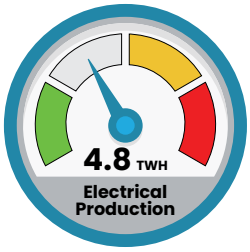
Ontario Power Generation

Performance Report for Darlington Nuclear

Q2 2021 Results

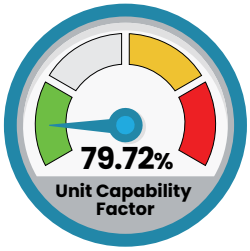
Performance Update

As part of our commitment to keep you informed, this report tracks performance for Ontario Power Generation's Darlington Nuclear in the areas of safety, operational and environmental performance and significant accomplishments during the second quarter of 2021.



Electricity Production – (the electrical energy generated, minus station needs)

OPG's nuclear electricity generation for Q2 of 2021 totalled 10.5 terawatt hours (TWh) compared to 11.6 TWh in 2020 in the same quarter. In Q2, Darlington Nuclear produced 4.8 TWh of electricity, which was 13 per cent of the electricity produced in Ontario.



Reliability – Unit Capability Factor

Compared to Q2 in 2020, Darlington's unit capability factor for Q2 2021 is higher (79.72) primarily as a result of a decrease in the number of days the station has been shut down for maintenance outages.

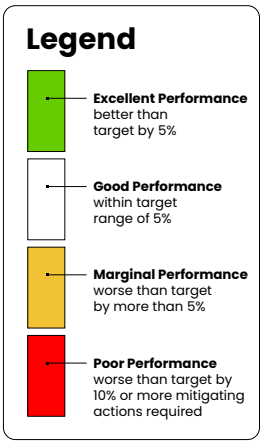
Environment – Spills to the Environment

During Q2 2021, there were no spills to the environment at Darlington Nuclear that were reportable to a regulatory authority.

Safety

Total Recordable Injury Frequency:

Total Recordable Injury Frequency (TRIF) measures the number of injuries involving OPG employees that result in a fatality, lost time, requiring restricted work and requiring medical treatment per 200,000 hours. In Q2 2021, Darlington Nuclear recorded 0.12 injuries per 200,000 hours worked.



Do you want to discuss our performance results with us? Please call us at 905-623-7122.

ONTARIO POWER GENERATION

About OPG's Nuclear Power Stations

Ontario Power Generation owns and operates the Pickering and Darlington Nuclear Generating Stations. The two stations have a combined generating capacity of about 5,728 megawatts with Darlington Unit 3 currently on refurbishment. Accounting for 29 per cent of the electricity produced in Ontario in Q2, OPG's nuclear units generated 10.5 terawatt hours.

Keeping you informed about milestones and items of interest achieved by Darlington Nuclear and across OPG:

Darlington New Nuclear Relicensing: In 2020, OPG announced the resumption of planning activities for a new nuclear build at Darlington, pending regulatory approvals. In June of that year, OPG applied to the Canadian Nuclear Safety Commission (CNSC) for renewal of the Site Preparation Licence to support the Darlington New Nuclear Project. The licence allows for pre-construction, preparatory activities to take place at the new nuclear site, which is located adjacent to our operating station. The original licence was granted in 2012 following an approved Environmental Assessment after extensive public engagement and a 17-day public hearing held in Clarington. The application for renewal of the Site Preparation Licence was considered through public hearings in June of this year. Renewal of the licence is onestep in a series of licences and approvals required prior to the construction and operation of a new nuclear reactor. Ahead of site preparation beginning, OPG is now studying the geotechnical aspects of the Darlington new nuclear site through borehole drilling activities. The study will assess the site for future Small Modular Reactor (SMR) foundations, which is a key aspect of the project. The ongoing work for the Darlington New Nuclear Project will support low-carbon, reliable nuclear energy continuing to be an important part of Ontario's energy mix into the future. Learn more at opg.com/newnuclear.

Darlington Refurbishment Learns and Prepares: After Darlington's Unit 2 returned to service on time and on budget after a successful refurbishment, OPG now has its focus on safely working through the next phase of the refurbishment project – refurbishing Darlington's Unit 3. OPG gained invaluable insights and lessons from the success of Unit 2, which are actively helping us improve our performance on Unit 3. "We're making sure to build on our success by applying more than 4,000 lessons learned to the plans and preparations for the refurbishments of Units 3, 1 and 4." said Subo Sinnathamby, Senior Vice President, Nuclear Refurbishment. "And we've already started to see efficiency gains in safety, schedule, and quality performance." As a result of this good performance, OPG has now moved into the next segment of work, disassembly. This segment involves removing key components from Unit 3, such as the feeder tubes and feeder assemblies. In May of this year, the project team successfully removed all 960 feeder tubes, and is advancing the preparatory work for the removal of fuel channel assemblies. The disassembly segment of the project is bringing OPG that much closer to providing another 30+ years of clean, reliable and low-cost energy for the people of Ontario.