



Oral presentation

Exposé oral

Written submission from the Organization of Canadian Nuclear Industries

Mémoire de l'Organization of Canadian Nuclear Industries

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

November 14, 2023

Re: Request to present Oral Intervention for Darlington New Nuclear Project in person on January 22, 2024.

Dear Commission,

My name is Brian Fehrenbach from the Organization of Canadian Nuclear Industries and representing over 200 Canadian companies comprising the Canadian nuclear supply chain. OCNI also proudly supports our nuclear utilities, including Ontario Power Generation and its vision to deploy a GE-Hitachi BWRX 300 at Darlington. Below is the text of my intervention.

Hello, I'm pleased to be here today as both a nuclear professional and a representative of the Canadian nuclear supply chain in support of Ontario Power Generation's application to construct a reactor facility for its Darlington New Nuclear Project (DNNP). OCNI believes that the Environmental Assessment applied to the Darlington site in 2012 is applicable and suitable for use with the GE-H BWRX 300 Small Modular Reactor.

The Organization of Canadian Nuclear Industries (OCNI) is the leading voice of the Canadian nuclear supply chain and its 240 members and associates. Founded in 1979, OCNI actively promotes the production of safe, clean and reliable nuclear energy, as well as the establishment of the needed infrastructure to carry out and manage nuclear projects in Canada. In 1979, the Canadian nuclear landscape looked different than it does today, smaller and with fewer reactors, and like today the industry was anchored by Ontario Power Generation (Ontario Hydro) and its growing nuclear fleet. Our industry has grown and changed over the last 40 years and Canada is a Tier 1 nuclear nation competing to supply products and services around the world.

And, just as it has for the last 40 years, OCNI is proud to support Ontario Power Generation in its past applications to extend licenses and now to embark on new nuclear projects again.

One of the reasons that Canada is a competitive Tier 1 nuclear nation is because Canada has a long history of safely executing nuclear projects and managing nuclear assets, all under the governance of the Canadian Nuclear Safety Commission (CNSC). For approximately 70 years the Canadian nuclear industry has developed and refined its expertise as a Tier One nuclear country, and this includes its world class nuclear regulatory regime, evidenced through its influence on the nuclear regulatory practices in other CANDU countries. The CNSC, through its continuous investigation of new technologies and international collaboration, is able to provide Canadians a strong and reliable licensing framework for nuclear operators that helps ensure the safest and most robust nuclear activities. Today, as I'm working with Canadian suppliers in countries across Europe, the CNSC is well known and active in promoting regulatory excellence.

Now, to continue our tradition as a strong Tier One nuclear country Canada is embarking on deploying Small Modular Reactors as outlined in our SMR Road Map and Action Plan, and Ontario Power Generation is poised to lead the way with its plan to construct a GE-H BWRX 300 MW at its Darlington site. OCNI believes this is an excellent choice of technology, location, and utility to deploy Canada's first commercial SMR.

The Canadian SMR Road Map defines three categories of SMRs based on their ranges of applications, size and technology readiness in 2022. The GE-Hitachi BWRX 300 was placed in Tier 1 and selected by OPG partly because it was the right choice for an early deployment of SMR to produce electricity. The GE line of boiling water reactors is a well-established technology that can be understood and operated safely by OPG. To reach this decision we know that OPG conducted a very lengthy review process of several SMRs before selecting the BWRX, and its through this intense review and preparation that I am confident in OPG's technology decision.

Ontario Power Generation's Darlington site received a Site Preparation license in 2012 after an Environmental Assessment and a public hearing, and this license was renewed in 2021 to allow for a quick start on some of the groundworks and infrastructure required to support an eventual SMR. This foresight and planning allowed OPG to choose a site that was already suitable for a project such as the GE-Hitachi BWRX 300. The concerns, conditions and impact of any nuclear technology based on existing reactor designs – including CANDU, Pressurized Water Reactors and Boiling Water Reactors - are considered by the 2012 Environmental Assessment. After selecting the GE-H BWRX 300 OPG conducted a review of its existing Environmental Impact Assessment and determined that it is valid for the deployment of a BWRX 300. OCNI strongly supports this conclusion reached by Canada's foremost nuclear operator.

In fact, OPG is not only Canada's foremost nuclear operator but also one of the best in the world based on assessments by the World Association of Nuclear Operators (WANO) and the demand by other utilities for its expertise. It has a track record of safety, operating excellence, transparency and continuous improvement that is second to none in the nuclear industry. The ongoing Darlington refurbishment project demonstrates that OPG is able to plan and execute major nuclear projects better than 'on time, on budget and safe'. Having worked at Ontario Power Generation and its commercial subsidiaries I know how strong its nuclear culture is, and all of these traits combine to point to OPG as the best choice for Canada's first GE-Hitachi BWRX 300.

In summary, OCNI strongly supports OPG and its selection of a GE-H BWRX 300 to build within the parameters of its current Environmental Impact Assessment, and encourages the CNSC to proceed with issuing a license for construction.