

Community Newsletter

BWXT NUCLEAR ENERGY CANADA APPLIES TO CNSC TO RENEW ITS NUCLEAR FUEL FACILITY OPERATING LICENCE



n Nov. 12, 2018, BWXT Nuclear Energy Canada (BWXT NEC) submitted an application to the Canadian Nuclear Safety Commission (CNSC) to

renew its Class 1B Nuclear Fuel Facility Operating Licence (FFOL) for a period of 10 years. The current licence, issued on January 1, 2011, is valid until December 31, 2020.

The current operating licence issued by the CNSC authorizes BWXT NEC to perform activities at two facilities: The Toronto facility located at 1025 Lansdowne Ave. and the Peterborough facility at 1160 Monaghan Rd. The Toronto facility is authorized to produce natural and depleted uranium dioxide pellets (referred to as pelleting), while the Peterborough facility is authorized to produce and test fuel bundles using natural and depleted uranium dioxide pellets. The Peterborough facility is additionally authorized to receive, repair, modify and return contaminated equipment from off-site nuclear facilities.

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The CNSC considers licence applications for nuclear facilities via a public hearing process. Information about the public hearings will be made available on nec.bwxt.com and via BWXT NEC's Community Newsletters. More information about the Canadian Nuclear Safety Commission is available at nuclearsafety.gc.ca.

BWXT NEC is seeking one change to its licence with regard to pellet manufacturing operations. BWXT NEC is seeking the flexibility during the proposed next 10-year licence period to permit BWXT NEC to produce natural uranium pellets at both the Peterborough and Toronto facilities.

While there is currently no plan to change the current state of operations, including the flexibility to allow BWXT NEC's Peterborough facility to conduct pelleting will help to ensure that BWXT NEC has the ability to adapt as needed to changing business needs over the decade-long licence period.

As always, we will be working hard to communicate and engage with neighbours, general public, local elected officials, Indigenous groups and other key stakeholders.

BWXT NEC's licence renewal application and corresponding Environmental Risk Assessment available are available online at nec.bwxt.com.

If you have any questions about licensing or BWXT NEC's operations, please call us at 1.855.696.9588 or email us at questions@bwxt.com.

Interested in learning more about BWXT NEC? Apply to join our Community Liaison Committee!

www.nec.bwxt.com/community/ clc-committee

THE ENVIRONMENTAL RISK ASSESSMENT

icensees are required by the Canadian Nuclear Safety Commission to have an Environmental Risk Assessment (ERA), which is to be updated on a five-year cycle, or whenever significant change occurs in the facility or activity. The ERA is to be conducted in accordance with the Canadian Standard Association (CSA) N288.6-12, *Environmental risk assessments at Class I nuclear facilities and uranium mines and mills*, 2012.

In its request to the CNSC to renew BWXT NEC's Nuclear Fuel Facility Operating Licence, BWXT NEC is seeking the flexibility during the proposed next 10-year licence period to permit BWXT NEC to conduct natural uranium pelleting operations at both its Peterborough and Toronto facilities.

Even though there is currently no plan to change the current state of operations, an ERA was undertaken to determine whether there is a potential for environmental (i.e. ecological and human health) effects from current or possible future emissions or physical stressors associated with producing pellets at <u>BWXT NEC's Peterb</u>orough facility.

The purpose of an ERA is to identify possible environmental effects, propose measures to mitigate adverse effects, predict if there will be significant adverse environmental effects after mitigation is applied, minimize or avoid adverse environmental effects before they occur, and incorporate environmental factors into decision making.

During the licence renewal process, the CNSC will review the ERA and, if necessary, request additional information to aid its assessment of the licence renewal application.

Learn more about the licensing process on page 3.

GOOD TO KNOW:

- BWXT NEC has been safely producing natural uranium fuel for over 50 years.
- BWXT NEC is in full compliance with its licence and all applicable regulations.
- Natural uranium pelleting is currently conducted at BWXT NEC's Toronto facility.
- The natural uranium pellets are shipped to BWXT NEC's Peterborough facility where they are placed into fuel bundles for use in CANDU® nuclear power stations.

CONCLUSIONS

- ⇒ Overall, estimated emissions associated with consolidated operations at the Peterborough facility are determined to be low.
- \Rightarrow All radiological and non-radiological emissions are, and will continue to be, well-below regulatory limits.
- \Rightarrow For human health, there are no radiological or non-radiological risks to members of the public.
- \Rightarrow For ecological health, there are no radiological or non-radiological risks to the environment or wildlife.
- ⇒ Potential impacts of future activities at the Peterborough facility, should pelleting occur, are anticipated to be similar to the existing Toronto operation which does not cause any adverse environmental or human health impacts.
- ⇒ BWXT NEC has a well-established and mature environmental monitoring program. Environmental monitoring programs in Toronto would be applied to the Peterborough operations and are considered effective in protecting human health and the environment.

Read the ERA: nec.bwxt.com

No predicted radiological or non-radiological risk to human health or the environment.

LICENSING PROCESS

n Nov. 12, 2018, BWXT Nuclear Energy Canada (BWXT NEC) submitted an application to the Canadian Nuclear Safety Commission (CNSC) to renew its Class 1B Nuclear Fuel Facility Operating License (FFOL) for a period of 10 years. The current licence, issued on January 1, 2010, is valid until December 31, 2020.

CNSC staff will conduct a technical assessment of the licence application against the regulatory requirements, request further information from BWXT NEC if required, make recommendations to the Commission and verify compliance with the Nuclear Safety and Control Act and any licence conditions imposed by the Commission.

The CNSC considers licence applications for nuclear facilities via a public hearing process that is set out in the <u>CNSC</u> <u>Rules of Procedure</u>. The one, or two-part public hearing for a licence application usually takes place over a 90-day period and takes into account the views, concerns and opinions of interested parties and intervenors. The hearing is broadcast live on the CNSC's website. To learn more about public Commission hearings visit: <u>http://nuclearsafety.gc.ca/eng/</u> <u>the-commission/hearings/index.cfm</u>.

Members of the public wishing to participate in a public Commission hearing can do so by following the CNSC's intervenor process. More information about participating in a public Commission hearing is available on the CNSC's website: <u>http://nuclearsafety.gc.ca/eng/the-commission/hearings/participate/index.cfm</u>.

Once details of BWXT NEC's public Commission hearing are determined by the CNSC, BWXT NEC will share that information in Community Newsletters and on its website: nec.bwxt.com.

OUR SAFETY & COMPLIANCE PERFORMANCE

WXT NEC's Peterborough facility (along with its Toronto operation) is licensed by Canada's nuclear regulator, the Canadian Nuclear Safety Commission. BWXT NEC is committed to meeting all its licence requirements.

For more than 60 years BWXT NEC's facilities have operated safely. The health and safety of employees, members of the public and the environment is BWXT NEC's number one priority.

BWXT NEC is subject to inspection by numerous regulatory agencies from the federal, provincial and local government, including:

- 1. The Canadian Nuclear Safety Commission (CNSC)
- 2. Ministry of Environment, Parks & Conservation
- 3. International Atomic Energy Agency
- 4. Human Resources and Skills Development Canada (Labour)

Each year, BWXT NEC submits a comprehensive Annual Compliance Report to the CNSC at the end of March. The purpose of this report is to demonstrate that BWXT NEC has successfully met the requirements of the Nuclear Safety and Control Act and its Class 1B Nuclear Fuel Facility Operating Licence. The Report is used by the CNSC to assist in its development of its Regulatory Oversight Report on the performance of Canada's uranium and nuclear processing facilities, which includes BWXT's Peterborough and Toronto facilities, and a public meeting is held to review the report's findings. In 2017, BWXT NEC received satisfactory ratings across the 14 Safety & Control Areas (SCAs).

More information on BWXT NEC's environmental and safety performance can be found in its Annual Compliance Reports which are available at nec.bwxt.com/safety.

The 14 Safety & Control Areas

- Management system
- Human performance management
- Operating performance
- Safety analysis
- Physical design
- Fitness for service
- Radiation protection
- Conventional health and safety
- Environmental protection
- Emergency management and fire protection
- Waste management
- Security
- Safeguards and non-proliferation
- Packaging and transport

FACTS ABOUT NUCLEAR

- \Rightarrow Canada was one of the first countries to produce nuclear power¹.
- ⇒ Ontario's nuclear industry is an important economic engine in this province—directly and indirectly employing about 60,000 people in Canada². Most of these jobs are located right here in Ontario where the industry generates \$2.5 billion in economic activity every year³.
- ⇒ Nuclear generates about 60 per cent of the province's power, and the use of nuclear energy helped to enable Ontario, in 2014, to become the first jurisdiction in North America to eliminate the use of coal-fired power generation⁴.
- ⇒ Nuclear provides a constant, reliable source of carbon-free energy that ensures people and businesses can continue to power their lives.
 - 1 https://nudearsafety.gc.ca/eng/resources/infographics/npp/index.cfm
 - 2 https://cna.ca/resources/key-messages/economics/
 - 3 https://cna.ca/wp-content/uploads/2014/05/Refurbishing-Ontario%E2%80%99s-Nuclear-Fleet-a-Major-Economic-Boost.pdf (page 16)
 - 4 https://www.world-nudear.org/information-library/country-profiles/countries-a-f/canada-nudear-power.aspx

FACTS ABOUT NATURAL URANIUM

- ⇒ It's safe to handle. BWXT NEC uses natural uranium which is the same material that can be found in the ground all across Canada.
- ⇒ Uranium is an element found all around us in nature: in rocks and soils; in rivers and oceans; in the food we eat; and in our bodies.
- ⇒ Because uranium is a naturally-occurring, low-level radioactive material that exists virtually everywhere, it contributes to what is called "background radiation".
- \Rightarrow Natural uranium is weakly radioactive.

TALK TO US

WE WANT TO HEAR FROM YOU!

Contact us via the following methods:

Phone: 855-696-9588 Email: <u>questions@bwxt.com</u> Online: <u>nec.bwxt.com</u>

Mail:

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