

# Performance Report for Darlington Nuclear

Q1 2017 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 first quarter of 2017.



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

OPG’s nuclear electricity generation for Q1 of 2017 totalled 10.0 terawatt hours (TWh) compared to 12.3 TWh in 2016 in the same quarter. In Q1, Darlington Nuclear produced 4.8 TWh of electricity, which was 12 per cent of the electricity produced in Ontario.



### Reliability – Unit Capability Factor:

Compared to Q1 in 2016, Darlington’s unit capability factor for Q1 2017 was lower (85.26) 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 Q1 2017, there were no spills to the environment at Darlington Nuclear that were reportable to a regulatory authority.

## 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 Q1 2017, Darlington Nuclear recorded zero days lost per 200,000 hours worked which is better than the Canadian Electricity Association top quartile industry performance.

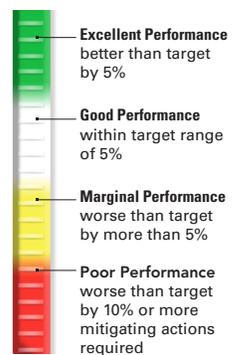


### Employee All Injury Rate:

The All Injury Rate (AIR) measures the number of workplace injuries per 200,000 hours worked. In Q1 2017, Darlington Nuclear recorded zero injuries per 200,000 hours worked which is better than the Canadian Electricity Association top quartile industry performance.

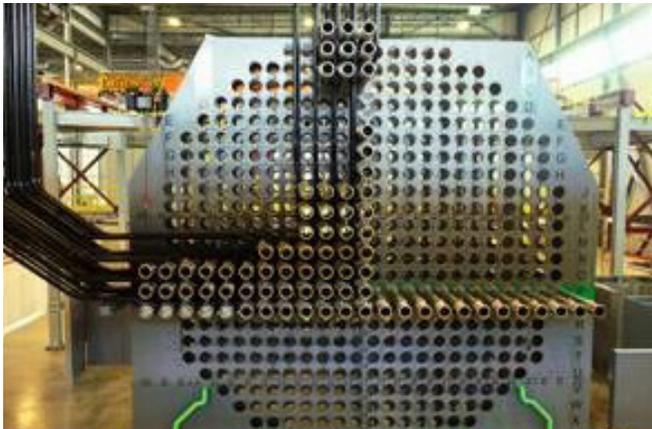


### Legend



## 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 Q1, OPG's 10 nuclear units generated 10.0 terawatt hours.



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

- OPG and Canadian Nuclear Partners, plan to create isotopes at the Darlington Nuclear GS, which will help power space probes OPG employs a similar isotope process in its Pickering units to create Cobalt 60 for use in the sterilization of surgical and medical supplies.
- After shutting down the Unit 2 reactor at the Darlington Nuclear Generating Station last fall, the Darlington Refurbishment project hit another milestone when the team successfully defueled and isolated the unit from the power plant on April 9. This work included removing 6,240 fuel bundles, draining critical nuclear systems and installing physical barriers between the shutdown reactor and the power plant. This milestone was achieved safely and ahead of schedule, concluding Segment 1 of the Unit 2 refurbishment schedule. The next phase of the project involves opening both airlock doors, removing interferences, installing shielding, and severing pressure tubes and bellows. During the Darlington Refurbishment project's 10-year life span, OPG and its over 60 vendor partners will be completing thousands of tasks according to hundreds of detailed plans that will extend the station's lifetime for another 30 years.
- Families from across Durham Region once again enjoyed our combined Darlington and Pickering March Break programs. Thousands attended the educational and environmental programs held in conjunction with our community partners including: Ganarska Region Conservation Authority, Claremont Conservation Area, Durham Children's Safety Village, Municipality of Clarington, WindReach Farm, Let's Talk Science, Pickering Public Library, City of Pickering and Central Lake Ontario Conservation Authority.
- Darlington and Pickering Nuclear proudly supported the Big Brothers Big Sisters (BBBS) annual 'Bowl for Kids Sake' fundraising initiative. OPG employees participated in various bowling events which took place throughout Durham Region. This is one of the organization's largest fundraising initiatives of the year. Proceeds raised, benefitted the wide arrange of mentorship programs offered within our host communities.

For more information go to: [www.opg.com/generating-power/nuclear](http://www.opg.com/generating-power/nuclear)

Do you want to discuss any of our performance results with us? If so, please call us at 905-623-7122.