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PRESENT: Madam Justice Whyte Nowak

BETWEEN:

CONCERNED CITIZENS OF RENFREW COUNTY AND  
AREA, CANADIAN COALITION FOR NUCLEAR  
RESPONSIBILITY AND RALLIEMENT CONTRE LA  
POLLUTION RADIOACTIVE

Applicants

and

CANADIAN NUCLEAR LABORATORIES

Respondent

**JUDGMENT AND REASONS**

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## I. Overview

[1] By decision dated January 8, 2024 [the Decision], a panel of the Canadian Nuclear Safety Commission [Commission] approved the application of Canadian Nuclear Laboratories [CNL] to amend its current licence governing the Chalk River Laboratories nuclear facility [CRL] located in Renfrew County, Ontario. The amendment authorizes the construction of a Near Surface Disposal Facility [NSDF] as part of a proposed waste disposal facility using an Engineered Containment Mound [Containment Mound] designed to be built at ground surface level. The NSDF will hold up to 1 million cubic metres (m<sup>3</sup>) of solid radioactive low-level waste [LLW].

[2] The Applicants, the Concerned Citizens of Renfrew County and Area [Concerned Citizens], the Canadian Coalition for Nuclear Responsibility [CCNR] and Ralliement contre la pollution radioactive [Ralliement][collectively, the Applicants], are non-profit organizations that are dedicated to ensuring the protection of human health and the environment in connection with the management of nuclear waste. The Applicants have sought judicial review of the Decision, arguing that it is unreasonable. They accept that a permanent and modern solution such as the

NSDF is needed for the storage of LLW currently being stored at CRL, but they say that there are significant gaps in the Commission's Decision relating to radioactive waste dose limits, waste verification criteria, mitigation measures for species at risk and cumulative environmental effects which render the Decision unreasonable.

[3] For the reasons that follow, I find that the Commission's Decision has not been shown to be unreasonable when read holistically and taking into account the Commission's expertise, its consideration of the record and the facts and the law that constrained it. Both the Decision and the record show that the Commission managed to grapple with the central issues and arguments from the parties and the 165 intervenors that it heard from. The Applicants have not shown any fundamental gap in the Commission's reasons that undermines the Court's confidence in the Decision.

## II. Legislative Framework

[4] The proposed NSDF facility would be licenced under the *Nuclear Safety and Control Act*, SC 1997, c 9 [NSCA] and will be subject to its associated regulations.

[5] The Canadian Nuclear Safety Commission was established pursuant to section 8 of the NSCA with both a regulatory and an adjudicative function. In these reasons, I refer to the panel constituted pursuant to section 22 of the NSCA to carry out its adjudicative function as the Commission as distinct from the CNSC, which refers to the organization and its staff that carry out its regulatory function.

[6] The CNSC is the sole nuclear regulator in Canada with the mandate to regulate the development, production and use of nuclear energy and the production, possession and use of nuclear substances and prescribed equipment in a manner that: (i) prevents “unreasonable risk” to the environment, the health and safety of persons and national security associated with those activities; and (ii) achieves conformity with measures of control and international obligations to which Canada has agreed (*NSCA*, s 9(a)).

[7] The CNSC is also the body that issues licences to persons wishing to carry out any of the regulated activities which are otherwise prohibited. It has the authority to issue, renew, suspend in whole or in part, revoke or replace a licence, or authorize its transfer (*NSCA*, ss 24-26) and to subject any such licence to terms or conditions it considers necessary (*NSCA*, s 24(5)).

[8] There are a number of associated regulations made pursuant to section 44 of the *NSCA* that touch on nuclear licences:

- (i) *General Nuclear Safety and Control Regulations*, SOR/2000-202 [*GNSCR*] provide the grounds for the issuance, renewal, amendment, revocation or replacement of a licence and impose obligations on licensees, including taking “all reasonable precautions to protect the environment and the health and safety of persons and to maintain the security of nuclear facilities and of nuclear substances” (*GNSCR*, s 12(1)(c));
- (ii) *Class I Nuclear Facilities Regulations*, SOR/2000-204 [*Class I Regulations*] set out the information that must be included in an application to construct a new Class IB facility like the NSDF and the required information relevant to the operation of the CRL site under licence;
- (iii) *Radiation Protection Regulations*, SOR/2000-203 [*RPR*] include regulations for the protection of the environment and the health and safety of persons from any risks associated

with regulated nuclear activities, including doses of radiation. The *RPR* also mandates the development of a radiation protection program that would be applicable during the potential operation of the NSDF, if later authorized by the CNSC; and

- (iv) *Nuclear Substances and Radiation Devices Regulations*, SOR/2000-207 [*NSRDR*] apply to all nuclear substances and sealed sources, as well as to all radiation devices that are not included in Class II prescribed equipment (*NSRDR*, s 2(1)) with provisions that set conditional clearance levels, unconditional clearance levels and exemption quantities in respect of listed radioactive nuclear substances which are to be abandoned or possessed or stored without a licence.

### III. Facts

#### A. *The Applicants*

[9] Concerned Citizens is an incorporated non-profit organization that has been working for over 45 years for the clean-up and prevention of radioactive pollution from the nuclear industry in the Ottawa Valley.

[10] CCNR is an incorporated non-profit organization that conducts education and research on issues related to nuclear energy.

[11] Ralliement is an incorporated non-profit organization whose mission is to “act voluntarily and collectively promote responsible solutions for the management of radioactive waste to ensure that they pose no risk to the environment and to the health of the population.”

[12] All of the Applicants made oral and written submissions to the Commission. They also backed certain submissions of other intervenors, including Dr. James Walker [Dr. Walker], who is the former Director of Safety Engineering and Licensing at Chalk River.

B. *CNL*

[13] CNL is a private company that operates and manages nuclear sites, facilities and assets owned by Atomic Energy of Canada Limited [AECL], a federal Crown corporation that owns the CRL site. AECL contracts CNL to manage its sites, nuclear activities, decommissioning programs and waste responsibilities.

[14] CNL operates the CRL site, which is located on Federal lands in Renfrew County, Ontario, approximately 200 km northwest of Ottawa and 1.1 km from the Ottawa River. The site houses several nuclear and non-nuclear facilities, including waste management facilities, which are operated by CNL under an existing Nuclear Research and Test Establishment Operating Licence under the *NSCA* [the Current Licence] which was renewed in 2018 for a 10-year period.

C. *CNL's Proposed NSDF Project*

[15] CNL is applying to the CNSC to construct a NSDF for the safe disposal of solid LLW at the CRL site.

[16] The NSDF facility will be built at ground surface level, feature an 18 metre-tall Containment Mound and include a multilayer base liner and cover system. There will be 10

waste disposal cells built in two phases, with the waste in each cell to be covered after the cell is full. The proposed project also includes a waste-water treatment plant, support facilities that enable operation and site infrastructure [collectively, the NSDF Project].

[17] The purpose of the NSDF Project is for the permanent disposal of current and future LLW at the CRL site. The LLW will include waste currently being stored temporarily at the CRL site, including contaminated soils, building materials and general items (e.g., mops, protective clothing and rags). The vast majority of the waste volume expected to be placed in the NSDF are soils, soil-like debris and decommissioning or demolition wastes. The remaining 15% of the total volume will be wastes contained in various types of packaging.

[18] The NSDF will also house future LLW that will be generated from future remediation, decommissioning and operational activities at the CRL site, as well as waste from other AECL-owned sites and other commercial sources, including Canadian hospitals and universities. It is projected that about 30% of the LLW to be stored in the NSDF is currently stored at the CRL site and around 60% of the LLW is projected to be generated in the future from the CRL operations.

[19] The Containment Mound has a design life of 550 years in order to meet the required time period to allow for radiologic decay of the waste inventory, which will require isolation and containment for up to a few hundred years.

[20] The NSDF's lifespan will consist of five phases. The pre-closure period consists of: (i) a 3-year construction phase; (ii) a 50-year operation phase during which the LLW would be placed



in the Containment Mound; and (iii) a 30-year closure phase. The post-closure period includes: (iv) a 300-year institutional control period; and (v) an indefinite post-institutional control period starting at approximately the year 2400.

D. *CNL's Application to Amend the Current Licence*

[21] The proposed NSDF is considered a new Class IB nuclear facility under paragraph 19(a) of the *GNSCR*. Both CNL and the CNSC acknowledge that the proposed NSDF is not authorized under the Current Licence and the Commission must approve an amendment to allow the construction of the NSDF to take place.

[22] On March 31, 2017, CNL submitted a licence amendment application under section 5 of the *Canadian Environmental Assessment Act, 2012*, SC 2012, c 19, s 52 [*CEAA, 2012*] (now repealed) and section 24 of the *NSCA* for an amendment to the Current Licence to allow for CNL's construction of an NSDF. CNL submitted an updated application, including updated technical documentation, on March 26, 2021 [the CNL Application].

E. *The Commission Process*

[23] The Commission gathered information over the course of 8 years. Public hearings were held virtually on February 22, 2022 (Part 1), and in person from May 30, 2022 to June 3, 2022 (Part 2).

[24] On July 5, 2022, the Commission issued a Procedural Direction allowing more time to receive additional evidence and information regarding engagement and consultation efforts with the Kebaowek First Nation and the Kitigan Zibi Anishinabeg First Nation. The deadline for additional information was extended twice. Additional written and oral submissions were received from intervenors who made oral submissions in Part 2 of the public hearings. A final oral hearing was held on August 10, 2023 in order to hear final submissions from Indigenous Nations and communities.

[25] The Commission was assisted by the CNSC, as it is the responsible authority for licensing matters under the *NSCA* and for the environmental assessment [EA] of the NSDF Project under the *CEAA, 2012*.

[26] In total, the Commission received submissions from CNL and the CNSC, and written and/or oral submissions from 165 intervenors, including the Applicants. The Commission acknowledged the high level of public interest and expressly stated that it “gave careful consideration to all submissions and perspectives received, in accordance with its mandate.” The total record consisted of over 14,000 pages of evidence.

F. *The Commission’s Decision*

[27] The Commission delivered its 157-page Decision on January 8, 2024. It consists of three decisions:

- (1) The Environmental Assessment Decision [EA Decision]

[28] First, the NSDF is a designated project subject to an EA under the *CEAA, 2012*.

Therefore, in accordance with the *CEAA, 2012*, the Commission needed to render a positive EA decision before it could consider a licensing decision under the *NSCA*.

[29] In making an EA under the *CEAA, 2012*, the Commission was required to consider whether the NSDF project is likely to cause significant adverse environmental effects as described in subsections 5(1) and (2) of the *CEAA, 2012*. The scope of the EA for the NSDF Project was set by the Commission in a decision dated March 2017. This included the requirement that the Commission take into account the entire lifecycle of the project [the EA Issue]. As the Commission explained in its Decision:

In section 1.2.1 of CMD 22-H7, CNSC staff explained that, although the scope of the activities in CNL's application is limited to construction, section 5 of the *Class I Nuclear Facilities Regulations*, along with international guidance and practices recommend that operational and post-closure safety assessments be sufficiently detailed and reviewed by the regulator to provide for the basis to proceed with construction. Therefore, during this licensing phase, CNSC staff also assessed the adequacy of the design, construction, commissioning, operation, decommissioning, closure, and post-closure performance of the NSDF against the respective regulatory requirements and international standards and guidance as well as industry best practices (Decision at para 437).  
[Emphasis of the Commission]

[30] On the EA Issue, the Commission concluded that the NSDF Project is not likely to cause significant adverse environmental effects, provided that all proposed mitigation measures are implemented.

[31] The key relevant aspects of the Commission's EA Decision under subsections 5(1) and (2) of the *CEAA, 2012*, were that: (i) CNL's site selection process met all applicable standards

and the chosen site for the NSDF is acceptable; (ii) the NSDF will not cause significant adverse effects on human health or species at risk; and (iii) the NSDF will not cause significant adverse cumulative environmental effects.

[32] As such, the Commission determined that it could proceed to consider the proposed licence amendment under the *NSCA*.

(2) The Licence Amendment Decision [Licensing Decision]

[33] The Commission had to determine whether to grant CNL a licence amendment under section 24 of the *NSCA*. The Commission was required under subsection 24(4) of the *NSCA* to be satisfied that the following conditions for the licence had been met:

- a) CNL is qualified to carry on the construction of the NSDF Project; and
- b) CNL will, in carrying on that activity, make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed [collectively, the Licensing Issue].

[34] This included satisfaction of the requirements for an amendment to a licence application for Class IB nuclear facilities found in the *GNSCR* and *Class I Regulations*.

[35] On the Licensing Issue, the Commission concluded that the CNL Application satisfied the conditions of section 24 of the *NSCA* for an amendment to the Current Licence for the construction of the NSDF Project, which was accordingly granted and remains valid until March 31, 2028.

[36] The key relevant aspects of the Commission's Licensing Decision under the *NSCA* were that: (i) the licensing amendment application is complete and complies with the regulatory requirements respecting an application for an amendment of a licence; (ii) CNL is qualified to carry on the licence activities under the proposed amended licence; (iii) the NSDF would not be likely to cause significant adverse environmental effects; (iv) CNL has adequate programs in place with respect to the applicable safety and control areas to ensure that the health and safety of workers, the public and the environment will be protected during the construction of the NSDF; and (v) CNL will continue to maintain measures to provide for the maintenance of national security and to implement international obligations to which Canada has agreed.

(3) The Duty to Consult Decision

[37] The third issue was a determination as to whether the Crown had honoured its duty to consult with indigenous peoples. The Crown's duty to consult is not at issue on this application. Instead, it is the subject of a separate judicial review application in Federal Court File No. T-227-24.

IV. Issues and Standard of Review

[38] The Applicants have raised the following five issues which they submit reveal errors on the part of the Commission that render the Decision unreasonable:

**Issue 1:** Is the Decision unreasonable because the Commission applied the wrong radiation dose limit without providing any explanation, justification or consideration of the statutory scheme in its consideration of the EA?

**Issue 2:** Is the Decision unreasonable because CNL did not provide the information required under paragraphs 3(1)(c) and (j) of the *GNSCR*?

**Issue 3:** Did the Commission meaningfully grapple with the intervenors' submission regarding the inadequacy of CNL's process for verifying that waste placed in the NSDF complies with the Waste Acceptance Criteria [WAC]?

**Issue 4:** Did the Commission meaningfully grapple with the intervenors' submissions that the Eastern wolf's habitat would be damaged or destroyed by NSDF site preparation and construction?

**Issue 5:** Did the Commission meaningfully grapple with the Applicants' argument that CNL did not provide sufficient information for the Commissioner to consider all of the cumulative effects of the NSDF on the environment under paragraph 19(1)(a) of the *CEAA, 2012*?

[39] I am in agreement with the parties that the standard of review is that of reasonableness as articulated in *Canada (Minister of Citizenship and Immigration) v Vavilov*, 2019 SCC 65 [Vavilov].

[40] A Court conducting a reasonableness review must read an administrative tribunal's decision holistically and contextually in light of the record (*Vavilov* at paras 85, 97), giving the reasons "respectful attention," including by giving deference to a tribunal's expertise while seeking to understand the challenged decision, and determine if, as a whole, it is rational, logical and "justified in relation to the facts and law that constrain the decision maker" (*Vavilov* at paras 84-85).

[41] A reasonableness review is not a "treasure hunt" for error (*Vavilov* at para 102). Rather, it is meant to ensure that courts intervene only where there is a significant flaw demonstrated in

the legality, rationality or fairness of the administrative process (*Vavilov* at paras 99-100 and *Canadian National Railway Company v Halton (Regional Municipality)*, 2024 FCA 160 at para 44 [CNR]).

V. Analysis

**Issue 1:** *Is the Decision unreasonable because the Commission applied the wrong radiation dose limit without providing any explanation, justification or consideration of the statutory scheme in its consideration of the EA?*

[42] The Commission was required to carry out the EA under paragraphs 5(1)(c) and 5(2)(b) of the *CEAA, 2012* to consider the effects of the NSDF Project on human health over the entire lifecycle of the NSDF.

(1) The Commission's Decision

[43] In making its EA Decision, the Commission relied on a 1,000  $\mu\text{Sv}/\text{year}$  (1  $\text{mSv}/\text{year}$ ) radiation dose limit. Sv (Sieverts) is a unit of radiation dose quantities meant to represent the risk of external radiation to a person such that *Sv/year* represents the amount of radioactive exposure a person receives from the substance in a year.

[44] The Commission supported its choice of radiation dose benchmark in the Decision with reference to subsection 1(3) of the *RPR* in combination with section 2 of the *NSCA*, which sets the prescribed limit for the general public at 1  $\text{mSv}$  per calendar year. Regarding the radiation dose limit applied in CNL's post-closure safety assessment, the Commission held that:

In section 4.1.14 of the *NSDF Safety Case*, CNL reported that the maximum predicted dose during the normal evolution scenario was 0.015 millisieverts per year (mSv/y). In this scenario, the dose would occur 4100 years after closure, to an individual who is conservatively assumed to be living on top of the [Containment Mound]. This dose is equivalent to 1.5% of the regulatory public dose limit of 1 mSv/y [footnoted to the *RPR* in reference to a person who is not a nuclear energy worker] and less than 1% of the natural background radiation dose in Canada (Decision at para 112).

[45] As part of its EA conclusion on long-term safety, the Commission found that CNL's post-closure safety assessment for the NSDF Project met regulatory requirements as well as international guidance.

[46] In its overall conclusion on the effects of the NSDF Project on human health, the Commission noted that the estimated radiation dose to persons who are not nuclear energy workers "is expected to be well below the regulatory dose limit of 1 mSv/y during both the pre-closure and post-closure periods" (Decision para 247).

(2) The Parties' Submissions

[47] The Applicants do not dispute that the limits applied by the Commission apply to the NSDF in the present and in the next 350 years; however, since the NSDF's expected maximum radiation dose post-closure of 15  $\mu$ Sv/year will occur 4,100 years from closure, they say the maximum radiation dose very clearly arises in the post-institutional control period, as "it is likely impossible that there would be any regulatory control that far out to the future." The Applicants submit that the Commission was required to consider and apply the appropriate radiation dose limit for materials *free from regulatory control* which it failed to do.



[48] According to the Applicants, a radiation dose limit of 10  $\mu\text{Sv}/\text{year}$  is the correct radiation dose limit to apply for substances in the post-institutional control phase where there would be no more regulatory oversight over these substances. This limit is the conditional clearance level found in the *NSRDR*, which meets the International Atomic Energy Agency [IAEA] standards for a post-institutional control phase. The NSDF does not meet this limit.

[49] The Applicants submit that in considering the radiation dose limits to apply as part of its EA Decision, the Commission committed three errors that render the Commission's Decision unreasonable.

[50] First, the regulatory scheme equally allowed for the radiation dose limit applicable in scenarios under *continued regulatory control* (as CNL advanced) and alternatively, one applicable in scenarios *free of regulatory control* (as the Applicants advanced), which required the Commission to justify its choice of dose limit, which it failed to do (*Vavilov* at paras 110, 122).

[51] Second, the Commission did not consider international standards.

[52] Finally, the Commission failed to meaningfully grapple with or account for the contradictory evidence of Dr. Walker, one of the intervenors whose evidence was that 10  $\mu\text{Sv}/\text{year}$  is the appropriate limit to assess the radiation doses to the public free from regulatory control.

[53] CNL submits that both it and the Commission properly justified the 1 mSv/year limit and that the Applicants' submissions ignore the justification provided. CNL takes issue with the Applicants' assumption that the post-closure phase is synonymous with abandonment. The post-closure period includes a 300-year institutional control phase and an indefinite post-institutional control phase. CNL also points out that the Decision approved only the construction of the NSDF and there is no basis for a calculation of radioactivity dose levels in a scenario that is free from regulatory control. CNL suggests that the Decision, read in light of the record, shows that the Commission properly grappled with the Applicants' submissions, even if they were not expressly addressed in the Decision.

(3) Analysis

(a) *The Commission justified the radiation dose limit applicable to a post-closure scenario*

[54] I find that the Commission's Decision in respect of the applicable radiation dose limit to be both justified and reasonable, and I am unable to conclude that there is a fundamental gap in the Decision that renders it unreasonable.

[55] First, contrary to the Applicants' position, the Commission did justify its selection of 1 mSv/year dose limit in its reasons. The Commission's justification is found in its acceptance of CNL's submission that the post-closure period is not synonymous with abandonment, as institutional controls would be in place during the post-closure phase. The Commission repeatedly referred to its assumption of institutional control throughout the Decision, including,

by way of example, in paragraphs 43-44 of the Decision, where it explains what the transitions to the institutional control period and post-closure period entail:

Asked for additional information regarding the transition of the NSDF Project to the institutional control period, a CNL representative explained that the transition would require authorization from the Commission. The CNL representative acknowledged that, as part of the application process to transition to institutional control, CNL would be required to update its safety assessments for the NSDF and provide environmental monitoring data to demonstrate that the site is stable and performing as expected. CNL would also be required to define the proposed physical and administrative control measures to be implemented during the institutional control period.

Multiple intervenors ... raised concern that the waste emplaced in the NSDF would effectively be abandoned during the post-closure period. In section 1.4.4 of CMD 22-H7.1 [CNL's written submissions], CNL reported that the post-closure phase of the NSDF Project is not synonymous with "abandonment" of the facility. CNL submitted that the post-closure phase includes implementation of institutional controls for at least 300 years; however, institutional control will continue as long as determined necessary by regulatory agencies. In section 1.2 of CMD 22-H7 [CNSC's written submissions], CNSC staff explained that, at the end of the institutional control period, CNL would have to seek authorization from the Commission for the removal of the NSDF from CNSC regulatory control. CNSC staff further explained that, as the enduring federal entity and owner of the assets and liabilities of CNL managed sites, AECL is responsible for controlling and restricting the land use of the NSDF footprint for as long as necessary.

[56] The Commission's assumption of institutional control was reasonable, given that it was considering its EA Decision with reference to a statutory and regulatory scheme that requires licences for each phase of the NSDF life cycle, including abandonment. It would be contrary to the nature of the scheme and the very function of the Commission under the NSCA to address a scenario that is free of regulatory control in light of CNL's acknowledgment that even after the closure of the NSDF's operations, the planned period of institutional control will not end unless

the Commission approves the NSDF's release from institutional control. Throughout its Decision, the Commission emphasizes the need for future authorizations:

Given the current licensing process and regulatory requirements, CNL will be required to seek authorization from the Commission prior to commencing each of the construction, operation, decommissioning of redundant site infrastructure and support facilities, closure (including commencement of the institutional control period), and post-institutional control project phases (Decision at para 41).

[57] The effect of this scheme is that before the authorization of release of the NSDF, the substances in the NSDF are all under institutional control, and in order to be released from institutional control, the Commission as regulator must be satisfied that the NSDF meets all regulatory requirements, which includes the 15  $\mu\text{Sv}/\text{year}$  radiation dose limit for the post-institution control period.

[58] Finally, there is no question that radiation dose limits are critical to the EA Decision and that CNL was required to satisfy the Commission of its safety case throughout the entire lifecycle of the NSDF Project. Nevertheless, I consider the Commission's failure to expressly address alternative radiation dose limits that are postulated on a hypothetical scenario of abandonment 4,100 years in the future in a manner that is antithetical to the scheme of approvals under the *NSCA* not to be a fundamental gap that undermines the reasonableness of the Commission's Decision (*Vavilov* at paras 100, 122 and *CNR* at para 55). It must be remembered that the licence approval is ultimately for construction of the NSDF, and the Commission accepted that there are no radiological activities to be performed during this phase of the NSDF lifecycle.

(b) *The Commission considered relevant international instruments*

[59] The Commission expressly mentions the IAEA standards it considered. Additionally, at the Commission's request, the CNSC mapped out the NSDF technical documentation to IAEA standards, with the Commission ultimately concluding that it was satisfied that the NSDF Project was "in alignment" with IAEA standards.

[60] While the international standards the Commission applied may not have been the international instruments that the Applicants relied on, given their different assumption that the post-closure period was a scenario that was free of regulatory control, I am satisfied that the record shows that the Commission considered all appropriate international instruments relevant to the NSDF.

(c) *The Commission meaningfully grappled with Dr. Walker's evidence on the appropriate radiation dose limit*

[61] This is the first in a number of arguments by the Applicants that the Commission failed to acknowledge and meaningfully address one of their central submissions. The Applicants argue that not only does *Vavilov* promote a culture of "responsive justification" that requires administrative tribunals to "meaningfully grapple" with the central issues and concerns raised by the parties (*Vavilov* at para 128), but a higher level of responsive justification is also required where, as here, the Commission's Decision will have a long-lasting impact on the lives and health of Canadians (*Vavilov* at paras 133-135).

[62] CNL argues that just because the substance of the Decision deals with nuclear waste does not mean it attracts a higher level of responsive justification, and the Court must take into account the complexity of the proceedings in assessing whether it met its duty of responsive justification.

[63] I agree that the Commission's reasons undoubtedly call for a high degree of responsive justification in light of the impact of the Decision on the lives of Canadians. However, I also agree with CNL that in assessing whether the Commission met a heightened degree of responsive justification, the Court must take into account the size of the record and the number of submissions that the Commission had to grapple with.

[64] In a case such as this, with 165 intervenors and thousands of pages of submissions, four important considerations are particularly relevant to this Court's review of whether the Commission fulfilled its duty to meaningfully grapple with the Applicants' arguments.

[65] First, a reviewing court must consider whether a decision maker has addressed the *substance* of the parties' arguments as they relate to the issues the decision maker has been called on to decide (*CNR* at para 45). The duty to grapple does not require a decision maker to expressly refer to parties' actual arguments, or use the labels or terminology they use (*Vavilov* at para 91, 128 and *CNR* at para 72, 77).

[66] Second, deference must be given to the Commission based on its expertise to determine which of the various submissions and arguments are the "central" arguments it should address in

its reasons (*Vavilov* at para 93). In this case, the Commission listed 16 “recurring issues” raised in the various submissions it received in relation to the NSDF Project, and in each section of the Decision, it addressed select arguments raised by the parties and the intervenors, including some (but not all) of the submissions of the Applicants and Dr. Walker. As *Vavilov* accepts, an administrative tribunal’s failure to address an issue whether in detail or at all is not always a sign of a failure to consider evidence. In some cases this silence or lack of detail may be a function of the administrative tribunal’s demonstrated experience and expertise (*Vavilov* at paras 93-94), or its difficult task of distilling and synthesizing large volumes of information (*Halton (Regional Municipality) v Canada (Transportation Agency)*, 2024 FCA 122 at paras 21-32 [*Halton*]).

[67] Third, a reviewing Court should assess the decision maker’s duty to grapple with a central argument as against the actual argument that was made and not a reformulated or reimagined version of an argument made after-the-fact on judicial review (*R v REM*, 2008 SCC 51 at paras 34-35 [*REM*]).

[68] Finally, latitude must be given to a decision maker in complex proceedings to grapple with central arguments during the course of the proceedings, and not just in its reasons. This is consistent with the Federal Court of Appeal’s decision in *CNR*, where it held that in assessing whether the duty of responsive justification has been fulfilled, a reviewing court must read a decision in light of the record and seek to understand the decision and the substance of the decision maker’s consideration of the evidence using a lens that is both holistic and contextual (*CNR* at paras 44-45, 72, 105-106).

[69] Applying these principles to the issue of whether the Commission meaningfully grappled with the contrary dose limit argument put forward by Dr. Walker and the Applicants, I find that a review of the record shows that the Commission did in fact grapple with this argument despite the fact that it makes no mention of the Applicants' alternative dose limit argument in its Decision.

[70] During Dr. Walker's oral submissions on the radiation dose limit upon release from regulatory control, the Commission asked CNL to clarify its choice of radiation dose limit. CNL responded that:

(i) it has applied for a Class IB nuclear facility under the *NSCA*, so the applicable regulation for the NSDF is the *Class I Regulations* and not the *NSRDR*;

(ii) this is why it did not use the conditional clearance level found in the *NSRDR* and instead used the dose limit of 1 mSv/year in the post-closure period as recommended by the Commission in REGDOC-2.11.1, Waste Management, Volume III: Safety Case for the Disposal of Radioactive Waste; and

(iii) a 1 mSv/year limit is further supported by the IAEA's SSR-5, Disposal of Radioactive Waste, which also recommends the 1 mSv/year limit.

[71] After seeking clarification from CNL, the Commission followed up with an inquiry to the CNSC, who agreed that the *NSRDR* is not applicable.

[72] I find that the Commission's reasons, read together with the record, demonstrate that the Commission meaningfully grappled with the issue of the appropriate radiation dose limit to apply in the EA.



[73] The Applicants argue that the duty to address Dr. Walker’s alternative dose limit also arose by reason that it was evidence that “squarely contradicted” the Commission’s Decision, requiring the Commission to deal directly with it (citing *Cepeda-Gutierrez v Canada (Minister of Citizenship and Immigration)* (1998), [1999] 1 FC 52 at para 17).

[74] Having accepted that it was reasonable for the Commission to consider dose limitations in the context of scenarios which only involve institutional controls and regulatory oversight over the NSDF, I do not consider Dr. Walker’s submissions to be contradictory to the Commission’s Decision since Dr. Walker and the Applicants do not disagree that the appropriate radiation dose limit to apply for substances under regulatory control was the dose limit applied by the Commission.

**Issue 2:** *Is the Decision unreasonable because CNL did not provide the information required under paragraphs 3(1)(c) and (j) of the GNSCR?*

[75] As part of its Licensing Decision, the Commission needed to be satisfied that CNL met all the licensing requirements under the applicable licensing regulations, including the *GNSCR*.

[76] The Applicants submit that the Commission erred in finding that CNL had met all applicable licensing requirements, given that CNL had not provided all the information required under paragraphs 3(1)(c) and (j) of the *GNSCR*, which read as follows:

**General Application Requirements**

**3 (1)** An application for a licence shall contain the following information:

**Dispositions générales**

**3 (1)** La demande de permis comprend les renseignements suivants :

...	...
(c) the name, maximum quantity and form of any nuclear substance to be encompassed by the licence;	c) le nom, la quantité maximale et la forme des substances nucléaires visées par la demande;
...	...
(j) the name, quantity, form, <u>origin</u> and volume of any radioactive waste or hazardous waste that may result from the activity to be licensed, including waste that may be stored, managed, processed or disposed of at the site of the activity to be licensed, and the proposed method for managing and disposing of that waste;	j) le nom, la quantité, la forme, <u>l'origine</u> et le volume des déchets radioactifs ou des déchets dangereux que l'activité visée par la demande peut produire, y compris les déchets qui peuvent être stockés provisoirement ou en permanence, gérés, traités, évacués ou éliminés sur les lieux de l'activité, et la méthode proposée pour les gérer et les stocker en permanence, les évacuer ou les éliminer;
...	...
[Emphasis added]	[Je souligne]

(1) The Commission's Decision

[77] The Commission noted that CNL had demonstrated that it satisfies the requirements of the *NSCA*, the *GNSCR* and the *Class I Regulations* by providing the Commission with a “clause-by-clause” response to each regulatory requirement. The CNSC itself provided a “regulatory compliance matrix” confirming that the CNL Application meets all applicable regulatory requirements.

[78] In its Decision, the Commission noted the submissions of intervenors who argued that the CNL Application did not contain sufficient information to satisfy paragraph 3(1)(j) of the *GNSCR*, and therefore could not be said to be complete. The Commission noted that the CNSC had confirmed that information satisfying paragraph 3(1)(j) of the *GNSCR* is found in CNL's NSDF Safety Case, NSDF Safety Analysis Report and NSDF Post-Closure Safety Assessment. The Commission also referred to its analysis of waste inventory and the WAC for the NSDF Project in connection with its EA Decision, where, for the purposes of the EA, the Commission was satisfied that CNL provided sufficient information for the Commission to assess the NSDF waste management processes and design features.

[79] The Commission therefore concluded that the CNL Application was complete and complies with all regulatory requirements.

(2) The Parties' Submissions

[80] The Applicants submit that the Commission erred in finding that CNL met the requirements of paragraphs 3(1)(c) and (j) of the *GNSCR*, as the requisite information for the origin of NSDF waste was not provided with sufficient specificity and the Commission did not address a clause in the WAC that overrides the guarantees provided by the WAC. The Applicants submit that intervenors made both these submissions to the Commission, but it failed to meaningfully grapple with the submissions or account for contradictory evidence.

- (a) *Did the Commission err in its assessment of CNL's compliance with the licensing requirements of paragraphs 3(1)(c) and (j) of the GNSCR?*

[81] The Applicants submit that the requirements of paragraphs 3(1)(c) and (j) of the *GNSCR* were not met, as CNL did not provide sufficiently specific information about the origin of packaged waste. They say that, following the modern approach to statutory interpretation, the “origin” requirement of paragraphs 3(1)(c) and (j) of the *GNSCR* requires precise and specific information about the source of waste to be placed in the NSDF in a manner that is consistent with the purpose of the *GNSCR*, which is to provide transparency about what waste will be stored in it. The Applicants submit that the specific origins of packaged waste was not provided by CNL.

[82] According to the Applicants, CNL only described the origin of packaged waste in the following two vague statements:

1. “In addition to CNL waste, the NSDF packaged waste may also include waste from Whiteshell Laboratories, the National Programs, the Nuclear Power Demonstration Closure Project, and waste from off-site commercial sources” (Certified Tribunal Record [CTR or the record] at 2881).
2. “The primary source of waste generation is the CRL site, with additional waste from other CNL's sites and small waste quantity from Canadian generators, such as hospitals and universities” (CTR at 2423).

[83] The Applicants suggest that even if the statements were understood in the most restrictive way, it would still permit packaged waste from any CNL property and any company in Canada. The Applicants further note that there is no information provided about the originating process of

this waste, which could include packaged waste originating from accidents, fuel reprocessing, or nuclear reactors.

[84] The Applicants submit that the Commission's failure to consider the text, context and purpose of the *GNSCR* when interpreting the origin requirement under paragraphs 3(1)(c) and (j) was unreasonable.

[85] CNL submits that the Applicants are conflating two different requirements of the *GNSCR* and that only one of them requires origins information. Paragraph 3(1)(c) of the *GNSCR* sets out information requirements for any nuclear substance to be *encompassed by the licensed* – i.e., all waste that will go into the NSDF, including packaged waste. This provision does not refer to origin. Paragraph 3(1)(j) of the *GNSCR* sets out information requirements for any waste that may *result from the activity to be licensed* – i.e., waste generated from the construction of the NSDF. This provision refers to the origin of the waste.

[86] CNL's submissions to the Commission was that all waste anticipated for disposal in the NSDF, including legacy waste and waste generated during the construction phase, will undergo waste characterization to ensure compliance with the WAC, which ensures that waste meets all the necessary safety requirements, including regulatory limitations. CNL points to the fact that in its Decision, the Commission accepted that the WAC aligns with international guidance and Canadian requirements. The Commission also found that the CNL Application complies with all applicable regulatory requirements, based on CNL's "clause-by-clause responses" to the

requirements set out by applicable regulations and the CNSC's own review. These regulatory requirements include subsection 3(1) of the *GNSCR*.

- (b) *Was the Commission's assessment of CNL's compliance with the licensing requirements under the GNSCR unreasonable by reason that it failed to consider an override clause?*

[87] The Applicants also submit that paragraphs 3(1)(c) and (j) of the *GNSCR* cannot be met because the Infrequently Performed Operations [IPO] process contained in the WAC acts as an overriding clause that effectively nullifies any guarantees the WAC provides regarding the waste that can be placed in the NSDF.

[88] Section 6.4 of the WAC refers to the override clause for the IPO process and states:

“[w]aste that does not meet all of the criteria listed in the WAC ... may be considered for disposal on a case-by-case basis only after receiving the documented authorization from the NSDF Facility Authority following the *Infrequently Performed Operations* process.”

[89] Appendix A.6.4 of the WAC adds:

The Infrequently Performed Operations Process is available as an option when a specific waste package or waste stream meets most, but not all of the requirements of the WAC. The Infrequently Performed Operations process is limited by the safety basis provided in the Design Requirements [5], the Environmental Impact Statement [6], the Post-Closure Safety Assessment [7], and the Safety Analysis Report [8] as there is safety margin between the safety basis and the WAC.

The Infrequently Performed Operations [35] complies with CSA N286-12 (Section 7.9.8) [56].”

[90] The Applicants submit that the Commission's acceptance of CNL's inadequate waste description is unreasonable, since it is "impossible for an administrative decision maker to justify a decision that strays beyond the limits set by the statutory language it is interpreting" (*Vavilov* at para 110).

[91] CNL submits that the IPO override clause is included in the WAC to allow CNL to flexibly deal with non-routine LLW while still meeting the safety requirements of the NSDF licensing basis. CNL emphasizes that the IPO override clause does not allow *any* waste to be placed in the NSDF without *any* restriction, and that the waste admitted under the IPO override clause is still guaranteed to be compliant with the safety requirements of the licence.

[92] CNL submits that it provided sufficient description of waste going into the NSDF as required by paragraph 3(1)(c) of the *GNSCR* in the NSDF Safety Case, which provided information on the development of the "Reference Inventory" (the proposed total activity of significant radionuclides of waste to be placed in the NSDF at placement and at closure) and the "Licensed Inventory" for the NSDF (the maximum radioactivity of significant radionuclides of waste to be placed in the NSDF at placement and at closure).

[93] The Applicants disagree that the Licensed Inventory provides limitation to what can be placed in the NSDF. Since the Licensed Inventory is part of the WAC, and given that the IPO process allows the bypassing of the WAC, they claim that an infinite loop is created.

(c) *Did the Commission meaningfully grapple with the intervenors' central arguments?*

[94] The Applicants submit that intervenors made submissions about the inadequacy of the waste description provided by CNL and the effect of the IPO override clause to the Commission. The Applicants claim that all the Commission said in response was that the required information was provided in various CNL reports and that the CNL Application is comprehensive. The Commission did not explain how it reached this conclusion or respond to any specific point raised by the intervenors. In fact, it did not even mention the IPO override clause in its Decision, which the Applicants consider to be contradictory evidence that the Commission was required to address.

[95] CNL submits that the Commission's reasons, read together with the record, demonstrate that the Commission meaningfully grappled with the Applicants' submissions, regardless of whether the Commission expressly identified them in the Decision. The IPO override clause forms a part of the WAC, which, as a whole, was discussed in detail in both the Decision and the record. Therefore, CNL concludes that the Commission was not required to explicitly refer to the IPO override clause and explain how it dealt with every contrary argument associated with it.



## (3) Analysis

- (a) *The Commission's assessment of CNL's compliance with the licensing requirements of subsection 3(1)(c) and (j) of the GNSCR was reasonable*

[96] I agree that the Applicants have merged the scope of paragraphs 3(1)(c) and (j) of the *GNSCR*, and in so doing, they are not only creating an origin requirement under paragraph 3(1)(c) that does not exist, but also expanding the origin requirement in paragraph 3(1)(j) to waste beyond that referred to in the provision. A plain reading of paragraph 3(1)(c) of the *GNSCR* supports CNL's position that the origin requirement is limited to waste generated from the construction of the NSDF, as that is the licensed activity.

[97] The Applicants say that paragraph 3(1)(j) of the *GNSCR* refers to "waste that may result from the activity to be licensed, *including waste that may be stored, managed, processed or disposed of at the site of the activity to be licensed*" [emphasis added], thereby extending the scope of the paragraph to all waste to be placed in the NSDF, even if not generated by the construction of the NSDF. Such a reading is contrary to the rules of statutory interpretation; the use of the word "including" simply expands the scope of waste that can be considered to be waste resulting from the construction of the NSDF; it does not expand this provision to cover all waste (Elmer A Driedger, *Construction of Statutes*, 2d ed (Toronto: Butterworths, 1983) at 19).

[98] Accordingly, I am not persuaded that the Commission's conclusion that the CNL Application met the licensing requirements under all applicable licencing regulations, including the *GNSCR*, was unreasonable.

[99] Nor do I find the Commission to have failed to meaningfully grapple with the intervenors' arguments regarding compliance with the *GNSCR*. The Commission specifically referred to the intervenors' arguments regarding CNL's compliance with subsection 3(1)(j) in its Decision, and responded by relying on the CNSC's confirmation that the CNL Application complies with all regulatory requirements. The Commission noted that the CNSC identified the documents which contain the information required by paragraph 3(1)(j) of the *GNSCR* and listed them in its Decision.

[100] Moreover, the argument presented on this judicial review that CNL did not follow the modern approach to statutory interpretation of paragraphs 3(1)(c) and (j) of the *GNSCR* was not originally put to the Commission by the intervenors who referenced only the statutory requirements of subsection 3(1)(j) and not (c). The Commission cannot be faulted for failing to address an argument that was not put to it (*REM* at paras 34-35).

(b) *The Commission's failure to address the IPO clause was not unreasonable*

[101] The question is whether the IPO clause nullifies any guarantee under the WAC about what waste would be placed in the NSDF.

[102] I do not find that the record supports the Applicants' submission for two reasons.

a. The IPO process is a standalone process

[103] First, the record shows that the IPO process is an independent process that is neither arbitrary nor reliant on the WAC or any of the documents mentioned in Appendix A.6.4.

[104] While the IPO clause itself forms part of the WAC, the IPO process is a standalone process with its own rules and criteria that requires separate documentation (*Infrequently Performed Operations*, 900-508200-MCP-008) and compliance with different standards (CSA N286-12, Section 7.9.8).

b. The safety basis for the IPO is different

[105] Second, contrary to what the Applicants suggest, the IPO process limits what waste can or cannot be admitted into the NSDF with the reference the safety requirements under the licence and is not a free-for-all backdoor into the NSDF.

[106] While the IPO process documentation itself is not part of the record, Appendix A.6.4 nevertheless states that the IPO process is limited by the *safety basis* provided in the Design Requirements, the Environmental Impact Statement, the Post-Closure Safety Assessment, and the Safety Analysis Report. Contrary to the Applicants' claim, the safety basis provided in these documents is not referring to the safety guarantee of the WAC, but rather the safety requirements under the licence – the licensing basis. As a licensee, CNL is required to ensure that the NSDF meets all licensing requirements, including the safety requirements. The documents mentioned in Appendix A.6.4 all show how the NSDF meets the licensing safety requirements, and it is the specific licensing safety requirements addressed in these documents that constitute the safety basis that limits the IPO process.

[107] Admittedly, every document mentioned in Appendix A.6.4 mentions the WAC, but this does not create an infinite loop. CNL primarily achieves the safety basis required under its licence by adhering to the WAC. Considering this, it is not surprising that the WAC is

frequently mentioned to show that the NSDF meets the safety basis discussed in each document. However, the safety guaranteed by the WAC and the *safety basis* are two different things, as can be seen by the fact that Appendix A.6.4 points out that “there is safety margin between the safety basis and the WAC.”

[108] Accordingly, it is possible for waste to meet the safety basis required under the licence but not the safety guaranteed by the WAC, and the IPO process ensures, according to Appendix A.6.4, that only this type of waste is accepted into the NSDF.

[109] Therefore, I do not find that there is an infinite loop that renders the WAC meaningless nor does the IPO clause nullify safety guarantees about waste going into the NSDF under the WAC as suggested by the Applicants. Rather, as CNL submitted to the Commission, the IPO clause permits flexibility to allow a small number of waste that does not meet the WAC exactly, but still meets the safety basis required by the licence. Consequently, I find the Commission’s Decision finding CNL to have met the *GNSCR* licencing requirements to be reasonable.

[110] It also follows that the Commission cannot be faulted for answering the intervenors’ submissions by simply referring to the documents that refer to the safety basis CNL is required to meet under its licence and in failing to address an argument that is based on an erroneous understanding of the IPO clause. I consider this lack of detail to be the result of the Commission’s expertise and distillation of the issues of CNL’s regulatory compliance with the *GNSCR* and its assessment of the WAC down to their most critical aspects.

[111] The Commission’s failure to address the IPO process may also be a function of its determination that the IPO process was not a central argument given that the intervenors themselves made only brief mention of the IPO process which consisted of the following submissions:

- (a) Ralliement – “We believe that the Infrequently Performed Operations process is not safe or explicit enough...”;
- (b) Northwatch – “...[CNL] outlined [the IPO] process which would have effectively voided any Waste Acceptance Criteria that might have been put in place as part of or prior to project approval”; and
- (c) Kitigan Zibi Anishinabeg – “As it currently stands, CNL could dispose of excessively radioactive materials and oversized debris using an “Infrequently Performed Operations provision in the Waste Acceptance Criteria.”

[112] It is understandable why the Commission chose not to address these submissions in the context of such a voluminous record based on submissions from 165 intervenors. To hold otherwise would be to risk the paralyzing effect on the functioning of administrative tribunals that the Supreme Court warned against (*Vavilov* at para 128).

**Issue 3:** *Did the Commission meaningfully grapple with the intervenors’ submission regarding the inadequacy of CNL’s process for verifying that waste placed in the NSDF complies with the WAC?*

[113] As part of the EA Decision, the Commission had to consider features of the proposed NSDF Project. This included waste management considerations, such as waste inventory, WAC and waste characterization and segregation.

[114] The Concerned Citizens, along with Dr. Walker, submitted that CNL's process for verifying that waste placed in the NSDF is compliant with the WAC was inadequate by reason that:

- (i) international safety standards require that a management system is established and adhered to for all aspects of the waste acceptance process. Under this requirement, Dr. Walker argued that he would have expected CNL's proposal to include a waste reception and verification facility that has technical capabilities and management systems to verify compliance with the WAC; and
- (ii) Dr. Walker's review of CNL's proposal does not reveal an adequate technical capability or management system capable of verifying that waste complies with the radiological parameters of the WAC.

(1) The Commission's Decision

[115] In its Decision, the Commission noted that it asked CNL about the WAC criteria that CNL will use to accept or reject waste for disposal in the NSDF and how the WAC would be implemented on a day-to-day basis. According to CNL, all waste anticipated for disposal in the NSDF, including legacy waste, will undergo proper modern waste characterization and segregation to ensure compliance with the WAC under CNL's existing waste management program, which includes waste verification processes. CNL will be responsible for properly implementing the WAC, along with oversight from the CNSC.

[116] The Commission also noted in its Decision that the CNSC confirmed that CNL's current waste management program meets regulatory requirements and that CNL has adequate measures to properly characterize waste generated and managed during different lifecycle phases of the

NSDF. The CNSC advised that they will continue to monitor and verify CNL's compliance with regulatory requirements and oversee the NSDF's waste management program.

[117] The Commission concluded:

Based on the information on the record, the Commission is satisfied that CNL has provided sufficient information for the Commission to assess the NSDF waste management processes and design features, for the purpose of the EA. The Commission finds that:

- CNL provided specific information on the LLW that will be emplaced in the NSDF
- CNL developed WAC for the NSDF in alignment with IAEA GSG-1, CSA N292.0:19, and REGDOC-2.11.1, Volume 1
- CNL provided information supporting the NSDF design has adequate capacity for AECL-owned LLW
- The amounts of long-lived radionuclides acceptable per the NSDF WAC are consistent with the definition of LLW
- The NSDF WAC require that all disused sources being considered for disposal in the NSDF are evaluated in accordance with IAEA guidelines
- CNL has a waste management program in place that meets regulatory requirements, including requirements for waste characterization
- CNSC staff will enforce the requirement that only LLW can be emplaced in the NSDF, through its regulatory oversight activities
- CNL is subject to requirements for the management of waste records under CSA N292.0:19 (Decision at para 105)

(2) The Parties' Submissions

[118] The Applicants submit that the Commission did not address or mention Dr. Walker's submissions or his argument in the Decision, rendering the Decision unreasonable.

[119] CNL responds that the Commission considered the issue of the adequacy of the waste verification process for the NSDF to ensure compliance with the WAC, and the Commission considered and accepted CNL's submissions and those of the CNSC that adequate waste management processes were in place for the NSDF. In so doing, CNL submits that the Commission meaningfully grappled with the issue it was required to consider.

(3) Analysis

[120] The role of the Court is not to assess whether CNL's waste verification process is adequate or whether there might have been a better way to implement a waste verification process for the NSDF as envisioned by Dr. Walker. The question is whether it can be said that the Commission's decision is unreasonable for failing to meaningfully grapple with his submissions.

[121] There are two aspects to Dr. Walker's submission: first, CNL's waste acceptance process does not meet international safety standards; and second, CNL's proposal does not include an adequate waste verification management system.



[122] There is no question that the Commission's Decision shows that it grappled with the issue of international safety standards. The Commission expressly references the international standards that the WAC was developed to align with.

[123] I also find that the Commission meaningfully grappled with the issue of the adequacy of CNL's waste verification process for the NSDF, which is ultimately the substantive issue that the Applicants say Dr. Walker's evidence was directed at (*Vavilov* at para 128 and *CNR* at paras 76-78). This is reflected in three aspects of the record and the Commission's Decision.

[124] First, the Commission was alive to the issues of both "the NSDF design's compliance with international standards" and "the NSDF waste inventory and waste acceptance criteria," as the Commission listed them as recurring issues raised by hearing participants.

[125] Second, the Commission heard and considered CNL's description of its current waste management program that will apply to the NSDF as well as the CNSC's submissions, which found that program to be adequate.

[126] Finally, the Commission clearly also considered the submissions of Dr. Walker and the Applicants, given that the Commission addressed other waste management-related submissions of Dr. Walker (that the NSDF WAC fails to capture certain radionuclides of importance) and the Concerned Citizens (regarding errors in the submissions of CNL and the CNSC relating to radioactive decay of the NSDF inventory over time).

[127] I am therefore inclined to see the lack of reference to Dr. Walker's submissions as part of the Commission's exercise of its expertise in assessing which of the various intervenor submissions were most critical to address (*Vavilov* at paras 93-94), for which deference should be given.

**Issue 4:** *Did the Commission meaningfully grapple with the intervenors' submissions that the Eastern wolf's habitat would be damaged or destroyed by NSDF site preparation and construction?*

[128] As part of its assessment of the environmental effects of the NSDF Project, subsection 79(2) of *Species at Risk Act*, SC 2002, c 29 [SARA] required the Commission to identify adverse effects on any wildlife species listed in Schedule 1 of SARA and its critical habitat. If the NSDF Project is carried out, subsection 79(2) will require CNL to ensure that measures are taken to avoid or lessen those effects and to monitor them. The Eastern wolf is one such species.

(1) The Commission's Decision

[129] By way of background, the Commission noted in its Decision that CNL did not describe the CRL site as a habitat for significant numbers of the Eastern wolf in its Environmental Impact Statement [EIS]. However, following the issuance of the Procedural Direction in July 2022, the Kebaowek First Nation and Kitigan Zibi Anishinabeg First Nation raised their concern that there are Eastern wolf feeding grounds at the proposed NSDF site that would be destroyed or damaged by the preparation and construction of the NSDF, which called for mitigation measures to protect them.

[130] In response to the intervenors' concerns, CNL advised that it has been collecting data on the Eastern wolf population on the CRL site since 2012 and that the EIS was based on the best information that CNL had at the time. CNL submitted additional information to the Commission, which confirmed that the Eastern wolf is present in the terrestrial environment surrounding the proposed NSDF site.

[131] CNL also reported in the EIS that a permit from Environment and Climate Change Canada [ECCC] will be required under Section 73 of *SARA* prior to the construction of the NSDF. The process for obtaining the *SARA* permit was being finalized in parallel with the completion of the EA process. According to CNL, while the final NSDF EIS includes mitigation measures for the protection of species at risk, CNL acknowledged that the terms and conditions of the finalized *SARA* permit would define the "overarching requirements."

[132] Based on the results of the EIS, CNL concluded that the NSDF Project would not have significant adverse environmental impacts on wildlife, including the Eastern wolf and its habitat, with the proposed mitigation measures in place.

[133] The Commission noted that the CNSC confirmed that CNL has proposed adequate mitigation measures to ensure the protection of the Eastern wolf and its habitat during all phases of the NSDF Project. It concluded that the additional information does not change the reasonableness of the conclusion of the EIS that the NSDF is not likely to cause significant adverse environmental effects on species at risk.

(2) The Parties' Submissions

[134] The Applicants submit that while the Commission stated that it was satisfied with the CNSC's Environmental Assessment Report [EA Report], which canvassed CNL's mitigation measures and follow-up monitoring program measures, the CNSC's report does not actually list any mitigation measures. Ultimately, they say those measures have been left to ECCC. The Applicants also submit that the Commission did not meaningfully grapple with their submission in this regard, nor did it meaningfully grapple with other intervenors' related submissions.

[135] CNL disagrees with the suggestion that the Commission off-loaded its duties to ECCC under *SARA* to consider the impacts of the NSDF on species at risk, including the Eastern wolf on the CRL site, and claims that the Commission instead properly considered and dealt with the concerns raised and responses from intervenors. CNL relies on the CNSC's confirmation that CNL's proposed mitigation measures to protect the Eastern wolf and its habitat during all lifecycle phases of the NSDF were adequate.

(3) Analysis

[136] I find that the Commission's Decision is reasonable when read holistically and in light of the facts that constrained the Commission, including the intervenors' submissions.

[137] First, it is important to consider the intervenors' submissions before the Commission. The Kebaowek First Nation provided the most detailed submissions on the Eastern wolf, which can be summarized as follows:

- (i) Based on data it collected, the NSDF site displays important use activity by both wolves and their prey, but “more baseline population and prey-predator studies are required”;
- (ii) CNL was not fully cooperative with its’s efforts to conduct wolf-related fieldworks and the Kebaowek First Nation has concerns about CNL’s data collection being unreliable;
- (iii) The Kebaowek First Nation is particularly concerned about the permanent deforestation of the 37-hectare footprint for the NSDF and the long term, structural habitat implications for the Eastern wolf and other mammals in the NSDF site; and
- (iv) The Kebaowek First Nation has concerns with the CNSC: it lacks internal expert capacity in respect of Eastern wolves and their habitat; and it is over-reliant on CNL’s promise to implement a sustainable forest management plan [Forest Management Plan] to mitigate the deforestation.

[138] The submissions of the Kitigan Zibi Anishinabeg First Nation expressed a concern that the impacts of the NSDF to the Eastern wolf had not been sufficiently assessed.

[139] The Concerned Citizens’ submissions noted the on-site field research of the Kebaowek First Nation on the Eastern wolf which revealed “gaps” in the baseline environmental work done by CNL as well as a lack of documentation related to the Eastern Wolf. The Concerned Citizens questioned whether the Commission had adequately studied the proposed mitigation measures.

[140] Having considered the Commission’s Decision in light of these submissions, I consider the Commission to have meaningfully grappled with them when the record is read holistically. The Commission touched on the Eastern wolf in three sections of its Decision: Terrestrial Environment; Species at Risk; and Indigenous Engagement and Consultation. Read together, the

mitigation measures relevant to the Eastern wolf, which were considered by the CNSC and the Commission, went beyond the ECCC permit. They include:

- (i) CNL's commitment to continue to collect and study Eastern wolf data;
- (ii) CNL's commitment to include and collaborate with the Kebaowek First Nation in the collection and study of that data; and
- (iii) Implementation of a Forest Management Plan, which is intended to minimize impacts to the terrestrial environment, including species at risk and the availability and quality of their habitats.

[141] The Commission's Decision also includes a direction to the CNSC to add an explicit commitment to the NSDF Licensing Regulatory Actions that requires CNL to submit its Forest Management Plan to the CNSC for review to ensure that it is adequate.

[142] Four insights emerge from a holistic review of the record and the facts that constrained the Commission.

[143] First, the Commission's Decision must be read in light of the acknowledgment of CNL, the CNSC and the intervenors that the data on the Eastern wolf and its habitat is insufficient and additional data needs to be collected in order to understand the habitat implications of the NSDF Project on this threatened species. This not only explains the limited number of mitigation measures referred to by the CNSC and the Commission, but also shows that those mitigation measures it does address – CNL's commitment to continue to collect data in collaboration with the Kebaowek First Nation in particular – are crucial to the protection of the Eastern wolf and its habitat.

[144] Second, the Commission's consideration was robust. It sought input from the CNSC on the issue of CNL's proposed mitigation measures (with the CNSC itself stating that it took input from Federal departments, Provincial ministries, Indigenous Nations and communities and the public into consideration). The Commission also heard from an ECCC representative during the hearing.

[145] Third, the mitigation measures considered by the Commission address the very concerns raised by the intervenors, which were: the need for more data and ensuring that CNL is aided in the collection and study of that data; and a call for the CNSC's oversight in CNL's Forest Management Plan.

[146] Finally, the Applicants have not identified any specific mitigation measures in the intervenors' submissions that were ignored by the Commission, nor can I find any.

[147] Given these findings, I find that the Commission meaningfully grappled with the intervenors' submissions in relation to the Eastern wolf and its habitat, and the Commission's reliance on an ECCC permit amongst other measures was not unreasonable.

**Issue 5:** *Did the Commission meaningfully grapple with the Applicants' argument that CNL did not provide sufficient information for the Commissioner to consider all of the cumulative effects of the NSDF on the environment under paragraph 19(1)(a) of the CEAA, 2012?*

[148] As part of its EA Decision, the Commission was required to consider any cumulative environmental effects that are likely to result from the NSDF Project in combination with the

environmental effects of other past or future physical activities as required by paragraph 19(1)(a) of the *CEAA, 2012*.

[149] Paragraph 19(1)(a) of the *CEAA, 2012* reads as follows:

<b>Factors</b>	<b>Éléments</b>
<p><b>19 (1)</b> The environmental assessment of a designated project must take into account the following factors:</p> <p style="padding-left: 2em;"><b>(a)</b> the environmental effects of the designated project, including the environmental effects of malfunctions or accidents that may occur in connection with the designated project <u>and any cumulative environmental effects that are likely to result from the designated project in combination with other physical activities that have been or will be carried out;</u></p> <p style="text-align: right;">[Emphasis added]</p>	<p><b>19 (1)</b> L'évaluation environnementale d'un projet désigné prend en compte les éléments suivants :</p> <p style="padding-left: 2em;"><b>a)</b> les effets environnementaux du projet, y compris ceux causés par les accidents ou défaillances pouvant en résulter, <u>et les effets cumulatifs que sa réalisation, combinée à celle d'autres activités concrètes, passées ou futures, est susceptible de causer à l'environnement;</u></p> <p style="text-align: right;">[Je souligne]</p>

(1) The Commission's Decision

[150] In its submissions to the Commission, CNL reported that it had conducted a cumulative effects assessment [the Assessment] which evaluated the contribution of effects from the NSDF Project in combination with previous, existing, or reasonably foreseeable developments or activities in the region. CNL considered activities that may overlap *spatially* (i.e., in the same geographic area) and *temporally* (i.e., over time). Reasonably foreseeable developments were



defined as projects that were under application review at the time of the Assessment, or that had officially entered a regulatory application process.

[151] In its Decision, the Commission noted the following conclusions of CNL's Assessment as outlined in CNL's final EIS:

- a) in most cases, CNL's prediction was that the NSDF's effects would not overlap spatially or temporarily with the effects of reasonably foreseeable development projects; and
- b) when they do overlap, the resulting cumulative effects on "valued components" (defined in the EA Report as ecologically, culturally, socially, or economically significant components) were not significant (Decision at para 281).

[152] The Commission further noted the CNSC's conclusion that, for all valued components for which potential cumulative effects had been identified (i.e., air quality, surface water quality and the Blanding's turtle), CNL's proposed mitigation and monitoring measures were comprehensive and adequate in addressing those potential cumulative effects. However, given the concerns of intervenors regarding the adequacy of CNL's Assessment, the Commission asked the CNSC for additional information regarding the scope of CNL's Assessment.

[153] The CNSC advised the Commission that the cumulative effects on the environment "had been adequately characterized and addressed in the EIS." The Commission considered the CNSC's review of CNL's Assessment, which is contained in the CNSC's EA Report. Table 8.5 of the EA Report includes a list of past, existing, and reasonably foreseeable future projects that were included in CNL's assessment. Table 8.5 includes a description of those projects and

provides the distance of the project to the NSDF site as well as information on the potential interaction with the NSDF Project.

[154] Having considered all the submissions and concerns, the Commission concluded that CNL's Assessment adequately considered the likely effects of the NSDF in accordance with the *CEAA, 2012* and that the NSDF will not cause significant adverse cumulative environmental effects, provided that the committed mitigation measures are implemented.

(2) The Parties' Submissions

[155] In its submissions to the Commission, the Concerned Citizens noted that CNL had failed to provide information related to nine waste-related projects at CRL that CNL posted to the Federal Impact Assessment Registry from November 2020 to March 2021. The Applicants take the position that information about these activities was needed in order for the Commission to properly consider the cumulative environmental effects of the NSDF as required under paragraph 19(1)(a) of the *CEAA, 2012*.

[156] The activities at CRL named by the Concerned Citizens are as follows:

1. CNL Cask Facility Project
2. CNL Intermediate Level Waste Storage Area
3. CNL Bulk Storage Laydown Area
4. CNL Material Pit Expansion Project
5. CNL Access Road Upgrade
6. CNL Building Demolition Project

7. CNL Waste Management Area Modification Project
8. CNL Effluent Monitoring Stations Upgrade Project
9. CNL Multi-Purpose Waste Handling Facility [collectively, the Listed Projects]

[157] The Applicants argue that only one of the Listed Projects – CNL Building Demolition Project – can be considered to have been noted in Table 8.5 and that none of the other Listed Projects fall under any activity described in Table 8.5.

[158] The Applicants submit that the Commission simply ignored the main point of their submissions that the information provided by CNL was not sufficiently comprehensive. The Applicants submit that this error can be characterized as both an error in construing paragraph 19(1)(a) of the *CEAA, 2012* and a failure to meaningfully grapple with one of their central arguments.

[159] CNL submits that the Assessment appropriately evaluated categories of projects which may contribute to cumulative environmental effects of the NSDF at the CRL site. It submits that it is logical that these general categories would not match the Listed Projects. CNL notes that the Commission's reasons, read together with the record, demonstrate that the Commission meaningfully grappled with the Applicants' submissions, regardless of whether they were expressly identified in the Decision.

(3) Analysis

(a) *The Commission's consideration of cumulative effects was reasonable*

[160] I find that the reasonableness of the Commission's consideration of cumulative environmental effects was not undermined by its failure to name the Listed Projects.

[161] The language of paragraph 19(1)(a) of the *CEAA, 2012* constituted an important legal constraint on the Commission's considerations (*Vavilov* at paras 108, 110 and *Innovative Medicines Canada v Canada (Attorney General)*, 2022 FCA 210 at para 40). The statutory requirement relates not to individual projects, but to their combined effects with the NSDF Project. The Applicants' complaint that the information provided to the Commission did not match the Listed Projects is therefore logically explained and does not detract from the reasonableness of the Commission's assessment of potential cumulative environmental effects of the NSDF Project.

[162] Even accepting the Applicants' argument that most of the Listed Projects do not fall under the general categories listed in Table 8.5, CNL's consideration of potential cumulative environmental effects in the Assessment flows from its methodology, which considered projects that overlap spatially and temporarily with the NSDF. This spatial and temporal constraint is reasonable, given that the purpose of the Assessment was to determine the combined effect of the NSDF with other activities. Nothing in the language of paragraph 19(1)(a) dictated that a cumulative effect analysis take any particular form, and, as CNL points out, its EIS, which includes the Assessment, was prepared in accordance with relevant standards, codes and

guidelines applicable to environmental impact assessments. The CNSC took no issue with either choice of methodology or its evaluation.

(b) *The Commission meaningfully grappled with the Applicants' submissions*

[163] I do not agree with the Applicants' submission that the Commission failed to meaningfully grapple with their submission. The Decision and the record reflect that the Commission addressed the substance of the Applicants' argument, which questioned the sufficiency of the information provided by CNL in order for the Commission to adequately determine the cumulative effects of the NSDF Project in combination with other physical activities.

[164] In its Decision, the Commission even noted the concern of intervenors with: (i) the adequacy of the scope of CNL's Assessment; and (ii) whether the cumulative effects on the environment had been adequately characterized and addressed in the EIS. The record shows that the Commission sought input from the CNSC in respect of these concerns and that it was satisfied with the CNSC's review of CNL's Assessment contained in the CNSC's EA Report.

[165] The fact that the Commission addressed the intervenors' concern in its Decision at a more general level rather than with reference to the Listed Projects is understandable in the face of multiple submissions from various intervenors and the Commission's job to distill and synthesize the large volume of material before it (*Halton* at paras 21-32). A failure to grapple is not made out simply because the argument of a party or intervenor is not expressly mentioned or accepted by the decision maker (*Vavilov* at para 91, 128).

VI. Conclusion

[166] I find the Commission's Decision to be reasonable: it sufficiently canvassed and addressed each of the issues it was required to address as part of the EA Decision and the Licensing Decision, and provided responses to the various submissions of the 165 intervenors where appropriate. The Commission's Decision, when read holistically and with deference to its experience and expertise, is justified, intelligible and transparent. Accordingly, this application is dismissed.

VII. Costs

[167] The parties agreed that costs should be awarded to the successful party in the amount of \$11,160, representing the high end of Tariff B, Column III of the *Federal Courts Rules*, SOR/98-106.

**JUDGMENT in T-226-24**

**THIS COURT'S JUDGMENT is that:**

1. The application for judicial review is dismissed; and
2. The Applicants shall pay the Respondent costs in the agreed upon amount of \$11,160.

"Allyson Whyte Nowak"

Judge

**FEDERAL COURT**  
**SOLICITORS OF RECORD**

**DOCKET:** T-226-24

**STYLE OF CAUSE:** CONCERNED CITIZENS OF RENFREW COUNTY  
AND AREA, CANADIAN COALITION FOR  
NUCLEAR RESPONSIBILITY AND RALLIEMENT  
CONTRE LA POLLUTION RADIOACTIVE v  
CANADIAN NUCLEAR LABORATORIES

**PLACE OF HEARING:** OTTAWA, ONTARIO

**DATE OF HEARING:** NOVEMBER 19-20, 2024

**JUDGMENT AND REASONS:** WHYTE NOWAK J.

**DATED:** FEBRUARY 20, 2025

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