



**Written submission from  
Canadian Nuclear Workers'  
Council**

**Mémoire du  
Canadian Nuclear Workers'  
Council**

In the Matter of the

À l'égard d'

**Ontario Power Generation Inc.**

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Application for a licence to construct one  
BWRX-300 reactor at the Darlington New  
Nuclear Project Site (DNNP)

Demande visant à construire 1 réacteur  
BWRX-300 sur le site du projet de nouvelle  
centrale nucléaire de Darlington (PNCND)

**Commission Public Hearing  
Part-2**

**Audience publique de la Commission  
Partie-2**

**January 8, 2024**

**8 janvier 2024**



## Canadian Nuclear Workers' Council

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November 04, 2024

Members of the Commission

c/o Tribunal Officer, Commission Registry  
Canadian Nuclear Safety Commission  
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Ottawa, Ontario  
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**Reference. 2024-H-03**

**CNWC submission regarding OPG's Application for a Licence to Construct a single BWRX-300 Reactor at their Darlington Nuclear Generating Site**

Dear President Tremblay and Members of the Commission

Please accept this letter as the written submission from the Canadian Nuclear Workers' Council (CNWC) for the Public Hearing scheduled for the week of January 08, 2025 regarding the application from Ontario Power Generation (OPG) for a licence to construct a single GE Hitachi Boiling Water Reactor X-300 (BWRX-300) at its Darlington New Nuclear Project (DNNP) site. We also request an opportunity to make an oral submission.

**The Canadian Nuclear Workers' Council**

The CNWC was established in 1993 as a Council of Unions with Members employed in Canada's nuclear industry. CNWC Affiliates include Unions that represent Workers across Canada's nuclear sector, including: uranium mines and mills, nuclear fuel manufacturing, nuclear power plant (NPP) operation and maintenance, engineering, component manufacturing, medical isotope production, nuclear research and development, nuclear waste management, NPP construction, NPP refurbishment and decommissioning. CNWC Affiliates also include District Labour Councils in a number of our nuclear host communities.

Specific to this hearing, the Women and Men employed at the Darlington NPP, the Darlington Waste Management Facility and the Darlington Refurbishment Project are represented by the Power Workers' Union, the Society of United Professionals, Member Unions of the Provincial Building and Construction Trades Council of Ontario (Ontario

Building Trades) and Unifor. Those Unions will be representing people employed at the Darlington New Nuclear Project through its evolution. Members of the United Steelworkers (USW) manufacture reactor components that will be used at the DNNP and Members of the USW and Unifor mine/mill and process the uranium that will continue to fuel Canada's nuclear reactors. Those Unions, as well as the Durham Region Labour Council, are all CNWC Affiliates.

The CNWC undertakes a number of activities to help ensure the perspectives of our Affiliates are heard, including the preparation of policy papers, publishing a regular newsletter, participating in various information sharing events, engaging on social media and posting relevant information on our website <https://cnwc-cctn.ca>. We also hold an annual conference that rotates amongst the various communities hosting Canada's nuclear facilities. At our 2023 conference in Clarington, OPG provided an update on their DNNP and CNWC Affiliates had an opportunity to tour the Darlington Site including the Darlington Nuclear Generating Station and the Darlington Nuclear Information Centre. At our 2024 conference in Saskatoon, GE Vernova provided an update on the development and deployment of their BWRX-300 Reactor.

The CNWC is a regular participant in the regulatory process.

### **The Darlington New Nuclear Project**

The DNNP encompasses the life cycle of up to 4 new nuclear reactors at the existing Darlington nuclear site with an electrical generation capacity up to approximately 4,800 MWe.

In 2006 OPG submitted an application to the CNSC for a site preparation licence followed by an environmental impact statement (EIS). The project was initiated under the Canadian Environmental Assessment Act of 1992 (CEAA 1992). A three Member Joint Review Panel (JRP) was established in October 2009. OPG had not selected a reactor technology so the environmental assessment (EA) was conducted based on an envelope of parameters that encompassed the technologies being considered, i.e. the plant parameter envelope (PPE). The JRP reviewed the EA under CEAA 1992 and the licence application under the Nuclear Safety and Control Act (NSCA). Following a series of public hearings in March/April 2011, the JRP concluded that the project could proceed and made a number of recommendations. In 2012, the Government of Canada determined the DNNP was not likely to adversely affect the environment and subsequently the CNSC issued a 10-year site preparation licence to OPG.

In October 2021, the CNSC renewed OPG's site preparation licence for the DNNP. In December 2021, OPG announced its selection of the General Electric Hitachi BWRX-300 reactor for deployment at the DNNP site. In October 2022, OPG applied for a licence to construct the first of four BWRX-300 reactors.

The CNWC and CNWC Affiliates have been fully engaged with the DNNP since its inception:

- We participated in all of OPG's community consultation sessions on the DNNP Environmental Impact Statement,
- In 2011 we made written and oral submissions to the Joint Review Panel,
- In 2021 we participated in the CNSC Public Hearing on OPG's application to renew the DNNP Power Reactor Site Preparation Licence, and
- In January 2024 we submitted a written intervention for the CNSC Public Hearing on the applicability of the DNNP EA, EIS and PPE to the BWRX-300 Reactor.

In preparation for this submission we also reviewed submissions from OPG and CNSC Staff.

### **Ontario Power Generation's Application**

We are in full support of OPG's application for a licence to construct the first of four BWRX-300 reactors at the DNNP site and their written submission in support of that application (CMD: 24-3.1), specifically:

- OPG meets all the legal requirements of the Nuclear Safety and Control Act (NSCA) and the applicable Regulations.
- OPG has demonstrated they are qualified to carry out the licensed activities and make adequate provision for the protection of the environment and the health and safety of people.
- The DNNP will not result in any significant adverse environmental effects.
- OPG will implement required mitigation measures.
- OPG has a long history of safe and effective operations in all of their nuclear facilities.
- OPG is qualified to undertake the construction of a BWRX-300 unit and ancillary facilities at the Darlington Nuclear site.

### **CNSC Staff's Assessment**

We are in full support of CNSC Staff's assessment of OPG's application as described in CMD: 24-H3 and 24-H3.B as well as their conclusions, specifically:

- OPG is qualified to carry on the activities authorized by the licence.
- OPG will make adequate provision for the protection of the environment and the health and safety of people.

We are also in full support of CNSC Staff's recommendation that the Commission issue a licence authorizing OPG to construct a single BWRX-300 reactor at the DNNP site subject to CNSC Staff's stated conditions, regulatory hold points and oversight.

### **Concluding Remarks**

The DNNP will add clean, safe and reliable generation capacity at the Darlington site while supporting our efforts to reduce carbon emissions. It will also enable the potential construction of additional new nuclear in both Ontario and Saskatchewan as well as supporting potential export opportunities. This will boost economic activity and provide high quality employment opportunities.

OPG has systems in place for the management of all Safety and Control Areas (SCAs). These systems are proven and effective, resulting in workplaces with standards of occupational health and safety that are second to none. The Darlington NPP has a strong record of safe operations with world class operating performance. We fully expect this high level of performance to continue through the lifecycle of the DNNP.

Unions with Members employed at OPG's nuclear facilities have developed mature and effective working relationships with OPG, especially with respect to occupational health and safety and any potentially related areas such as training.

The CNWC is in full support of OPG's application and respectfully recommends the Commission issue a licence to OPG for the construction of a single BWRX-300 reactor at its DNNP site.

Thank-you to the Commission, CNSC Staff and everyone participating in this process. A transparent public process and strong regulatory oversight help maintain the high level of health and safety that we see in our workplaces and in our communities.

Respectfully submitted,

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