



**Written submission from  
TerraPower**

**Mémoire de  
TerraPower**

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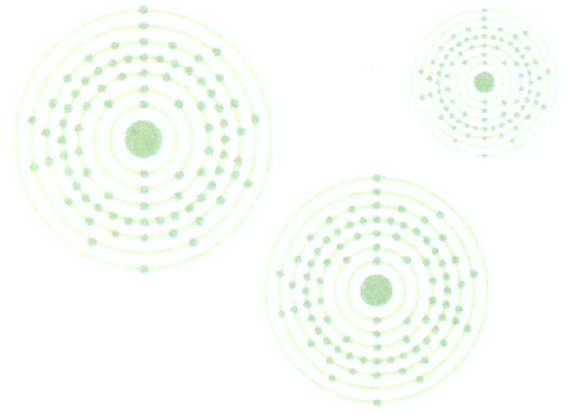
Demande de renouvellement du permis de  
préparation de l'emplacement d'une centrale  
nucléaire pour le projet de nouvelle centrale  
nucléaire de Darlington

**Commission Public Hearing**

**Audience publique de la Commission**

**June 10, 2021**

**10 juin 2021**



30 April 2021

Commission Secretariat  
Canadian Nuclear Safety Commission  
280 Slater Street  
P.O. Box 1046, Station B Ottawa, Ontario  
K1P 5S9

Subject: **Darlington New Nuclear Project (DNNP) Site Preparation Licence**

Re: **TerraPower Intervention on behalf of Ontario Power Generation**

Dear Commission Members:

TerraPower strongly endorses the renewal of the Site Preparation Licence to support the Darlington New Nuclear Project (DNNP). The goal of this project would be to generate approximately 4,800 megawatts electricity for the Ontario grid and, most importantly, it would be of emissions-free electricity.

TerraPower is an advanced nuclear technology company based in Bellevue, Washington, USA. In 2006, our company's founders began looking for a technological solution to the dual challenges of the growing global demand for energy and the rising threat of climate change. A key tool, they discovered, is advanced nuclear technology.

Nuclear power provides abundant, safe, reliable, firm, and flexible zero-carbon electricity. Nuclear is already a key contributor to Ontario's low-emitting electricity grid and is considered by a growing body of environmentalists and experts to be essential in achieving net-zero emissions by 2050. We agree with the Canadian government that nuclear is essential to achieving net-zero goals for Canada, and a number of companies, including TerraPower, are working to bring advanced nuclear technologies to the market to help achieve those goals.

Ontario Power Generation is leading the way to establish the foundation of Canada's future clean energy grid by standing up new nuclear at Darlington. In its original granting of the licence, the Canadian Nuclear Safety Commission (CNSC) recognized OPG's history as an expert operator with a top track record in safety, protection of workers, and protection of the environment. OPG possesses extensive knowledge of the Darlington site. This, together with its knowledge gained from combined national and international nuclear facility operating experience, provides OPG with proficiency to safely construct and operate additional nuclear power generating stations from this site.

We believe that Canada will need new nuclear to meet its goals of achieving zero emissions while maintaining the reliability of its power system. Darlington is the only site in Canada currently licensed for new nuclear. OPG is paving the way on the development and deployment of the next generation of nuclear power in Canada. Using the Darlington site for new nuclear will enable the next generation of grid-scale nuclear power plants in Canada faster than at any other location, enabling faster deployment of this critical tool in fighting the climate change crisis. As such, we support the renewal of the Site Preparation Licence for the Darlington New Nuclear Project.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Blessing", enclosed in a large, loopy oval.

Christian Blessing  
Director, Business Development  
TerraPower, LLC