

Performance Report for Darlington Nuclear

SECOND QUARTER OF 2010

This report discusses performance for Darlington Nuclear in the areas of safety performance, electricity production, environmental performance, and significant accomplishments achieved during the second quarter of 2010.



OPG continues to maintain a high standard of Public Safety

OPG maintains and builds upon a strong safety culture at each of our nuclear stations to ensure that there are no public or employee safety concerns as a result of our operations.

In the four decades that nuclear energy has served Canada's electricity needs, no member of the public has ever been harmed as a result of a radiation emission from a nuclear power plant or waste storage facility. An excellent measure demonstrating that the public is protected at all times from radiation emissions, is provided by the continuous measurement of radiation exposure at the perimeter of our stations. All Canadians are exposed to naturally-occurring radiation, mostly from the sun and from radon which is found in soil. The average exposure of Canadians is 1,770 microsieverts a year.

For Darlington Nuclear, the estimated additional exposure during the first quarter in 2010 (most recent data) for people living near the station, based on their actual lifestyle characteristics and food consumption patterns, was 0.2 microsieverts. This is a very small percentage of the amount we each receive naturally and much lower than the 1,000 microsieverts permitted by the Canadian Nuclear Safety Commission regulation.

Keeping Our Employees Safe

OPG's primary focus is the health and safety of employees and the public. In 2010, OPG became the first employer in Ontario to be awarded the ZeroQuest Platinum Award from the Infrastructure Health and Safety Association (IHSA). This award is the highest level of recognition a company can achieve in the ZeroQuest program and recognizes OPG's efforts to sustain and continuously improve our safety performance, health and safety management systems, and safety culture.

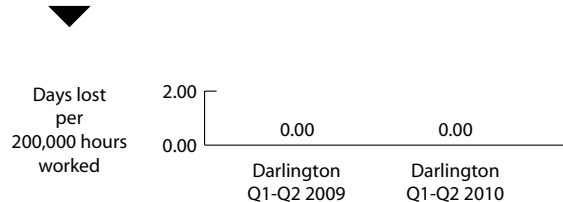
OPG's pursuit to Platinum began in 2005, when OPG was first recognized with the Gold Award, following detailed document reviews and employee interviews at Corporate, Nuclear, Thermal and Hydro sites. OPG succeeded in achieving Platinum by sustaining this Gold level over the next four years based on annual assessments at OPG sites.

At OPG's nuclear operations, we are on a continuous journey toward excellence in our safety performance. We strive for zero injuries and to create a work environment where more than 2,500 employees at Darlington Nuclear take personal responsibility to consistently build safety into every task they perform.

Employee Accident Severity Rate

Darlington's employee safety performance is measured against other companies. One measure is the employee Accident Severity Rate (ASR) which measures the number of days lost due to injuries per 200,000 hours worked. During the second quarter, Darlington recorded zero days lost per 200,000 hours worked. This is excellent performance and better than Canadian Electricity Association (CEA) top quartile performance.

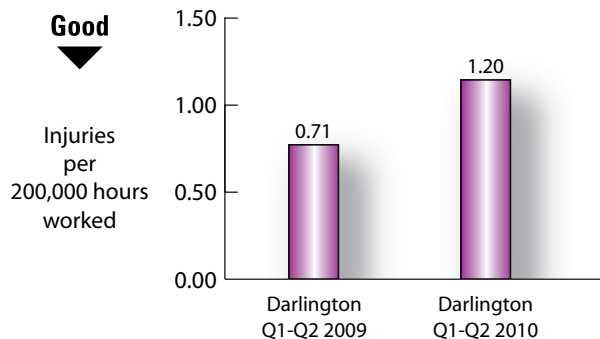
Good



Employee All Injury Rate

Another key safety measure is the All Injury Rate (AIR) which measures the number of workplace injuries per 200,000 hours worked. During the second quarter, Darlington recorded 1.20 per 200,000 hours worked achieving good performance and slightly above the top quartile industry performance category set by the CEA.

Good



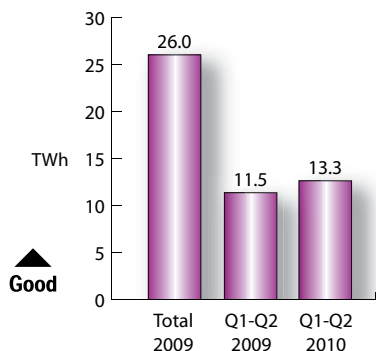
Safety Milestones

The safety of our employees, like the safe operation of our nuclear reactors, is a top priority in our operations.

During the second quarter of 2010, Darlington employees achieved over 7 million hours without a lost-time injury.

Electricity Production

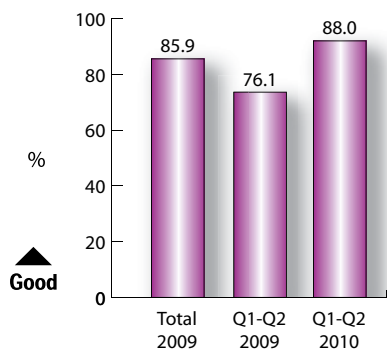
Darlington Electricity Production (TWh)



Darlington increased its output in the first half of 2010. From January to June, Darlington's four units produced 13.3 TWh of electricity, up from 11.5 TWh for the same period in 2009. During which time the station completed a successful inspection and maintenance outage on the vacuum building, an important safety system.

Unit Capability Factor

Unit Capability Factor (%)



Another measure of the station's performance is its unit capability factor, basically a percentage of perfect generation a unit is capable of producing during a specified period. Darlington achieved improved performance compared to the same period last year recording an 88.0 per cent Unit Capability Factor.

Protecting the Environment

During the second quarter of 2010, Darlington Nuclear did not record any major or moderate spills to the environment.

Milestones & Items of Interest

Some of the milestones and items of interest achieved by Darlington and across OPG include the following:

- The Canadian Nuclear Safety Commission (CNSC) released its annual assessment in which "CNSC staff concluded that nuclear power plants in Canada operated safely during 2009."
- In April, OPG announced plans to proceed, in conjunction with the Municipality of Clarington and Durham Region, with site preparation and servicing for a proposed 250,000-square foot multi-purpose building on OPG-owned land in the Clarington Energy Business Park. The proposed new facility, adjacent to Darlington Nuclear, is in support of the Darlington Refurbishment Project.
- In April, Darlington employees safely completed an inspection and maintenance outage on Unit 4.
- Pickering Nuclear employees, with the assistance of 2,200 temporary employees, safely completed a VBO (the largest and most complex project planned across OPG this year). The Pickering VBO was launched in April following more than two years of preparation. About 30,000 tasks were completed in a 6-week window.
- On June 29, the Canadian Nuclear Safety Commission announced its decision to grant Pickering A nuclear station a three-year operating licence. The CNSC commissioners' decision for a three-year rather than the previous five-year licence reflects a desire to harmonize licensing dates for Pickering A and Pickering B during the next decade of operation. The licence is valid from July 1, 2010 to June 30, 2013.



Do you have any questions about our performance results? If so, please give us a call at 905-623-7122.