

IESO Media Backgrounder

Darlington Refurbishment and Pickering Continued Operations

January 11, 2016

Nuclear's Role in Ensuring System Reliability in Ontario

- One of the core strengths of Ontario's electricity system is the diversity of its supply mix, three-quarters of which comes from non-fossil sources.
- Nuclear power plays a critical role in the supply mix, representing over 30 percent of Ontario's installed generation capacity and about 60 percent of the electricity produced in Ontario.
- Together, Pickering and Darlington represent about half of Ontario's installed nuclear generation capacity.
- The Bruce Power, Pickering and Darlington nuclear facilities provide reliable power 24/7.

Pickering Continued Operations at a Glance	Darlington Refurbishment at a Glance
<ul style="list-style-type: none">• Six Pickering units will be extended to 2022; four of those units will be further extended to 2024• Defers capacity needs and new investment of up to about 2,000 MW• Utilizes existing asset with access to transmission• Provides a critical source of electricity for the eastern part of the Greater Toronto Area	<ul style="list-style-type: none">• Secures 3,500 MW of supply capability over the longer-term (about 30 TWh per year) into the 2050 period• Utilizes existing asset with access to transmission• The plan to refurbish the Darlington nuclear units and to continue operations at Pickering during the refurbishment period is a cost-effective way to meet our future power needs

System Benefits and Value

- Darlington and Pickering nuclear units provide long-term, lower cost, emissions-free baseload electricity generation.
- The respective refurbishment and extension of life defers the need to procure new resources for a number of years.

Ontario's Nuclear Fleet

Site	Bruce	Darlington	Pickering
Installed Capacity	6,300 MW	3,500 MW	3,100 MW
Annual Energy	48 TWh	28 TWh	20 TWh
Number of Units	8	4	6
Operator	Bruce Power	OPG	OPG