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Written submission from the Durham College

Mémoire du Durham College

In the Matter of the

À l'égard d'

Ontario Power Generation Inc.

Ontario Power Generation Inc.

Applicability of the Darlington New Nuclear Project environmental assessment and plant parameter envelope to selected reactor technology

Applicabilité de l'évaluation environnementale et de l'enveloppe des paramètres de la centrale à la technologie de réacteur sélectionnée pour le projet de nouvelle centrale nucléaire de Darlington

Commission Public Hearing

Audience publique de la Commission

January 2024

Janvier 2024

Canada

DURHAM COLLEGE
SUCCESS MATTERS

OFFICE OF
THE PRESIDENT

November 17, 2023

Senior Tribunal Officer, Commission Registry
Canadian Nuclear Safety Commission
280 Slater St., PO Box 1046 Stn B
Ottawa, ON K1P 5S9

To Whom It May Concern:

RE: CNSC Public Hearing 2024-H-02 – Darlington New Nuclear Project, OPG

This letter confirms Durham College's support for Ontario Power Generation's (OPG) environmental assessment for the Small Modular Reactor (SMR) technology at the Darlington nuclear station. Durham College has a long-standing partnership with OPG, and supports the use of the GE Hitachi BWRX-300 as the choice of technology for the SMR's being developed at the Darlington site.

Since 2005 Durham College and OPG have partnered on training initiatives and collaborative projects that have helped expand training capabilities and countless students achieve their goals. OPG has invested more than $20 million in education and training, including the construction of the OPG Centre for Skilled Trades and Technology at Durham College's Whitby campus, which opened to students in 2021. Beyond direct investments, OPG partners with the college on key training initiatives such as females in welding and Indigenous peoples in electrician programs to attract diverse talent to the trades and power industry.

The four SMRs at Darlington nuclear site are expected to produce a total 1,200 megawatts (MW) of electricity, enough to power 1.2 million homes. This supports Canada's goal to reach net-zero by 2050, providing clean energy with a focus on environmental conservation.

OPG conducted an environmental assessment (EA) for the Darlington New Nuclear Project (DNNP) that was accepted by a Joint Review Panel from the Government of Canada in 2012. The EA concluded that, with mitigation measures in place, the project would not cause significant adverse environmental effects. The assessment used a Plant Parameter Envelope approach based on reactor technologies considered at the time.

In 2021, after selecting the BWRX-300 reactor technology for the project, OPG reviewed the EIS (Environmental Impact Statement) to ensure it aligned with the new reactor technology. They compared BWRX-300 design parameters with the original DNNP values and reviewed the BWRX-300 against the earlier EA process.

The review found that the BWRX-300 parameters falling outside the original values still had environmental effects consistent with the earlier conclusions. The environmental impact of the BWRX-300 deployment was found to be less than what was examined in the initial EA. This review demonstrated that considering the entire lifecycle of the proposed plant, the BWRX-300 reactor technology was not fundamentally different from the technologies assessed in the DNNP Environmental Assessment.

Given the extensive assessment, OPG has addressed the environmental and safety concerns that support the development of this technology in Darlington. Furthermore, approval of this project will have a positive impact on the economy, creating thousands of new jobs, investing in local supply chains and developing partnerships with post-secondary institutions that will help train future energy sector leaders.

Sincerely,

Don Lovisa
President
Durham College