Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

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Written submission from Chris Risley

Mémoire de Chris Risley

In the Matter of the

À l'égard de

BWXT Nuclear Energy Canada Inc., Toronto and Peterborough Facilities

BWXT Nuclear Energy Canada Inc., installations de Toronto et Peterborough

Application for the renewal of the licence for Toronto and Peterborough facilities

Demande de renouvellement du permis pour les installations de Toronto et Peterborough

Commission Public Hearing

Audience publique de la Commission

March 2 to 6, 2020

Du 2 au 6 mars 2020

Canada

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Intervention

Overview Statement

I present my concerns with BWXT's request to allow pelleting at their Peterborough facility and my concerns with granting them a 10-year license. My concerns are framed in the "unreasonable risk" lens by which the Canadian Nuclear Safety Commission (CNSC) views its work.

Discussion and Recommendations

The Canadian Nuclear Safety Commission states:

"The CNSC is the sole authority in Canada to regulate the development, production and use of nuclear energy, and the production, possession and use of nuclear substances, prescribed equipment and prescribed information in order to prevent unreasonable risk." [taken from CNSC Regulatory Fundamentals, s. 2]

The words "unreasonable risk" present a lens by which operations of the Peterborough BWXT plant or its future expansion plans must be examined by the CNSC. The CNSC must be assured that no "unreasonable risk" has occurred.

I would ask the CNSC to consider the following questions:

Is it not an unreasonable risk to have a children's playground and large elementary school (Prince of Wales School) within 25 m of the BWXT plant?

Is it not an unreasonable risk to young children to expose them to any level of radiation from uranium? Uranium is dangerous even at very low concentrations and the scientific consensus is that there is no safe dose of radiation. [National Research Council. 2006. Health Risks from Exposure to Low Levels of Ionizing Radiation: BEIR VII Phase 2. Washington, DC: The National Academies Press. https://doi.org/10.17226/11340.]

Is it not an unreasonable risk to have wastewater contaminated with uranium flow into the Otonabee River which is the source drinking water for communities downstream? What methods are used to minimize uranium in the wastewater and how is effectiveness monitored?

Is it not an unreasonable risk that uranium dust which is finer than wheat flour be processed in a facility so close to a densely populated community? How will results of any environmental monitoring be used?

Is it not an unreasonable risk when the United States Nuclear Regulatory Commission requires pelleting operations to be placed in non-residential areas while Canada considers placing similar facilities in an urban neighbourhood?

My concerns mentioned above lead me to question granting a ten-year license to BWXT. If the expansion is allowed to proceed it must be for less than ten years and there must be careful environmental monitoring tied to the period. There must be a new set of hearings to review the results of the environmental monitoring after two or three years from these 2020 hearings. To have a longer period of license would be an unreasonable risk to those living in Peterborough and being exposed to its operations. BWXT has only been operating for 3 years in Peterborough. This is too short a time to justify granting a 10-year license to BWXT.

I also have concerns about the ability of BWXT to manage its operations. In 2017 they reported a “minor” fire at their Toronto plant. The fire involved their hydrogen tank which is situated close to a loading dock for uranium dioxide, in flammable powder form. Is it not an unreasonable risk to have this situation occur and yet be called “minor” by the company proposing similar operations in Peterborough? How can we be sure the same type of accident won’t occur in Peterborough?

Is it not an unreasonable risk to have BWXT operate a plant when they found that they had been using the wrong filters for masks for exposure to beryllium exposing their employees to this highly toxic element? Can they be trusted to not make similar mistakes again?

There is a large amount of legacy pollution at the BWXT site in Peterborough. How will this pollution be controlled if pelleting is allowed? What steps would be taken to reduce cumulative effects from legacy pollution and pelleting? Is this location appropriate for pelleting based on its legacy pollution?

Conclusion

Based on these concerns stated above I would request that the Canadian Nuclear Safety Commission deny granting a 10-year license for the Peterborough BWXT facility. I would also like to deny BWXT’s license request to allow pelleting in Peterborough.