



CMD 26-M13.28

Date: 2026-04-16

**Written Submission from
Ken Brown**

**Mémoire de
Ken Brown**

In the matter of the

À l'égard de la

**Mid-term update from BWXT Nuclear
Energy Canada Inc. on licensed activities
at its Toronto and Peterborough facilities**

**Mise à jour de mi-parcours sur les
activités autorisées de BWXT Nuclear
Energy Canada Inc. à ses installations de
Toronto et de Peterborough**

Commission Meeting

Réunion de la Commission

May 2026

Mai 2026

Tribunal Officer, Commission Registry
Canadian Nuclear Safety Commission
280 Slater Street, PO Box 1046, Station B
Ottawa, Ontario, K1P 5S9

Submission re: upcoming public meeting on BWXT Nuclear Energy Canada Inc.'s mid-term update on licensed activities at its Toronto and Peterborough facilities (Ref: 2026-M-13)

To the Commission,

I write in response to the Notice of Participation for the upcoming public meeting concerning BWXT Nuclear Energy Canada Inc.'s mid-term update on licensed activities at its Toronto and Peterborough facilities. I also expressly rely on and incorporate by reference my written intervention dated January 27, 2020 (attached), in which I opposed pelleting in Peterborough, objected to treating the Toronto and Peterborough facilities as interchangeable, and called for significantly enhanced environmental monitoring and public disclosure. Those concerns remain and, in my view, have only been strengthened by subsequent events. This meeting concerns BWXT's safety performance over the current licensing periods. My submission is that BWXT's performance and the present regulatory framework do not justify confidence in any future transfer of pelleting to Peterborough under the existing licensing framework or under any future licence.

A central concern is that legacy industrial occupation and legacy zoning at the former GE site continue to be treated, implicitly or explicitly, as if they were a justification for continued or intensified nuclear operations in this location. **They are not.** Legacy zoning may explain why industrial activity historically occurred there. It does not answer whether this site is suitable today for increased nuclear-manufacturing risk in the middle of a city, adjacent to residences, and beside a public elementary school. The proper regulatory question is not whether the site has historically been industrial. **The proper question is whether this specific site is appropriate now for the continuation or expansion of risk-bearing nuclear activities.**

That question is even more important given the broader condition of the former GE property. In October 2025, Peterborough council approved demolition of much of the historic GE factory site despite contamination concerns, after hearing discussion about hazardous substances, brownfield conditions, and the city's inability to compel remediation where no land-use change was proposed. In other words, the larger site context remains one of unresolved legacy contamination concerns, demolition, uncertainty, and constrained municipal control. In my submission, that context weighs against any intensification of nuclear manufacturing activity at this location. **A legacy industrial site with contamination concerns is not a blank cheque for greater radiological or associated industrial risk.**

Modern nuclear safety principles support this caution. The IAEA treats adequate site selection as part of defence in depth. Its siting standards require regulators to consider site and regional characteristics, population density and distribution, the potential transfer of radioactive material to people and the environment, and the feasibility of effective emergency response actions. Radiological protection principles likewise require optimization, meaning that the number of people exposed, the likelihood of exposure, and the magnitude of dose should all be kept as low as reasonably achievable. These authorities do not create a simple automatic prohibition on every urban nuclear facility. But they do make clear that historic occupancy is not enough. **A regulator must ask whether the site itself is suitable in light of the surrounding population and the broader environmental context. On that question, this Peterborough location is deeply problematic.**

I also ask the Commission to remember that the real issue is not whether Peterborough is less dense than Toronto. The real issue is whether this particular Peterborough site is an appropriate place to add or normalize pelleting risk at all. BWXT's desire for business flexibility does not convert an unsuitable or questionable site into a suitable one. If anything, the fact that

BWXT has long regarded Toronto and Peterborough as locations between which pelleting might be shifted underscoring that siting choice matters. If siting choice matters, then the Commission should not allow “legacy zoning” to do the work of a true site-suitability analysis.

The Commission has already been confronted with this exact issue. The CNSC’s own published case summary records that, in the 2020 licensing decision, the minority commissioner viewed the question not as whether pelleting was safe in Peterborough in the abstract, but at what location it was safer to pellet. The same summary records that the proximity of the elementary school and the concerns of residents were predominant factors in the minority’s conclusion that pelleting should not be authorized in Peterborough. Although the Federal Court later upheld the majority decision as lawful and reasonable, **that did not amount to a scientific endorsement of this location.** It simply confirmed that the majority decision fell within the Commission’s legal discretion. The underlying prudential and siting concerns remain unresolved in any practical sense for those who live here.

For this mid-term review, I ask the Commission to focus on what BWXT’s performance actually shows. Has BWXT earned public confidence through transparent, timely, site-specific disclosure? Have monitoring, reporting, and public communication improved to the point where the surrounding community can reasonably trust that the risks are understood and minimized? Has the broader contaminated former GE site context been meaningfully integrated into the way the Peterborough facility is assessed and discussed? Has BWXT clearly stated whether it still intends to move pelleting to Peterborough, and if so, on what timeline, with what design, what emergency implications, and what site-specific evidence?

In my submission, until the Commission and the public have complete, intelligible, site-specific answers to those questions, the present licensing framework should not be relied upon to permit, facilitate, or normalize any future transfer of pelleting to Peterborough, nor any further entrenchment of nuclear-manufacturing activity at this site.

I therefore ask the Commission to make clear that legacy zoning and historic industrial occupation are not substitutes for modern site suitability. I ask the Commission to find that this site, located within an established urban neighbourhood and immediately adjacent to residences and a public elementary school, is not an appropriate location for the intensification of nuclear-related activity, including pelleting or any other expansion of risk-bearing nuclear manufacturing operations. The fact that such activities may have historical roots at this location does not justify their continuation or expansion where modern siting principles require careful regard to surrounding population, environmental context, and the need to minimize public exposure.

In my submission, the proper long-term regulatory objective is not merely to prevent intensification at this site, but to move nuclear-manufacturing activities of this kind away from this urban location.

Most importantly, I ask the Commission to state clearly that the proper regulatory direction is not to normalize or facilitate expanded nuclear manufacturing at this legacy urban site, but to recognize that nuclear-manufacturing activities of this kind should, over time, be moved away from dense residential settlement and sensitive receptors, and to locations where potential risks to the public and the environment can be minimized to the greatest extent reasonably practicable.

At a minimum, the Commission should make clear that no proposal to intensify operations, transfer pelleting, or further entrench this site as a location for long-term nuclear-manufacturing activity should be supported under the existing licensing framework or treated as presumptively acceptable because of historic industrial use and legacy zoning.

Respectfully submitted,



Ken Brown

Attachment: My written submission dated January 27, 2020

Senior Tribunal Officer, Secretariat
Canadian Nuclear Safety Commission
280 Slater Street, P.O. Box 1046, Station B
Ottawa, Ontario K1P 5S9
Sent by email cnscc.interventions.ccsn@canada.ca

RE: Written Intervention opposing requests from BWXT Nuclear Energy Canada Inc. (BWXT) to renew licence FFOL-3620.1/2020 for 10 years and to authorize pelleting operations at the Peterborough facility.

To whom it may concern,

I am requesting status to participate as an intervenor the hearing in the above referenced matter by way of this written communication only.

My submission to the Canadian Nuclear Safety Commission regarding the licence renewal of the BWXT facilities follows.

SUMMARY:

I live within 450 meters of the BWXT building and I am extremely concerned about the increased level of risk to people and the environment necessarily attached to the proposed pelleting operation. There are already well established environmental concerns regarding current BWXT operations and the burden of contamination inherited from legacy operations at the GE site.

- I am against granting pelleting operations in Peterborough.
- I am not in favour of granting any licence for a term exceeding three (3) years.
- I am against a single licence combining the operations of the Toronto and Peterborough facilities and believe a separate licence is required for each facility.
- I believe any licence must require significantly enhanced environmental monitoring both on and off-site.

DETAIL:

INCREASED RISKS:

The addition of pelleting operations necessarily increases risk of exposure to harmful radioactive materials in the air and soil.

I understand pelleting operations create uranium dioxide, which is flammable in powdered form and is not created by the currently licenced operations. I understand a 9,000¹ gallon tank will be required to be installed somewhere on the site to store liquid hydrogen necessitated by the pelleting operation. The presence of liquid hydrogen increases the level of risk compared to current licenced operations where no such liquid hydrogen tank is required nor exists.

The industrial zoning designation of the BWXT site (formerly GE site) would never be allowed to be created today in the midst of a residential area with a public school immediately across the road. I am not suggesting this "legacy" zoning be removed, but rather we must not allow such legacy zoning to be exploited to allow the expansion of industrial operations as is requested by BWXT.

It is my view that pelleting operations impose increased risks to the population and environment, adding to the already significant burden of risk already being borne due to current operations and inherited from legacy operations.

¹ as per the BWXT Toronto facility

Question:

- Why is it necessary for BWXT to expand to include “possible” pelleting operations in the midst of a densely populated residential area and increasing risks when such manufacturing can be done in areas where the population is minimal and thus risks concomitantly reduced?

Recommendation:

- Do not allow pelleting operations at the Peterborough site because pelleting operations impose increased risks to the population and environment, adding to the burden of risk already being borne due to current and legacy operations.

BERYLLIUM LEVELS SHOW STATISTICALLY SIGNIFIANT INCREASE.

I understand that it was only on Wednesday January 22, 2020 that the 2019 environmental monitoring data were released in full. Such unreasonable delays further, and significantly, hobble the public's ability to form a reasoned intervention with a deadline a mere five (5) days following such release.

I understand that the CNSC Independent Environmental Monitoring Program (IEMP) measures substances in the environment at 8 (2014 and 2018) or 9 (2019), locations external to the BWXT site². I understand from speaking with others knowledgeable in such matters that the levels of beryllium in the soil were being measured and that levels of beryllium in the soil are an indicator of airborne levels. I understand in each of the measured years from 2014 onwards (2018 and 2019) a statistically significant increase in beryllium levels was evident. I further understand that the highest concentration of beryllium in soil was measured at the schoolyard of Prince of Wales Public School (which I think is Site Sample Code GP05-S05).

Questions:

- Does CNSC believe that the public can develop a fully informed intervention by January 27, 2020 when critical IEMP data was only made available five (5) days prior on Wednesday January 22, 2020?
- Has the IEMP noted a statistically significant increase in beryllium from 2014 to present?
- Of the 8 or 9 IEMP monitoring sites was the largest current measure of beryllium and measure of increase of beryllium at the schoolyard of Prince of Wales Public School and if not which was?
- When did CNSC become aware of the statistically significant increase in beryllium measured at IEMP sites?
- Was this increase in beryllium considered in CNSC's reports on the applications at hand?
- Why does CNSC's website fail to mention, or even draw attention to, IEMP data trend showing statistically significant increases in beryllium?
- In light of statistically significant increases in beryllium how can the public have any faith in CNSC conclusion “The IEMP 2014, 2018, and 2019 results indicate that the public and the environment in the vicinity of the BWXT Peterborough facility are protected and that there are no expected health impacts.” when the data shows increasing levels of this very hazardous substance?

Recommendations:

- Increase the number of monitoring sites; include air as well as soil measurements, increase the frequency and period of sampling.
- Require defined protocol for BWXT enhanced environmental monitoring regarding current operations to be in place.
- Require BWXT conduct off-site monitoring to defined protocols and increased frequency.

² <http://www.nuclearsafety.gc.ca/eng/resources/maps-of-nuclear-facilities/iemp/bwxt-peterborough.cfm>

- Require defined protocols for BWXT enhanced environmental monitoring specifically for proposed pelleting operations PRIOR to any licence approval allowing pelleting.
- Require consistent units of measure and show changes/trends, absolute measures, do not rely on diluting exposures over larger populations or time.

PETERBOROUGH AND TORONTO FACILITIES DIFFER

Each BWXT site has unique features and industrial history and should be licenced separately.

Recommendations:

- Do not combine the operations of the Peterborough and Toronto sites into one licence.
- Licence each facility separately.
- Do not approve pelleting operations at Peterborough facility.
- Peterborough licence should be limited to currently allowed operations and not allow any expansion of operations beyond currently allowed operations in Peterborough.

DECOMMISSIONING INSUFFICIENTLY DETAILED

In seeking Authorization for Pellet Production in Peterborough BWXT appears to rely upon Decommissioning Plans based on decommissioning current activities and operations, and does not include costs associated with decommissioning the expanded pelleting operation. BWXT appears to rely upon the absence of a business decision to actually conduct pelleting as justification for such underestimated decommission costs.

Questions:

- Does the updated financial guarantee of \$10,775,155 for Peterborough which BWXT is seeking approval for take into account decommissioning operations at Peterborough inclusive of a pelleting operation?
- Is the financial guarantee of \$10,775,155 for decommissioning plans in Peterborough sufficient?
- What happens to decommissioning plans and financial guarantees in the event BWXT were to declare bankruptcy?

LENGTH OF LICENCE EXCESSIVE

Ten years is too long a term for any licence. The BWXT request presents multi-facetted problems which have not been adequately addressed, including the need for significantly improved environmental monitoring on and off-site.

Recommendations:

- The term of any licence should be limited to three years and must not expand operations in Peterborough nor combine the operations of the Peterborough and Toronto sites into one licence during the term.
- Any licence must include significantly enhanced environmental monitoring, both on and off-site.

Sincerely,



Ken Brown

My intervention is on the preceding three (3) pages which were submitted by me on January 27, 2020 to:

Senior Tribunal Officer, Secretariat
Canadian Nuclear Safety Commission
280 Slater Street, P.O. Box 1046, Station B
Ottawa, Ontario K1P 5S9
By email to: cns.interventions.ccsn@canada.ca