



**Written submission from the  
Ontario Chamber of Commerce**

**Mémoire de la  
Chambre de commerce de l'Ontario**

In the Matter of the

À l'égard de

**Darlington New Nuclear Project**

**Projet de nouvelle centrale nucléaire de  
Darlington**

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Application to renew the nuclear power  
reactor site preparation licence for the  
Darlington New Nuclear Project

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Demande de renouvellement du permis de  
préparation de l'emplacement d'une centrale  
nucléaire pour le projet de nouvelle centrale  
nucléaire de Darlington

**Commission Public Hearing**

**Audience publique de la Commission**

**June 10, 2021**

**10 juin 2021**

April 23, 2021

Mr. Marc Leblanc  
Commission Secretary  
Canadian Nuclear Safety Commission  
P.O. Box 1046  
280 Slater Street  
Ottawa, Ontario K1P 5S9

**RE: Darlington New Nuclear Project**

Dear Mr. Leblanc,

Thank you for the opportunity to comment on Ontario Power Generation (OPG)'s application to renew the Darlington New Nuclear Project (DNNP) Power Reactor Site Preparation Licence.

For more than a century, the Ontario Chamber of Commerce (OCC) has supported economic growth in Ontario by advocating for business priorities at Queen's Park on behalf of our 60,000 members, including local chambers of commerce and boards of trades in over 140 communities. Our membership comprises energy stakeholders of various kinds – from generators and distributors to consumers of all sizes.

Since phasing out coal-fired generation, Ontario has relied on nuclear as a source of affordable, safe, clean, and reliable energy. OPG's Darlington Nuclear station is an important part of Ontario's clean energy future – providing nearly 20 percent of Ontario's electricity – and the Darlington Refurbishment Project will ensure the station continues to provide reliable power for decades.

With this context in mind, the present submission summarizes the OCC's perspectives on the value of OPG's Darlington New Nuclear Project.

**Darlington New Nuclear Project**

The Darlington New Nuclear Project (DNNP) is an undertaking by OPG to add a new nuclear build at the Darlington Nuclear site, immediately east of the four-unit Darlington Nuclear Generating Station. The project began in 2006, when the Province of Ontario directed OPG to begin the federal approvals process for new nuclear at an existing site. The Canadian Nuclear Safety Commission granted OPG a Site Preparation Licence in 2012 for a period of 10 years. Currently, Darlington is the only site in Canada licensed for new nuclear.

Specifically, the DNNP is exploring innovative nuclear energy technologies with advanced safety features that could help meet Ontario's changing energy needs while combating climate change. In November 2020, OPG announced it was resuming planning activities with the goal of hosting a grid-size Small Modular Reactor (SMRs) by as early as 2028, pending regulatory approvals.

OPG is seeking a 10-year renewal of the current DNNP Power Reactor Site Preparation Licence, which is set to expire in August 2022. This renewal would be one step in a series of licences and approvals required prior to the construction and operation of a new nuclear reactor.

### **Economic and Environmental Benefits**

By all accounts, demand for electricity will continue rising in Ontario as our economy grows, existing generation assets are retired, and several sectors such as transportation move ahead with electrification. As Ontario looks to source that supply, nuclear power offers a clean and economically sound option.

SMRs will offer the same benefits of traditional nuclear reactors – low carbon emissions, reliable baseload power, and the ability to operate around the clock under all weather conditions – with a much smaller land footprint. Since SMRs are designed to be factory-constructed and modular, they are easier to build and operate. They can be used for generating electricity as well as producing heat for other applications like district heating for commercial or residential needs, hybrid energy systems, water desalination, or heavy industry applications. They also provide a reliable alternate energy source to diesel in rural and remote communities.

Domestic development of SMR technology would help strengthen Canada’s competitive advantage in an area that has significant potential for global demand. The success of SMRs will build on Canada’s strong foundation of existing nuclear projects and supply chains. To date, several governments across the country (including Ontario, New Brunswick, Saskatchewan, and Alberta) have expressed interest in deploying SMRs locally.

The DNNP would advance opportunities for businesses and workers within Canada’s nuclear industry and across its supply chains. Many high-quality jobs in the skilled trades and science, technology, and engineering sectors will be directly and indirectly promoted.

### **Other Considerations**

Through extensive studies and assessments, OPG has demonstrated that the construction and operation of a new nuclear generation station at the DNNP site would not pose any unreasonable risk to the public, personnel, or environment.

Further, OPG has continued to regularly engage with Indigenous communities, the public, government agencies, and other stakeholders on all aspects of the DNNP and the licence renewal process. OPG respects the treaty rights and priorities of identified Indigenous communities regarding the protection of the natural environment, nuclear safety, and meaningful engagement.

## Conclusion

In summary, the OCC supports OPG's request that the Commission renew the DNNP Reactor Site Preparation Licence. Additional generation at Darlington would provide a reliable source of baseload power, help reduce GHG emissions, and support workers and companies across the Canadian nuclear industry and its supply chains. The project is innovative, safe, and a key step towards combatting climate change.

Sincerely,



Rocco Rossi  
*President and CEO*  
*Ontario Chamber of Commerce*