# Performance Report for Darlington Nuclear

# 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 fourth quarter of 2017.







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

OPG's nuclear electricity generation for Q4 of 2017 totalled 10.1 terawatt hours (TWh) compared to 11 TWh in 2016 in the same quarter. In Q4, Darlington Nuclear produced 5.4 TWh of electricity, which was 14 per cent of the electricity produced in Ontario.

### Reliability - Unit Capability Factor:

Compared to Q4 in 2016, Darlington's unit capability factor for Q4 2017 was lower (85.17) primarily as a result of an increase in the number of days the station was shut down for maintenance outages.

#### **Environment** – Spills to the Environment:

During Q4 2017, there were no spills to the environment at Darlington Nuclear that were reportable to a regulatory authority. Darlington Nuclear had no reportable spills in 2017.

## **Safety**

#### **Accident Severity Rate:**

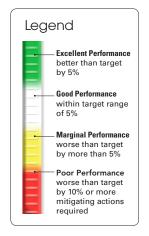
The Accident Severity Rate (ASR) measures the number of lost days due to employee injuries per 200,000 hours worked. In Q4 2017, Darlington Nuclear recorded 4.43 days lost per 200,000 hours worked.



#### **Employee All Injury Rate:**

The All Injury Rate (AIR) measures the number of workplace injuries per 200,000 hours worked. In Q4 2017, Darlington Nuclear recorded 0.40 injuries per 200,000 hours worked.







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## 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 6,600 megawatts. Accounting for 26 per cent of the electricity produced in Ontario in Q4, OPG's 10 nuclear units generated 10.1 terawatt hours.





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

- The Darlington and Pickering Nuclear Generating Stations have recently been awarded Gold Certification by the Wildlife Habitat Council (WHC) for their biodiversity programs. The WHC is an international organization which promotes habitat conservation and management on corporate lands through partnerships and education. Over 110 corporations, conservation organizations, government agencies, and academia are members and have received Conservation Certificates for their efforts in habitat protection and community education. OPG has been a member of the WHC since 1997 and has certified many of its generating facilities.
- In early December, students from Courtice Secondary school took part in the annual cleaning out of the Darlington site nesting boxes. This on-site habitat enhancement program is recognized by the Wildlife Habitat Council (WHC), and is one of the many environmental activities that allows Darlington to earn certification in the WHC Wildlife at Work program. The purpose of the nesting box project is to provide additional locations for small birds that nest at the Darlington site. Part of the project also includes examining each nesting box and recording usage patterns. The boxes are cleaned each year to reduce the chance for disease and increase the likelihood that birds will return. With the support of Courtice Secondary school, the nest box program has made Darlington an ideal location for learning about bird ecology and migration.
- On Saturday, Nov. 18, 2017, more than 2,100 people took the opportunity to visit the world's first-ever nuclear reactor mock-up during the recent Darlington Refurbishment Open House. Attendees got to visit the full-scale mock-up - a worldclass training facility - and take a virtual reality tour of a nuclear building airlock. Guided bus tours of the Darlington Nuclear Generating Station were also available. Scientists in School offered activities, and there was a chance to see the latest technology involved in fueling a reactor. As well, it was a chance to meet with people from some of the 60 companies from across Ontario who are involved in Darlington Refurbishment, to learn more about both the Refurbishment project and the nuclear industry in general. The event ran in conjunction with a school open house, which included students from four Clarington secondary schools, and a Trades Indigenous Career Open House. Both took place on Friday, Nov. 17, 2017, the day before the public open house.
- Darlington Nuclear employees embraced the season of giving as a mountain of food and toys were donated in support of the annual Durham Regional Police Service (DRPS) Food & Toy Drive. Now in its 29th year, the DRPS Food and Toy Drive works with numerous community agencies to deliver food and toys to thousands of families across Durham Region.

For more information go to: www.opg.com/generating-power/nuclear

