



**Written submission from
Ontario's Nuclear Advantage**

**Mémoire de
Ontario's Nuclear Advantage**

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

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January 23, 2020

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

RE: Hearing Notice No. 2020-H-01

Dear Senior Tribunal Officer, Secretariat,

Ontario's Nuclear Advantage (ONA) appreciates the opportunity to provide feedback on the application before the Canadian Nuclear Safety Commissions (CNSC) from BWXT Nuclear Energy Canada Inc. (BWXT NEC) to renew its Class IB fuel facility operating licence for a period of ten years. Under its current licence, BWXT NEC operates two separate facilities: one in Toronto and one in Peterborough. ONA is pleased to support BWXT NEC's application for its operating licence renewal as both facilities are critical components of Ontario's electricity infrastructure and vitally important nuclear supply chain.

In the Province of Ontario, nuclear power represents one of the lowest-cost electricity resources available, providing more than 60 per cent of the province's power at 30 per cent less than the average residential price. With a tremendously efficient, baseload output free of greenhouse gas (GHG) emissions, Ontario's nuclear stations help avoid the creation of 45 million tonnes of CO₂ every year, the equivalent of having 10 million fewer cars on the province's roads.

The role of nuclear power in Canada goes far beyond being a safe, clean, affordable and reliable source of energy. It has an important role to play in medicine, industry, food safety, research and innovation, and it supports thousands of long-term, high-tech and well-paid jobs. The nuclear industry's \$15 billion annual contribution to gross domestic product (GDP) and direct support of more than 69,000 jobs in communities large and small make it the most economically significant presence in Ontario's energy sector, and one of the most significant industrial footprints in the province generally.

These are just a few of the aspects that make up Ontario's Nuclear Advantage, an information and advocacy initiative launched in 2016. While ensuring adequate environmental protections, robust processes and transparency is essential, it is important not to overlook Ontario's leadership on the environment and climate change, having reduced GHG emissions by more than 20 per cent since 2005. This accomplishment has been driven largely by the phase-out of coal fired electricity generation, which was accommodated primarily due to the restart of six nuclear units in Ontario's generating portfolio.

A safe, clean, reliable and affordable supply of electricity for Ontario cannot be assured without the infrastructure required to produce the fuel that supplies approximately 25 per cent of the province's power. BWXT NEC's facilities in Toronto and Peterborough are essential elements of that end-use product which enables the day-to-day functioning of Canada's largest provincial

economy. ONA believes that BWXT NEC has clearly demonstrated, through both their evidence submitted and their exceptional record in all Safety and Control Areas (SCAs) regulated by the CNSC over the current licence period, their unequivocal ability to continue to operate both facilities in a manner fully respecting both public and environmental safety.

Part of this confidence includes the fact that even though there is currently no plan to change the existing state of operations, BWXT NEC proactively undertook an Environmental Risk Assessment (ERA) to assess the potential for ecological and human health effects from current or possible future activities related to pellet-production at the Peterborough facility. The purpose of conducting the ERA was to identify possible environmental effects, propose any necessary mitigation measures, reasonably anticipate any occurrence of negative environmental impacts notwithstanding mitigation measure, and minimize or avoid possible events before they occur.

BWXT NEC's facilities have existing ERAs that were just completed in 2018. While this detailed process determined that no health or environmental impacts are expected as a result of BWXT NEC conducting pelleting operations and fuel bundle assembly at its Peterborough facility, ONA has confidence that the CNSC will review the ERA and, if necessary, obtain additional information from BWXT NEC to further support its assessment of this licence renewal application.

The reality is that nuclear generating stations produce approximately one-fifth of Canada's non-GHG emitting electricity, and in addition to hydroelectric stations, are the only baseload resources upon which a clean power grid that includes intermittent renewables can be built. How Ontario's Nuclear Advantage was leveraged to enable the province's phase-out of coal-fired generation is one of Canada's greatest environmental success stories. This could not have been achieved without a stable, proven and economic supply of natural uranium pellets and reactor-specific fuel bundles for Ontario's CANDU reactors.

Notwithstanding the necessity of the highly specialized, purpose-built fuel prepared in these facilities to the day-to-day reliability of Ontario's electricity system, BWXT NEC has demonstrated its unwavering commitment to public and environmental safety through its actions and performance metrics. It is for these reasons that ONA fully supports renewal of BWXT NEC's operating licence for an additional ten years.

Sincerely,

Taylor McKenna
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