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**Oral presentation**

**Exposé oral**

**Written submission from  
Westinghouse Electric Canada Inc.**

**Mémoire de  
Westinghouse Electric Canada Inc.**

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**

MR. M. A. LEBLANC  
Commission Secretary  
Canadian Nuclear Safety Commission  
280 Slater Street  
Ottawa, Ontario  
K1P 5S9

Date: May 3, 2021

**Re: Notice of Interest to Participate at CNSC Public Hearing 2021-H-04 and Written Submission in support of the Renewal of the DNNP PRSL**

Dear Mr. Leblanc,

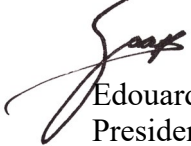
The purpose of this letter is to notify the Canadian Nuclear Safety Commission (CNSC) of Westinghouse Electric Canada's interest to:

- (1) participate as an intervenor by making an oral presentation during the Public Hearing 2021-H-04 in support of the renewal of Ontario Power Generation Inc.'s (OPG) nuclear power reactor site preparation licence (PRSL 18.00/2022) for the Darlington New Nuclear Project (DNNP);
- (2) provide the Commission with a written submission in support of OPG's application for renewal of power reactor site preparation licence for the Darlington New Nuclear Project.

As referenced in (2) above, please find attached the Westinghouse Electric Canada written submission.

Thank you.

Yours sincerely,



Edouard Saab  
President  
Westinghouse Electric Canada, Inc  
161 Bay St., Suite 2700  
Toronto, Ontario

Attachment: Westinghouse Electric Canada written submission to the CNSC in support of the renewal of the PRSL for the Darlington New Nuclear Project

MR. M. A. LEBLANC  
Commission Secretary  
Canadian Nuclear Safety Commission  
280 Slater Street  
Ottawa, Ontario  
K1P 5S9

Date: May 3, 2021

**Re: Written Submission in support of the Renewal of the DNNP PRSL**

Over the past fifty years, Westinghouse Electric Company has supported OPG's strong safety and operational performance at its two nuclear generating stations. Westinghouse has witnessed firsthand the diligence, commitment and passion for excellence of OPG personnel in ensuring the safe and reliable operation of OPG's nuclear power facilities. It is this experience that allows me to speak to matters under the Commission's purview, such as OPG's nuclear safety, its focus on protection of workers, and its ability to meet licence requirements, while protecting our citizens, communities and the environment.

In this submission, I would like to offer comments in three broad areas pertinent to the Commission's deliberations on OPG's application for renewal of its nuclear power reactor site preparations licence (PRSL 18.00/2022) for the Darlington New Nuclear Project (DNNP).

Background/Context

Westinghouse firmly believes that nuclear power generation provides safe, reliable, low-carbon baseload electricity generation. Nuclear power is a key contributor to Ontario's low-emitting electricity grid, and is considered by many experts, including the International Energy Agency, to be critical to achieving net-zero by 2050. The Government of Canada considers nuclear power essential to net-zero for Canada. As the Minister of Natural Resources, The Honourable Seamus O'Regan, has said: "*We have not seen a model where we can get to net-zero emissions by 2050 without nuclear. The fact of the matter is that it produces zero emissions.*"

In 2012, following the acceptance of a thorough environmental assessment (EA), which included extensive public involvement, the Canadian Nuclear Safety Commission (CNSC) granted OPG a licence to allow site preparation activities to support future nuclear generation. This licence will expire in 2022 unless renewed. OPG's renewal application will be considered by the CNSC at a public hearing scheduled to take place on June 9 to 10, 2021.

For context, it is Westinghouse’s understanding that:

- OPG is seeking CNSC regulatory approval for renewal of the Site Preparation Licence to support the Darlington New Nuclear Project (DNNP).
- In 2012, following the acceptance of a thorough environmental assessment (EA), which included extensive public involvement and seventeen days of public hearings with a Joint Review Panel, CNSC granted OPG a licence to allow site preparation activities to support future nuclear generation.
- The environmental assessment concluded that new nuclear generation would not cause significant environmental effects, given mitigation and commitments made by OPG.
- OPG has included new nuclear generation in its Climate Change Plan issued in late 2020.
- OPG is requesting to renew the licence “as is”. There is no requested increase in scope from the existing licence granted by CNSC. OPG has not selected a technology at this time and is not currently seeking approval for construction.

### Westinghouse Experience with OPG

Westinghouse Electric Canada (WEC Canada) is the legally constituted representative in Canada of Westinghouse Electric Company LLC. Today’s WEC Canada was established recently in June 2018 – but Westinghouse’s operations in support of Canadian nuclear power generation span some fifty years. Moreover, many of our current Canadian employees have extensive experience working with OPG at its nuclear generating stations in Pickering and Darlington, Ontario.

Throughout OPG’s operating history, Westinghouse’s provision of services has ranged from engineering support of critical infrastructure/construction projects to the manufacturing of customized platforms within its power generation plants. The following examples provide just a snapshot of our experience with OPG.

- **Custom Engineering & Equipment** – Supply of custom engineering and equipment for all aspects of operation to the Pickering NGS since 1974 and the Darlington NGS since its construction in the early 1990s.
- **Operation & Maintenance** – Supply of custom inspection tooling, replacement process vessels, maintenance platforms, lead-shielded filter vessels, and tooling calibration facilities.
- **Waste Management** – Supply of shielded flasks and transportation trollies, flask to flask transfer equipment, waste overpack containers, dry storage container lid clamps and design modifications for the Multi-Purpose Waste Container (MTPT).

- **Reactor Refurbishment** – Supply of end-fitting cutting and welding equipment, retubing tool carriers, platform systems, control systems and penetrations, and retube waste container engineering and design.
- **Tritium Recovery Facility** – Supply of all immobilized transportation containers (ITCs) since the Darlington TRF has been in production, ITC storage racks, and the tritium gloveboxes.
- **Design and Consulting** – Supply of design and consulting services for numerous OPG properties, including new and expanded facilities at both Darlington and Pickering sites.

OPG Darlington New Nuclear Application Documentation:

*Reference: <https://www.opg.com/powering-ontario/our-generation/nuclear/darlington-nuclear/darlington-new-nuclear/#process>*

OPG has published an extensive collection of planning documentation and factual evidence related to site evaluation and safety and control areas. This documentation provides strong validation that the selected site for the DNNP is appropriate. Some of the key items from the OPG documentation and data should be noted:

- OPG's capability to lead the construction and operation of a new nuclear generation facility is supported by fifty years of safe operation of nuclear facilities and project management success.
- OPG's Darlington NGS and Pickering NGS have recently been recognized for exemplary performance in safety and operating performance by the World Association of Nuclear Operators (WANO).
- OPG's review of codes, standards and practices demonstrates that there are no gaps vis-à-vis the original application materials and the geological environment remains unchanged.
- A review of potential hazards, human-induced events and security considerations concludes that the site is suitable for all stages of the DNNP life cycle.
- Updated requirements related to Canadian climate and air quality standards were assessed; they do not adversely impact the conclusions reached in the original application.

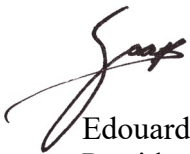
- Exclusion zone analysis/assumptions and conclusions performed for the most limiting design for the DNNP site in 2009 still remain valid.
- Review of the licence basis materials has not identified any new risks to health, safety or the environment that would require new mitigation measures.
- OPG has a demonstrated track record of environmental stewardship which will continue for DNNP site preparation licensed activities.
- OPG has robust emergency preparedness plans integrated with the Province of Ontario, Region of Durham, Municipality of Clarington, and international partners.

### Conclusion

In conclusion, Westinghouse Electric Canada is confident that: (a) the DNNP site evaluation and licence application will meet, if not exceed, all applicable regulatory requirements, current codes, standards and practices; (b) while changes have been identified and assessed by OPG, the resulting impacts are not significant with respect to the safety and suitability of the DNNP site for a new nuclear generating station; (c) OPG's site preparation licensed activities would therefore not pose any unreasonable risk to the public, personnel or the environment.

Thank you.

Yours sincerely,



Edouard Saab  
President  
Westinghouse Electric Canada, Inc  
161 Bay St., Suite 2700  
Toronto, Ontario