



**Oral Presentation**

**Exposé oral**

**Written submission from  
Bill Templeman**

**Mémoire de  
Bill Templeman**

In the Matter of the

À l'égard de

**BWXT Nuclear Energy Canada Inc.,  
Toronto and Peterborough Facilities**

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

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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**

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## INTERVENTION TO THE CANADIAN NUCLEAR SAFETY COMMISSION

**Subject:** BWXT's licence application for Peterborough, Ontario  
Hearing Ref. 2020 - H - 01)

**From:** Bill Templeman of Peterborough, Ontario  
( [REDACTED] )

**Submission:** 6 pages excluding cover letter  
Submitted via email to [cns.interventions.ccsn@canada.ca](mailto:cns.interventions.ccsn@canada.ca)

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January 25, 2020

To Whom It May Concern,

I am concerned about the possibility of BWXT Nuclear Energy Canada being granted a licence to produce nuclear fuel pellets .6 of a kilometer from my home. I am not a nuclear engineer, a physicist or a radiation biologist. So, I am totally dependent on experts.

When I get onto a passenger jet, I have to depend on the expertise of the pilots, the flight crew, the air-traffic controller and ground crew who serviced the aircraft. I have to trust that all these people have managed the risks involved. I am not a pilot.

When I am wheeled into an operating room at the hospital for a procedure or emergency surgery, I have to trust that my surgeon, my anesthetist, the nurses and technicians on duty have managed all the risks involved. I'm not a doctor either.

So, when a nuclear manufacturer near my house says they want to build reactor components using radioactive materials, I have to trust that they too, like the pilots and doctors, have managed all the risks involved. But have they?

I don't know. I am a volunteer program host on a local community radio station (Trent Radio, 92.7 FM) in Peterborough. I post my program as podcasts after each show. I have interviewed 3 executives at BWXT. I have included links to my podcasts on this issue in an appendix at the end of this document. The BWXT

executives I met were bright, decent people; the sort of people with whom I would leave my house keys in order to feed the cat and water the plants when I go away on vacation. Very trustworthy. But nuclear energy is a hideously complex topic and I do not have the technical background to judge if I am being told the truth or not. BWXT is asking the neighbourhoods adjacent to the plant to have faith in the company's expertise and safety record. "Trust us", they say. Why? Why should these neighbours trust BWXT?

Will there be a huge nuclear explosion at the plant? Probably not. They don't work with enriched uranium and there are no reactors involved. However, BWXT plans to store up to 9,000 gallons of liquid hydrogen on their site to be used in the production of the pellets. When I brought this matter up at BWXT, I was assured that the storage tank will be managed by their hydrogen supplier and that storing hydrogen in liquid form is better from a safety standpoint than storing gaseous hydrogen. But is storing such a large quantity of liquid hydrogen in the middle of a residential neighbourhood (and across the street from an elementary school) a good idea?

Will there be any seepage of radioactivity into our local environment? I don't know. The former occupants of that plant (GE Hitachi) said there would be no safety concerns, yet there is a shockingly high incidence of cancer among former employees and in the neighbourhoods close to the plant. I am told the same is true in Port Hope for the neighbourhood closest to the Cameco plant there. Will BWXT be any different? I don't know. The BWXT executives said they would test the air and soil around the plant on a regular basis. I am concerned about the plant being located 25 meters from a large elementary school. Is this a safe idea? In Ontario we have lots of undeveloped land. Why not set up this operation far from schools and residential neighbourhoods?

But what about property values? Nothing untoward may ever happen at BWXT's plant. There may be no radioactive contamination of the surrounding neighbourhood. Yet in ten years if the market perception is that this neighbourhood is contaminated or unsafe, our properties will be worth much less than they are today. Manufacturing processes and environmental contamination are both physical processes and subject to the laws of science. Property values, particularly property values in neighbourhoods deemed to be of questionable

safety, are subject to market forces and the laws of perception, not the laws of science. Apart from selling now and moving, what can homeowners in the neighbourhood of this plant do to mitigate this financial risk? BWXT or the Canadian Nuclear Safety Commission (CNSC) are not in the real estate business. Neither organization will be compensating me for any loss in property value I may sustain.

Much of my retirement savings are tied up in this house. My house is fully paid for and is the foundation of my security for old age. If either my wife or myself ever need intensive care in our final years, the money for this care will come from the sale of this house. Now I have to admit that this is hardly a desperate situation. There are many, many people in Peterborough who will never own a house like mine. So, this is very much “a middle-class” problem. But it is my middle-class problem. The mere existence of this nuclear manufacturing plant close to my house could seriously erode my property value. Once BWXT gets its licence renewal from the CNSC, we will have no voice whatsoever.

I have been told that this decrease in property values is an issue in Port Hope. Faye More, head of the Port Hope Community Health Concerns Committee has not been mollified by assurances of government compensation for lost equity on homes resulting from AECL activities, and she points to new hot spots being discovered when buildings are demolished or new holes dug as evidence that concerns about property values and privacy rights ought to be reconsidered in the face of broader public health issues (*Harries, 2017*). Will the government compensate Peterborough property owners for lost equity on homes resulting from BWXT’s activities? I acknowledge that the Port Hope situation is quite different from what we are facing in Peterborough. Or is it?

For one of my podcasts, I interviewed Jim Dufresne, a retired GE plant worker with over 20 years experience on the nuclear side of the business. Concerned about a high rejection rate by the WSIB of claims by ex-GE workers and their families for compensation for suffering caused by illnesses and deaths, Dufresne compiled a list of 175 former GE Nuclear/GE Hitachi workers. 64 of them had died from cancer. More than 1 in 3. I am not an epidemiologist, but such numbers cry out for a comprehensive environmental assessment and

epidemiological survey prior to inviting more nuclear manufacturing into a residential neighbourhood.

Health Canada dismissed similar doubts raised by concerned citizens in Port Hope. Eric Mintz, an epidemiologist retained by the Port Hope Community Health Concerns Committee to review such studies, drew very different conclusions from the data collected by Health Canada, arguing that it actually shows higher than normal rates of leukemia and childhood cancer deaths, as well as significantly elevated incidences of brain, lung, and colon cancer for certain time periods and demographic groups (*Harries, 2017*).

A problem in Peterborough is that right now there are no baseline measurements of radiation or cancer levels around the GE neighbourhoods. But will the production of these pellets cause property values in the neighbourhood to fall? Perhaps. The property values around BWXT's plant in the Lansdowne-Dupont neighbourhood of Toronto are among the lowest in the GTA.

So, to conclude: I respectfully request that the CNSC not grant BWXT Nuclear Energy Canada Inc. a licence to produce nuclear fuel pellets at their Peterborough facility. If, in its final analysis, the CNSC decides to grant such a licence, I request that this licence be limited to 2 years, not 10 years as requested by the company.

My rationale for this request is two-fold: (1) A 2-year licence would give the company time to pilot their pelleting process then do a complete environmental assessment of the air, soil and water in the surrounding neighbourhood and (2) if radioactive contamination is detected in the neighbourhood, an exposure of 2 years would be significantly less damaging than an exposure period of 10 years.

Finally, I wish to offer the Commission a few words of feedback on this intervenor process. Preparing a document and delivering an oral presentation are not daunting challenges for me. Public speaking and writing are daily activities for me. However, there are many citizens for whom these tasks form an insurmountable barrier. I should point out that the neighbourhoods directly adjacent to the former GE plant are among the most economically depressed areas in Peterborough. Some of the neighbours closest to the BWXT building on Monaghan Road do not have access to this intervenor process for educational and cultural reasons. Social class exclusion makes BWXT's licence application an inaccessible process for them. Upscale wealthy neighbourhoods do not get

nuclear manufacturing. There are no nuclear factories in Rosedale, Forest Hill or along the Bridal Path in Toronto. The BWXT plant in Toronto is in a former industrial area, near the infamous Junction neighbourhood. Is the same dynamic at play in Peterborough?

This intervenor process is, in effect, exclusionary in that those without the vocational background or cultural capital to write and speak in public are, ipso facto, excluded from this process. I would be glad to offer alternatives to the current intervenor processes should the Commission wish to explore this matter further.

Respectfully yours,

Bill Templeman

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Peterborough, Ontario

**References:**

Harries, K. (2008, March; updated 2017, June), Nuclear Reaction, *The Walrus*, Retrieved from <https://thewalrus.ca/nuclear-reaction/>

## APPENDIX

I have interviewed 3 members of CARN (Citizens Against Radioactive Neighbourhoods) and created a 3-episode podcast for my Trent Radio program and podcast. See the links below to listen to these episodes if you want more details.

You can also visit the CARN website at <https://www.nopellets.ca/>.

Part 1: <https://pintsandpolitics.ptbopodcasters.ca/podcast/edition-76-part-1-why-is-there-community-resistance-to-nuclear-fuel-manufacture-in-peterborough/>

Part 2: <https://pintsandpolitics.ptbopodcasters.ca/podcast/edition-76-part-2-why-is-there-community-resistance-to-nuclear-fuel-manufacture-in-peterborough/>

Part 3: <https://pintsandpolitics.ptbopodcasters.ca/podcast/edition-77-part-3-why-is-there-community-resistance-to-nuclear-fuel-manufacturing-in-peterborough/>

I have also interviewed a former plant worker from GE Nuclear/GE Hitachi and 3 executives from BWXT.

Ex-GE worker:

<https://pintsandpolitics.ptbopodcasters.ca/podcast/edition-78-part-2-is-nuclear-fuel-manufacturing-safe-in-peterborough-a-ex-ge-nuclear-worker-says-no/>

BWXT executives:

<https://pintsandpolitics.ptbopodcasters.ca/podcast/edition-78-part-1-is-nuclear-manufacturing-safe-in-peterborough-bwxt-says-yes/>