

DARLINGTON NEW NUCLEAR PROJECT

OPG leading the way on the deployment of SMRs



OPG's new nuclear project will deploy a 300-megawatt Small Modular Reactor (SMR) at the Darlington site by the end of the decade, pending regulatory approvals.

“With our people and our current and future partners, we will build and operate a SMR at Darlington safely, timely and cost-effectively,” said **Ken Hartwick, OPG's President & CEO**. “This will position our company to be an industry leader in SMR deployment.”



Once built, the SMR could power about 300,000 homes, create around 2,500 jobs over its 60-year lifespan, and increase GDP by \$2.5 billion.

SMRs are a key solution to climate change, and achieving net-zero.

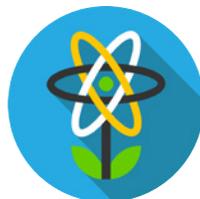
The Darlington New Nuclear Project team continues to work closely with technology partner **GE Hitachi Nuclear Energy (GEH)** to engineer, design and prepare for the eventual construction of GEH's proven reactor design, the BWRX-300, pending regulatory approvals.



Deliver a world-class SMR, together.



OPG is one of Ontario's **lowest cost generators**. We produce around half of the electricity used in Ontario and our prices are about **a third less** than the price paid to other generators.



Between 2035–2050, SMRs could **reduce greenhouse-gas emissions** by 216 megatons in Canada's heavy industrial sector—equivalent to taking over **three million cars** off the road per year.



Due to their **scalability** and **modularity**, SMRs can meet demands ranging from those of remote industries, to on and off-grid communities, to helping to **power our province** with low-emission electricity.

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Quick Facts about OPG and SMRs

Geotechnical study continues at Darlington

Meet the new nuclear team; Neela D'Souza



Where a brighter tomorrow begins.

OPG set to begin preparation work

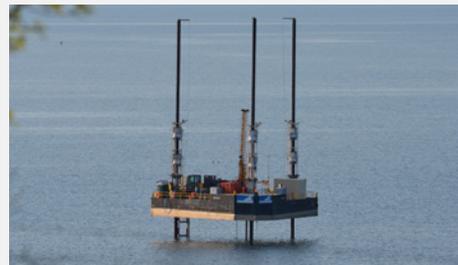
In March, OPG announced it will partner with E.S. Fox Ltd. to begin work on non-nuclear infrastructure such as utilities and roads later this year. This work will build on the project's renewed site preparation licence received from the Canadian Nuclear Safety Commission (CNSC) last

October. "We look forward to seeing the site begin to take shape, with help from trusted partner E.S. Fox, as OPG paves the way for the next generation of nuclear power in Ontario," said Ken Hartwick. Further regulatory approvals are required before any SMR construction work can begin.

Geotechnical study continues at Darlington

Starting in mid-May, through September 2022, E.S. Fox Ltd. will be conducting regular off-shore geotechnical studies east of Darlington station.

Barges will gather samples of the bedrock formation, used to characterize the Darlington site for



the future construction of a SMR, pending regulatory approvals.

Meet Neela D'Souza

Neela D'Souza has called Pickering her home for the last 40 years and has worked for OPG for 21 years. Before joining the Darlington New Nuclear Project team, Neela was a Shift Manager at the Pickering Nuclear Generating Station, where she was responsible for managing the overall operations for the station.

This responsibility has prepared her well for her work on the new nuclear project. Neela will be overseeing the preparations to operate a SMR at the Darlington site.

"Having the opportunity to leverage OPG's years of strong operational experience and take that to the new nuclear project is very exciting for me," said Neela. "We've learned a lot as an organization over several



decades, and now we have the opportunity to apply those learnings to innovate, improve, and plan to build a station that will benefit our community for years to come."

Neela relishes the opportunity to get outside, take family walks with her dogs and work in her garden. She is also an accomplished long distance runner who represented Canada in 2018 at the World 100km Championships in Croatia.

May 2022

The CNSC has approved OPG's revised financial guarantee, outlining our strategy to fund decommissioning activities associated with site preparation work.

March 2022

OPG awarded E.S. Fox Ltd. the contract to complete site preparation activities; read more about this in the story on the left.

December 2021

OPG selects GEH to further develop the BWRX-300 SMR design, with the mutual goal of constructing Canada's first commercial, grid-scale SMR.

October 2021

After a hearing in June 2021, the CNSC announced approval of OPG's application to renew the existing Site Preparation Licence for a 10-year period.

November 2020

OPG announced resumption of planning activities for future nuclear power generation using a SMR at the Darlington site.

June 2020

OPG submitted an application to the CNSC seeking renewal of the Site Preparation Licence.

December 2013

Citing lower than planned power consumption growth and a strong supply situation, the Government of Ontario requested OPG defer construction of new nuclear reactors but maintain the existing licence for future generation.

August 2012

The CNSC issued the Licence to Prepare Site to OPG for a period of 10 years.

May 2012

The Government of Canada accepted the recommendation of the Joint Review Panel (JRP) and the Environmental Assessment (EA).

March 2011

The JRP hosted 17 days of public hearings on the EA, addressing the project need, purpose and alternatives and potential effects on all aspects of the environment.

September 2009

OPG submitted the Environmental Impact Statement (EIS), and an updated Application for a Licence to Prepare Site.

June 2006

OPG directed by the Province of Ontario to begin the federal approvals process for new nuclear at an existing site.

Want to learn more about SMRs and the Darlington New Nuclear Project? Visit opg.com/newnuclear, or reach out to us directly at opg.com/contact-us.

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