



**Written submission from
Ontario Power Generation**

**Mémoire de
Ontario Power Generation**

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

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

Re: BWXT Nuclear Energy Canada (NEC) Inc. Fuel Facility Operating Licence Renewal

Dear Madam President and Commission Members,

Ontario Power Generation (OPG) supports the renewal of the BWXT-NEC Fuel Facility Operating Licence for a period of ten years to operate the fuel fabrication facility located in Toronto and the fuel bundle manufacturing facility in Peterborough, Ontario, under a single Class 1B operating licence.

These facilities collectively supply the fuel and fuel bundles for use at OPG's Pickering and Darlington nuclear generating stations and are essential for our continued operation. BWXT-NEC has provided high quality fuel for the CANDU fleet since 1965. This in turn allows OPG to operate safely and to provide clean, reliable energy for the people of Ontario.

BWXT-NEC's continued high performance is expected and appreciated by OPG. We note, through our audits, that BWXT-NEC makes considerable efforts to continually improve in all aspects of its operations, including training and safety of the workforce and the protection of the environment. This is achieved through a well developed management system that clearly defines a quality program in all aspects of the work conducted by BWXT-NEC.

OPG has exacting requirements that its suppliers must meet to be qualified. We perform initial and ongoing audits to confirm our requirements are met before including suppliers on our approved suppliers' list. BWXT-NEC has consistently met our stringent requirements and remains a reliable supplier of fuel. In our view, BWXT-NEC together with its parent, BWXT Canada has been, and remains a key support component in the overall nuclear energy framework of Ontario. It also provides high quality technical jobs to over 1400 people in various locations across Canada. Both OPG and BWXT-NEC share similar values in placing high emphasis on safety of workers, the environment and the public. Our focus and emphasis is on consistently achieving high standards, and this has been proven over the years.

Co-operation between our two companies has existed since the very beginning of construction and operation of the Pickering nuclear generating station. In addition to fuel, BWXT-NEC has supplied other services and equipment, for example, equipment such as Channel Inspection and Gauging Apparatus (CIGAR) and the Universal Delivery Machine (UDM) which support safe operations at our facilities.

Just recently, as OPG's fuel supplier, BWXT-NEC's facility in Peterborough was engaged in supporting the Darlington Refurbishment project for Unit 2 with new fuel. BWXT-NEC collaborated with OPG to develop an innovative process for pre-sequencing of all 6,240 fuel bundles required for Unit 2 refueling. This involved detailed planning of additional inspections, serial number verification, documentation, and integration of OPG oversight into standard work processes to meet Safeguards requirements. Several random inspections were successfully performed by the IAEA along with CNSC staff. Safe material handling, ergonomics, and reducing worker dose were all key considerations in planning this work. BWXT-NEC accommodated these inspections and worked with OPG to ensure that all fuel bundles were restored to their required position.

An important part of sustaining a high quality workforce is a healthy safety culture. It has long been recognized in the nuclear industry and by the CNSC that a healthy safety culture is fundamental to attaining and maintaining high standards of performance. Safety culture is developed and managed internal to the company, but it is visible to customers and it is an important area of regulatory interest. It refers to core values and behaviours of a company's leadership and workers in all aspects of safety, compliance, quality, production, and protection of the environment. All of these attributes ultimately reflect on the performance and reputation of the company. OPG has noted that BWXT-NEC exemplifies all of the good qualities associated with a healthy safety culture and has thus maintained a high standing with OPG in all the products and services it provides. For example, in 2018 there were no lost time injuries at either of the BWXT-NEC plants, and we observe that CNSC notes in CMD 20-H2 *BWXT-NEC Inc. Application to renew licence for the Toronto and Peterborough facilities*, that all of the 14 safety and control areas have remained satisfactory. OPG also notes that BWXT-NEC quickly responds with effective corrective measures that resolve issues in a safe and effective manner consistent with a healthy safety culture.

OPG acknowledges that BWXT-NEC has undertaken an Environmental Risk Assessment (ERA) to address fuel pellet manufacturing at both its facilities should the need arise in the ten year licence period. The ERA shows no adverse environmental impacts as a result of changes to operations at BWXT-NEC, in support of this licence renewal request. Historical performance shows that the air and water emissions are kept at a very small fraction (less than 1%) of the regulatory limits at both facilities and efforts are made to continually reduce them even further. Hence, OPG supports this change to provide increased flexibility for BWXT-NEC to meet OPG's requirement for fuel and to further improve the reliability of fuel supply in years to come.

In summary, OPG supports BWXT-NEC's application for a renewal of the fuel fabrication operating licence for ten years. OPG is confident that BWXT-NEC has a robust approach to managing the conduct of its operations in a safe and predictable manner and will continue to provide high quality fuel for our reactors.

Yours sincerely,



Sean Granville
Chief Nuclear Officer
Ontario Power Generation Inc.