCA, which will be discussed below.

Radiation Protection SCA

While DPWF was found to be compliant with the Radiation Protection SCA, the ROR does discuss an abnormal radiological hazard control finding that the intervenor would like learn more information about: "In 2024, *elevated levels of loose surface contamination in excess of CNL's zoning limits were discovered in 2 rooms inside the Service Building*. Decontamination and other hazard reduction measures were taken, and the rooms are now designated at the correct Radiological Safety Zone."[40] The intervenor requests more information about what these levels were, and how this exceedance occurred.

Emergency Management and Fire Protection SCA

When reviewing the four NNCs issued under this SCA, it is notable that the issues are largely linked to mismanagement of job tasks, and disorganization:

- Inconsistencies in emergency equipment being properly inventoried, inspected, tested, and maintained in state of readiness at all times;

[39] CNL ROR 2024, p. 6
[40] CNL ROR 2024, p. 45, *emphasis added*

- discrepancies between the building pre-incident plans and the location of equipment in the building, egress aisle obstruction, and missing updates of pre-incident plans to account for temporarily shuttered entrances;
- absence of records for drills or exercises demonstrating that all emergency measures outlined in DPWF's emergency procedures have been tested;
- no secondary means of communication for emergency notifications in the event of a radio failure.[41]

CELA **submits** that CNSC and CNL need to take a close look at the work culture at all CNL sites, as the non-compliances likely could have been avoided with employees being diligent and up to date on policies and standards to be followed in day-to-day operations.

Recommendations

12. The intervenor requests more information on elevated levels of loose surface contamination in excess of CNL's zoning limits discovered in 2 rooms inside the Service Building at DPWF, specifically, what the exceed levels were, and how/why this exceedance occurred.
13. CNSC and CNL need to take a close look at the work culture at all CNL sites, as the non-compliances with Emergency Management and Fire Protection SCA at DPWF likely could have been avoided with employees being diligent and up to date on policies and standards to be followed in day-to-day operations.

F. Gentilly-1 Waste Facility ("G1WF")

There were two inspections at the Gentilly-1 Waste Facility ("G1WF") in 2024, resulting in 8 NNCs being issued.[42] All of these NNCs were issued in regard to the Emergency Management and Fire Protection SCA.

Asbestos

When reading the overview for Gentilly-1 Waste Facility ("G1WF"), the ROR states: "Asbestos removal was completed in all areas of the Reactor Building except for the reactor upper feeder cabinet."[43] CELA **requests** an update on the expected timeline for this asbestos to be removed.

[41] CNL ROR 2024, p. 48-49
[42] CNL ROR 2024, p. 6
[43] CNL ROR 2024, p. 51

Emergency Management and Fire Protection SCA

Once again, a CNL site has been issued numerous NNCs for not complying with the Emergency Management and Fire Protection SCA. While CNSC staff note these non-compliances were all deemed "low-risk",[44] there is a concerning trend that the emergency procedures and practices associated with this SCA are not taken seriously by employees across CNL's sites. The intervenor **reiterates** that the CNSC and CNL need to investigate the root cause of non-compliance with the Emergency Management and Fire Protection SCA.

Recommendations

14. CELA requests an update on the expected timeline for the remaining asbestos to be removed from G1FW.
15. The CNSC and CNL need to investigate the root cause of non-compliance with the Emergency Management and Fire Protection SCA.

G. Nuclear Power Demonstration Waste Facility ("NPDWF")

The main topic of concern when reading the Nuclear Power Demonstration Waste Facility ("NPDWF") section of the ROR concerns the environmental risk assessment segment:

> In 2023, CNSC staff performed a gap analysis of CNL's NPDWF environmental risk assessment (ERA) documentation against requirements of REGDOC 2.9.1, Environmental Protection: Environmental Principles, Assessments and Protection Measures and CSA N288.6-22, Environmental risk assessments at nuclear facilities and uranium mines and mills. Following the review, *CNSC staff identified gaps regarding formal documentation of a human health risk assessment for hazardous substances as well as an ecological risk assessment for the current storage-with-surveillance state of the facility*. In their response letter submitted in September 2024, *CNL stated that they currently have an open action to review the ERA documentation for NPDWF by June 2025, for which CNSC staff have accepted the scope and schedule*. While completing the committed action to review the existing ERA for the NPDWF, *CNL will take into consideration the gaps and comments provided in CNSC staff's ERA gap analysis.*[45]

With regard to the gaps and comments provided in the CNSC staff's ERA gap analysis, the intervenor seeks clarification on why CNL is only going to take CNSC staff's analysis "into consideration", rather than being required to resolve the identified gaps in the ERA? The gaps

[44] CNL ROR 2024, p. 58
[45] CNL ROR 2024, p. 64, *emphasis added*

identified by CNSC staff are concerning in the public eye, considering they involve a human health risk assessment for hazardous substances as week as an ecological risk assessment. The intervenor **submits** that gaps and comments identified by CNSC Staff should be an undertaking for CNL to resolve these gaps to ensure the ERA is robust, and not merely take the comments into consideration.

Recommendation

16. When gaps and comments identified by CNSC Staff for an environmental assessment, the proponent should be required to make an undertaking to resolve the gaps to ensure the ERA is robust.

IV. COMMENTS ON THE REGUALTORY OVERSIGHT REPORT FOR CANADIAN NUCLEAR POWER GENERATING SITES: 2024

When reviewing the various sites captured by the NPGS ROR 2024, there were a number Safety Compliance Areas ("SCAs") that really stood out when assessing licensee compliance. While the ROR is organized by NPG site, which is a very clear way of providing the information required in the ROR and we appreciate that CNSC staff have organized the ROR in this way, this submission is mainly organized according to SCAs to point out recurring themes of non-compliance. It is worth noting that Bruce Power and the Darlington Waste Management Facilities each have their own sections due to their instances of non-compliance. Our submission also makes note of two issues that do not get enough attention in the RORs: KI Pills and Climate Change.

A. Human Performance Management SCA

Darlington Nuclear Generating Station

A crucial piece of workplace safety is ensuring employees are fit to work. Upon the inspection of OPG's Fitness-for-Duty: Managing Worker Fatigue Program, CNSC staff identified two instances of non-compliance: "1 related to not ensuring that workers are trained with respect to managing worker fatigue and another to OPG not effectively managing worker fatigue."[46] While both of this Notices of Non-Compliance ("NNCs") were deemed to be of low-safety significance, the intervenor submits that there is a concerning trend within the nuclear industry in which there is not a safe and supportive work environment. CELA **requests** that the CNSC and OPG provide an update on whether OPG is effectively addressing this issue after implementing the corrective measures.

Pickering Nuclear Generating Station

When reviewing the Fitness-For-Duty programs at Pickering, CNSC staff noted 3 non-compliant findings of low safety significance for the Managing Alcohol and Drug Use Program, and 2 non-compliant findings of low safety significance for the Managing Worker Fatigue Program:

- *Managing Alcohol and Drug Use Program*: related to Continuous Behavior Observations Program (CBOP); the training did not include elements of monitoring for drug and alcohol use, the program did not ensure post- incident testing was conducted, and measures were not in place to prevent subversion of urine samples collection;

[46] NPGS ROR 2024, p. 28

- *Managing Worker Fatigue Program*: related to not ensuring that workers are trained with respect to managing worker fatigue and not managing worker fatigue.[47]

CELA **requests** an update on how OPG is managing the Fitness-For-Duty programs at Pickering, both in terms of drug and alcohol use, and fatigue.

Point Lepreau Nuclear Generating Station

The biggest offender for not complying with ensuring fitness for duty is Point Lepreau. The ROR notes: "During a fitness for duty field inspection, CNSC staff found that NB Power was not compliant with REGDOC-2.2.4 sections 4.2 and 4.3, as non-compliances were identified with the scheduling software, hours worked, and recovery periods."[48] After CNSC staff noted that the corrective actions by Point Lepreau were "inadequate at preventing the recurrence of the non-compliant findings as they were found in *multiple* follow-up inspections," the non-compliance was escalated to a finding of **medium safety significance**.[49]

Due to the continued non-compliance, "on March 20, 2025 the CNSC issued an administrative monetary penalty (AMP) of $24,760 to New Brunswick Power Corporation. CNSC staff will continue to monitor NB Power's progress in implementing the corrective actions."[50] CELA notes that the CNSC does not issue AMPs very frequently, which indicates how serious the non-compliance with the Human Performance Management SCA is to ensure nuclear facilities are being operated by alert and reactive employees. CELA **requests** an update on the state of compliance at Point Lepreau following the issuance of the AMP. The warning letter issued on January 22, 2025 did not resolve the issue. CELA is interested in hearing about the effectiveness of issuing AMPs and getting licences to take compliance seriously.

Recommendations

1. The CNSC and OPG should provide an update on compliance with the fitness for duty programs at Darlington and Pickering.
2. An update is needed how New Brunswick Power Corporation is rectifying the findings of non-compliance with the fitness for duty programs at Point Lepreau, especially following the issuance of an AMP.

[47] NPGS ROR 2024, p. 52
[48] NPGS ROR 2024, p. 107
[49] NPGS ROR 2024, p, 107, emphasis added
[50] NPGS ROR 2024, p. 107

B. Physical Design SCA

Darlington Nuclear Generating Station

With regards to Darlington's Pressure Boundary (PB) Program, OPG identified issues with demonstration of overpressure protection in the M0-99 Target Delivery System and reported these issues to CNSC staff in late 2024. As a result, CNSC undertook a reactive inspection in 2025 to monitor OPG's corrective actions and to measure compliance with this SCA.[51] CELA is **requesting** an update on this issue, and whether CNSC staff have found the corrective measures to be sufficient.

Pickering Nuclear Generating Station

CELA is seeking more details on the 3 non-compliances of low safety significance found in a reactive desktop inspection of Pickering's Pressure Boundary Program, as the ROR's latest update is that CNSC staff were reviewing the corrective actions for their effectiveness at the end of 2024. First, CELA **requests** more information on what these non-compliance were, and what CNSC staff have determined upon their review of OPG's corrective actions.

Recommendations

3. Provide an update on the issue of overpressure protection in Darlington's M0-99 Target Delivery System, and whether CNSC staff have found the corrective measures to be sufficient.
4. Provide more details on the 3 non-compliances of low safety significance found in a reactive desktop inspection of Pickering's Pressure Boundary Program, as the ROR's latest update is that CNSC staff were reviewing the corrective actions for their effectiveness at the end of 2024.
    a. Provide more information on what these non-compliance were, and
    b. Explain what CNSC staff have determined upon their review of OPG's corrective actions.

C. Emergency Management and Fire Protection SCA

Darlington Nuclear Generating Station

One of the most troubling findings when reviewing last year's ROR was reading about a reactive field inspection in 2023 that revealed audibility issues with the public address (PA) system

[51] NPGS ROR 2024, p. 32

throughout the station. At the time of the NPGS ROR 2023 being published, the PA system had not been repaired. We reiterate that in the public eye, having a functioning PA system at a nuclear power plant is essential in being able to address emergency situations and ensure safety protocols are being followed.[52]

Upon reviewing this year's ROR, the document notes:

> CNSC staff continue to monitor OPGs progress towards completion of the project to upgrade the public address system at the DNGS, as previously detailed in CMD 25-M9, Regulatory Oversight Report for Canadian Nuclear Power Generating Sites for 2023. To date, OPG has completed the detailed design and issued a purchase order for the required materials.[53]

This means that the PA system is still not functional. As we have mentioned, having a functioning PA system is a *crucial* component of emergency response. CELA is **requesting** an update on a timeline for the repair of Darlington's PA system, and an explanation of what OPG has been doing in the meantime to mitigate the absence of a functioning PA system at the site.

Pickering Nuclear Generating Station

The NPGS ROR 2024 notes that after CNSC conducted 1Type II inspection and 10 field inspections on Fire Protection at Pickering, CNSC staff discovered non-compliance pertaining to updates of pre-fire plans and inspection, testing, and maintenance of fire protection equipment. CELA is requesting an update whether CNSC staff have deemed OPG's corrective actions to be effective and bring about compliance.

Recommendations

5. Provide an update at the upcoming Commission meeting on a timeline for the repair of Darlington's PA system, and an explanation of what OPG has been doing in the meantime to mitigate the absence of a functioning PA system at the site.
6. Provide an update at the upcoming Commission meeting as to whether CNSC staff have deemed OPG's corrective actions to be effective and bring about compliance.

[52] CELA NPGS ROR 2023 Submission, p. 11
[53] NPGS ROR 2024, p. 36, *emphasis added*

D. Safeguards Against Non-Proliferation

Upon reviewing the performance ratings for Safeguards and Non-Proliferation at the various sites covered within this ROR, it is troubling to see the lack of co-operation the International Atomic Energy Agency ("IAEA") has encountered during inspections. The following sites all had negative outcomes from IAEA inspections, despite the ROR performance ratings being "satisfactory".

Darlington Nuclear Generating Station

For example, "during an IAEA short notice random inspection (SNRI) on April 29, 2024, the IAEA could not access all fresh fuel designated for Darlington Nuclear Refurbishment Unit 1."[54] The IAEA did not have access to the new fuel load due to its storage configuration in a foreign material exclusion zone—this was not a satisfactory inspection to the IAEA.[55] The ROR notes that the CNSC is working with OPG and the IAEA "to ensure plans for the next and final refurbishment (Darlington Nuclear Refurbishment Unit 4) new fuel load do not impact IAEA inspections and the necessary follow-up actions are taken to resolve this issue."[56]

In the eyes of the public, it does not instill confidence that a governing agency could not conduct an inspection of fuel due to improper storage. Whether an inspection is scheduled well in advance, on short notice, or with no notice, a member of the public would expect a body like the IAEA to be able to see everything they need to see at a nuclear facility and have everything where it should be.

CELA **requests** clarification on how this incident unfolded, and why the fresh fuel was in a foreign material exclusion zone, and not where it should have been for a satisfactory inspection.

Darlington Waste Management Facility

The IAEA also encountered problems at the Darlington Waste Management Facility ("DWMF") during an inspection:

> In January 2024, the results from *an IAEA unannounced inspection were found to be unsatisfactory because the IAEA was not able to verify the declared shipment of a DSC during the transfer from DNGS to DWMF*. The transfer of the DSC occurred ahead of the scheduled time declared by OPG, leading to a loss of continuity of knowledge for the IAEA. The IAEA requested the opportunity to perform follow up verification activities to

[54] NPGS ROR 2024, p. 38
[55] NPGS ROR 2024, p. 38
[56] NPGS ROR 2024, p. 38

> address the issue. In June 2024, the IAEA performed neutron and gamma measurements on the DSC. No additional follow up actions are required from OPG.[57]

While this issue seemed to be beyond OPG's control, this event raises a question of proper time management at this facility, and whether this issue would have been mitigated had OPG known that the IAEA was going to come to inspect the shipment.

Pickering Nuclear Generating Station

According to the NPGS ROR 2024, "the IAEA had identified concerns related to advance information on spent fuel loadings not being provided to the IAEA correctly or in a timely manner and delays due to the implementation and late communication of new entry requirements."[58] CNSC staff note that the CNSC continues to engage with the IAEA and OPG to resolve these issues. The intervenor requests an update on whether these shortfalls in sharing information with the IAEA have been resolved.

Pickering Waste Management Facility

Yet another instance of an unsatisfactory inspection by IAEA occurred at the Pickering Waste Management Facility ("PWMF"): "there were non-satisfactory results of unannounced inspections for PNGS due to operational information not being provided correctly or in a timely manner by PWMF. OPG provided the support required for the IAEA's safeguards equipment, containment, and surveillance activities."[59] CELA is concerned about the issues that seem to arise at IAEA inspections for OPG site when they are either unannounced or with short notice; to the public, these reports suggest that OPG sites are not prepared or organized with regard to safeguarding nuclear substances. The intervenor **recommends** CNSC and OPG explore why unannounced/short notice inspections by the IAEA seem to catch OPG's nuclear sites off-guard in preparedness.

Recommendations

7. The intervenor is requesting clarification on how the unsatisfactory IAEA inspection at Darlington unfolded, and why the fresh fuel was in a foreign material exclusion zone, and not where it should have been for a satisfactory inspection.
8. The intervenor requests an update on whether the shortfalls at Pickering with sharing information with the IAEA have been resolved.

[57] NPGS ROR 2024, p. 46, *emphasis added*
[58] NPGS ROR 2024, p. 62
[59] NPGS ROR 2024 p. 70

9. CNSC and OPG should investigate why unannounced/short notice inspections by the IAEA seem to catch OPG's nuclear sites off-guard in preparedness.

E. Bruce Nuclear Generating Stations A and B

Major Component Replacement Project

When discussing the various major component replacement project events, the NPGS ROR 2024 makes note of the discovery of neutron radiation fields at the Retube Component Storage Building (RCSB) of the Western Waste Management Facility (WMMF), which resulted in Unit 3 MCR work being temporarily stopped until neutron hazard controls were established.[60] The ROR also notes that CNSC Staff continue to monitor this area. The intervenors are **requesting** that any updates or findings that have arisen from this event be discussed at the upcoming Commission meeting.

Environmental Protection SCA

When reviewing the environmental protection SCA, there were several environmental releases of concern to the intervenor.

First, from "October 23, 2024 to October 30, 2024, The Bruce B Ancillary Services Building (ASB) airborne tritium emissions were above the weekly Environmental Action Level (AL). Tritium emissions from the Bruce B Ancillary Services Building totaled 336 Curies over the course of the week, which is 124% above the AL. This release represented 0.1% of the regulatory limit (DRL) for airborne tritium at Bruce B."[61] According to the ROR, the CNSC staff's review of the detailed REGDOC-3.1.1 preliminary event report was in-progress. The intervenor is wondering if CNSC staff's review of this report is complete, and if so, what were the findings.

The other issue presented in the ROR concerns two occurrences in which releases of hazardous (non-radiological) substances exceeded provincial regulatory limits: "On August 15, 2024, a quarterly acute lethality sample for Active Liquid Waste (ALW) was collected at Bruce B as part of their Radioactive Liquid Waste Management System. The pre-release criteria for ALW was met; however, the acute lethality testing performed for the sample returned with an 80% mortality for daphnia magna, exceeding the 50% provincial regulatory limit."[62] The intervenor is requesting more details on this event, including the reasoning behind this event occurring, and whether it could have been prevented.

[60] NPGS ROR 2024, p. 75
[61] NPGS ROR 2024, p. 88
[62] NPGS ROR 2024, p. 88

Recommendations

10. The intervenors are requesting that any updates or findings associated with the discovery of neutron radiation fields at the Retube Component Storage Building (RCSB) be discussed at the upcoming Commission meeting.
11. An update on the airborne tritium release from Bruce B Ancillary Services Building in October 2024 is requested.
12. More details regarding the hazardous substance exceedance at Bruce B, including the reasoning behind this event occurring, and whether it could have been prevented.

F. Packaging and Transport SCA

Pickering Nuclear Generating Station

The NPGS ROR 2024 provides a very vague instance of non-compliance with the Packaging and Transport SCA: "There was 1 reportable event related to Packaging and Transport. No immediate health and safety concerns were noted and CNSC staff determined OPG took appropriate immediate action."[63] There are very details about this event, and CELA is **requesting** more information about what occurred in this event.

Recommendations

13. More details are requested concerning the instance of non-compliance with the Packaging and Transport SCA at Pickering.

G. Management System SCA

Darlington Nuclear Generating Station

During a reactive inspection related to the Molybdenum-99 Target Delivery System (TDS) at Darlington NGS, which was carried out in response to a configuration management issue identified in late 2023, a finding of **medium safety significance** was imposed in relation to "*procurement activities not following OPG's established processes*. In response, CNSC staff issued a warning letter to formally notify OPG of these non-compliances and to emphasize that further deficiencies in this area may lead to escalated enforcement actions."[64] Since this incident, CNSC staff have

[63] NPGS ROR 2024, p. 62
[64] NPGS ROR 2024, p. 27, *emphasis added*

increased regulatory oversight of OPG's TDS projects and have initiated 2 additional inspections in this area.[65]

With regards to this incident, the intervenor seeks clarification on what sort of procurement activities occurred. We also request an update on the outcomes of the two additional inspections, and whether further CNSC intervention will be necessary at this stage to ensure compliance with this SCA.

Recommendations

14. The intervenor seeks clarification on what sort of procurement activities occurred with the medium safety significance event.
15. The upcoming meeting should provide an update on the outcomes of the two additional inspections related to the medium safety significance event at Darlington for the Management System SCA, and whether further CNSC intervention will be necessary at this stage to ensure compliance with this SCA.

H. Climate Change

One of the recurring requests from CELA when reviewing the RORs for Nuclear Power Generating Sites is to include a discussion of climate change and climate mitigation. Upon reading through the NPGS ROR 2024, there is yet again an absence of this topic.

We recall that in response to CELA's submission for the NPGS ROR 2022, CNSC staff had recorded their responses to the various issues raised by intervenors. On the topic of climate change, CNSC staff noted:

> CNSC staff are currently undertaking a pilot project with the Pickering Nuclear Site Environmental Protection Review Report (EPRR) to incorporate a new section dedicated to climate change. This initiative is in response to the growing interest and concern about climate change among intervenors. Furthermore, CNSC staff are open to and welcome any feedback on this new section, as it will help us improve and refine future EPRRs, which are reviewed and revised every five years or earlier. The Pickering EPRR is expected to be published on the CNSC external website in early 2024.[66]

Once again, the intervenor submits including a discussion of the Pickering Nuclear Site Environmental Protection Review Report within the ROR would be of benefit. Especially

[65] NPGS ROR 2024, p.,27

[66] Canadian Nuclear Safety Commission, *Supplemental CMD*, CMD 23-M36.B (6 December 2023), page 4 [**Supplemental CMD to the 2022 ROR**]

considering this new EPRR was expected to be published on the CNSC external website in 2024. Including a CNSC staff assessment of climate change response would have been very insightful.

However, like last year's ROR, the NPGS ROR 2024 does not make any mention of climate change[67]. We note that in the ROR, there is a significant gap in addressing the increased risks to nuclear plant operations and safety as a result of the impacts of climate change and the development of adaptive strategies. Therefore, we once again **recommend** that the ROR should have dedicated sections for specific reactors and respective climate change risks and related adaptation strategies along with an overview of these power plants.

Recommendation

16. Have dedicated sections in Regulatory Oversight Reports for specific reactors and respective climate change risks and related adaptation strategies along with an overview of these power plants.

I. KI Pill Distribution

When reviewing this year's ROR to determine whether or not a discussion of potassium iodide ("KI" pill) distribution has been included, CELA was disappointed to note its exclusion once again. As noted in the CNSC Staff Supplementary CMD to the NPGS ROR 2022 (this CMD is also referenced in Appendix D2 of the NPGS ROR 2024)

> The PNERP update will undergo a public review period led by EMO, at which time the CNSC will coordinate meetings with the KI Pill Working Group and the Advisory Committee to discuss the update and potential comments from the public review. At this time, the CNSC understands the PNERP update is expected by the end of 2024.[68]

Unfortunately, this year's ROR also does not provide any update on the PNERP's progress. CELA reiterates that adequate distribution of KI pills is an important element of emergency preparedness for all NPGS, and **submits** that a discussion of KI distribution requirements and any updates based on meetings of the CNSC-led KI Pill Working Group would fall well within the scope of this ROR.

CELA remains an active member of the advisory group to the KI Pill Working Group; however it has not met in some time. CELA **submits** that distribution of KI pills is currently inadequate. While operators and regulators have spent years working on understanding the current framework for storing and distributing potassium iodide, the critical work has not begun as committed to in

[67] *With the exception of the ROR noting concerns of the Historic Saugeen Métis at p.178*: "CNSC staff and HSM continue to dialogue about HSM's outstanding concerns on fish impingement and entrainment, thermal effluent, and climate change."
[68] Supplemental CMD to the 2022 ROR, page 5 (CMD 23-M36.B)

the last Pickering hearing to further distribute KI pills to residents living beyond 10 km. This measure is especially critical for vulnerable populations, such as children.

CELA continues to **recommend** expanding the delivery of KI pills to a pre-distribution area of 50 km, rather than the current 10 km pre-distribution area. CELA further **recommends** that KI pill distribution requirements and updates from the KI Pill Working Group be discussed at the upcoming Commission Meeting and integrated into this ROR, especially now that the PNERP has been updated.

Recommendations

17. The CNSC should consider expanding the delivery of KI pills to a pre-distribution area of 50 km, rather than the current 10 km pre-distribution area.

18. KI distribution requirements and updates from the KI Pill Working Group be discussed at the upcoming Commission Meeting and integrated into this ROR.

V. CONCLUSION

We respectfully provide these comments to assist the Commission in its review of the *Regulatory Oversight Report for Canadian Nuclear Laboratories Sites: 2024,* the *Regulatory Oversight Report for Canadian Nuclear Power Generating Sites: 2024,* and the CNSC Regulatory Oversight process as a whole.

Sincerely,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION

Sara Libman

Sara Libman, Legal Counsel to CELA

APPENDIX A

Summary of General Recommendations

1. The intervenor seeks clarification on whether CNL sites are subjected to Type I and Type II inspections.

2. All RORs would benefit from an explanation of the types of inspections being utilized in the monitoring of the various nuclear activities and sites across Canada. Furthermore, when discussing the inspections for each SCA, the ROR should detail which type of inspections are being triggered.

3. The CNSC should consider developing a performance rating system based on measurable indicators. In the alternative, performance ratings for each CNL site or NPGS in an ROR include an evaluation of set criteria such as key performance indicators, compliance with licence conditions, events, repeat non-compliances, and licensee action in response to events, as well as the nature of the events themselves.

4. The ROR would greatly benefit from providing a detailed breakdown of the issues raised by all intervenors, and how they have been answered or responded to should be provided in RORs annually in a disposition chart or table of action taken and underway.

5. Intervenors who provide comments on an ROR should have an opportunity to present orally before the Commission.

APPENDIX B

Summary of Recommendations for CNL ROR 2024

1. CNSC staff should evaluate the results of inspections and reportable events from a cumulative impacts lens, and from a safety perspective, as each act of non-compliance reveals complacency or other root causes in work place safety and emergency management.

2. At the upcoming Commission meeting, an update should be provided on which Radiation Protection SCA notices of non-compliance have been closed, and which remain open, as well as a timeline for CNL to resolve the remaining NNC for Chalk River.

3. CNL should conduct an internal review of its safety culture, with CNSC reviewing these findings, and providing regulatory oversight and guidance to rectify this issue.

4. CNSC and CNL should review and discuss how the CRL site accumulated so many emergency and fire protection hazards, and what is the root cause of CRL workers not taking due care for their own safety.

5. CNL and CNSC staff should provide an update on the 2 remaining cyber-security NNCs that arose from the 2023 inspection—whether they are still open, and if they are, when are anticipated to be closed?

6. A detailed update is requested regarding the progress at WL to improve compliance with the Human Performance SCA at the upcoming Commission meeting.

7. CNSC staff is requested to provide an update on what is being done at other CNL sites to ensure the Human Performance Management SCA do not fall into this issue of non-compliance, especially considering sites like CRL seem to be having non-compliance issues linked to personnel not following protocols and not keeping records up to date.

8. The intervenor seeks clarification on what happens next if WL continues to be rated "Below Expectations" for the Emergency Management and Fire Protection SCA? What will the CNSC's next steps be, and is there a timeframe for CNL to improve their compliance with Emergency Management and Fire Protection Program?

9. CELA requests more detail about an exceedance of copper and zinc at the Portable Water Treatment System located at the Port Hope Harbour and Centre Pier be provided at the upcoming Commission meeting. For instance, how much was the exceedance, how long did the exceedance last, how did it happen, and why was it not considered to be a Reportable Event?

10. An update should be provided on the Physical Design SCA notice of noon-compliance issued to the PHAI.

11. Seeking clarification on Fitness for Service NNC at the PHAI, specifically about how long the equipment and sensors were not functioning, and whether there is an update on the engineering firms assessment of this malfunction.

12. The intervenor requests more information on elevated levels of loose surface contamination in excess of CNL's zoning limits discovered in 2 rooms inside the Service Building at DPWF, specifically, what the exceed levels were, and how/why this exceedance occurred.

13. CNSC and CNL need to take a close look at the work culture at all CNL sites, as the non-compliances with Emergency Management and Fire Protection SCA at DPWF likely could have been avoided with employees being diligent and up to date on policies and standards to be followed in day-to-day operations.

14. CELA requests an update on the expected timeline for the remaining asbestos to be removed from G1FW.

15. The CNSC and CNL need to investigate the root cause of non-compliance with the Emergency Management and Fire Protection SCA.

16. When gaps and comments identified by CNSC Staff for an environmental assessment, the proponent should be required to make an undertaking to resolve the gaps to ensure the ERA is robust.

APPENDIX C

Summary of Recommendations for NPGS ROR 2024

1. The CNSC and OPG should provide an update on compliance with the fitness for duty programs at Darlington and Pickering.

2. An update is needed how New Brunswick Power Corporation is rectifying the findings of non-compliance with the fitness for duty programs at Point Lepreau, especially following the issuance of an AMP.

3. Provide an update on the issue of overpressure protection in Darlington's M0-99 Target Delivery System, and whether CNSC staff have found the corrective measures to be sufficient.

4. Provide more details on the 3 non-compliances of low safety significance found in a reactive desktop inspection of Pickering's Pressure Boundary Program, as the ROR's latest update is that CNSC staff were reviewing the corrective actions for their effectiveness at the end of 2024.

    a. Provide more information on what these non-compliance were, and
    b. Explain what CNSC staff have determined upon their review of OPG's corrective actions.

5. Provide an update at the upcoming Commission meeting on a timeline for the repair of Darlington's PA system, and an explanation of what OPG has been doing in the meantime to mitigate the absence of a functioning PA system at the site.

6. Provide an update at the upcoming Commission meeting as to whether CNSC staff have deemed OPG's corrective actions to be effective and bring about compliance.

7. The intervenor is requesting clarification on how the unsatisfactory IAEA inspection at Darlington unfolded, and why the fresh fuel was in a foreign material exclusion zone, and not where it should have been for a satisfactory inspection.

8. The intervenor requests an update on whether the shortfalls at Pickering with sharing information with the IAEA have been resolved.

9. CNSC and OPG should investigate why unannounced/short notice inspections by the IAEA seem to catch OPG's nuclear sites off-guard in preparedness.

10. The intervenors are requesting that any updates or findings associated with the discovery of neutron radiation fields at the Retube Component Storage Building (RCSB) be discussed at the upcoming Commission meeting.

11. An update on the airborne tritium release from Bruce B Ancillary Services Building in October 2024 is requested.

12. More details regarding the hazardous substance exceedance at Bruce B, including the reasoning behind this event occurring, and whether it could have been prevented.

13. More details are requested concerning the instance of non-compliance with the Packaging and Transport SCA at Pickering.

14. The intervenor seeks clarification on what sort of procurement activities occurred with the medium safety significance event.

15. The upcoming meeting should provide an update on the outcomes of the two additional inspections related to the medium safety significance event at Darlington for the Management System SCA, and whether further CNSC intervention will be necessary at this stage to ensure compliance with this SCA.

16. Have dedicated sections in Regulatory Oversight Reports for specific reactors and respective climate change risks and related adaptation strategies along with an overview of these power plants.

17. The CNSC should consider expanding the delivery of KI pills to a pre-distribution area of 50 km, rather than the current 10 km pre-distribution area.

18. KI distribution requirements and updates from the KI Pill Working Group be discussed at the upcoming Commission Meeting and integrated into this ROR.