Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

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Written Submission from Conexus Nuclear Inc.

Mémoire de Conexus Nuclear Inc.

In the matter of the

À l'égard de la

Mid-term update from BWXT Nuclear Energy Canada Inc. on licensed activities at its Toronto and Peterborough facilities

Mise à jour de mi-parcours sur les activités autorisées de BWXT Nuclear Energy Canada Inc. à ses installations de Toronto et de Peterborough

Commission Meeting

Réunion de la Commission

May 2026

Mai 2026

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Canada

April 15, 2026

Tribunal Officer, Commission Registry
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Subject: BWXT Nuclear Energy Canada Inc.'s mid-term update on licensed activities at its Toronto and Peterborough facilities.

Conexus Nuclear Inc. supports BWXT Nuclear Energy (NEC) Canada Inc. in its mid-term update regarding licensed activities at its two Class 1B Nuclear Facilities located in Toronto and Peterborough. BWXT has played a key role in the CANDU industry since its inception, with over 60 years of extensive experience and innovation, helping to ensure that Ontario's electricity grid remains one of the cleanest in the world, with over 90% of its generation emissions-free.

BWXT NEC manufactures the ceramic fuel pellets in Toronto and assembles fuel bundles in Peterborough. From there, the fuel bundles are shipped to Ontario Power Generation's Pickering and Darlington nuclear power plants. At its two nuclear facilities, BWXT employs more than 450 people in high-tech, engineering, manufacturing, and administrative positions. Over 150 of these employees are engineers in disciplines such as software development, metallurgy, mechanical engineering, electrical engineering, and systems engineering.

In addition to supplying the nuclear fuel, BWXT also supplies fuel channel components, services, equipment, and parts specifically for the CANDU nuclear industry. Its staff design, engineer, and manufacture highly advanced, technical systems and tooling for the nuclear industry. These systems inspect and maintain reactors, reducing workers' radiation doses and decreasing outage times.

BWXT not only supports reactor operations but also manufactures components and tools for producing life-saving radioisotopes. BWXT collaborated with Ontario Power Generation to design, manufacture, and install a complex system which lowers medical isotope targets, also manufactured by BWXT, into the reactor at the Darlington Nuclear Power Plant, where they are irradiated. Once the targets have been irradiated for a predetermined period, they are extracted from the reactor and shipped to the BWXT medical facility in Kanata, where they are processed for use by pharmacies and hospitals worldwide. Currently, the radioisotopes are used in diagnostic imaging to help

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detect illnesses such as cancer and heart disease. In the future, similar systems will be installed at other Darlington reactors to produce additional medical isotopes for cancer treatment.

BWXT has a long and strong history of prioritizing safety and works to ensure the well-being of its employees, the public, and the environment. The company is dedicated to reducing the environmental impact of its operations and adhering to environmental regulations. BWXT understands that building and maintaining public trust is best achieved through environmental excellence and a commitment to openness and transparency with the community.

BWXT has been a Conexus supplier participant since 2005 and is also a member of our supplier participant program, demonstrating its long-term commitment to the highest standards of safety and quality. The Conexus Supplier Participant Program (SPP) fosters collaboration among suppliers to develop an internationally recognized approach to building a strong safety and quality culture. It provides opportunities for information exchange, training, and interaction between operators and suppliers.

Today, all operators of CANDU reactors, both in Canada and internationally, are members of Conexus. Our mission is to achieve excellence through collaboration in CANDU technology, small modular reactors and advanced nuclear technologies. In partnership with our members, suppliers, research institutions, and other organizations, Conexus continuously innovates nuclear plant equipment and processes to ensure the highest standards of safety, efficiency, and environmental performance. Conexus members invest approximately $75 million annually in research and development, and joint projects aimed at enhancing the safety, reliability, environmental performance, and cost-effectiveness of CANDU nuclear generating stations.

Conexus supports its members by engaging skilled and knowledgeable suppliers with extensive expertise, human resources, and research facilities to conduct innovative nuclear science. This research, along with related engineering activities, is primarily carried out in Canada by organizations such as BWXT, Canadian Nuclear Laboratories, Kinectrics, AtkinsRéalis, Calian, Stern Laboratories, and several Canadian universities.

To conclude, Conexus supports BWXT NEC in its mid-term update regarding licensed activities at its two Class 1B Nuclear Facilities located in Toronto and Peterborough. Conexus is confident that the facilities will continue to effectively support the Canadian nuclear industry and implement process and infrastructure improvements, while maintaining their exemplary safety record across all areas of operation.

Sincerely,

Rachna Clavero
President and CEO
Conexus Nuclear Inc.

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