

2008 Performance Report

DARLINGTON NUCLEAR

This report discusses performance for Darlington Nuclear in the areas of safety performance, electricity production, environmental performance, and significant accomplishments achieved during 2008.



OPG continues to maintain high standard of Public Safety

OPG's ongoing goal is to maintain and continue building 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 third quarter (most recent data) for people living nearest the station, based on their actual lifestyle characteristics and food consumption patterns, was 0.5 microsieverts. This is a very small percentage of the amount we each receive naturally and much lower than permitted by regulation.

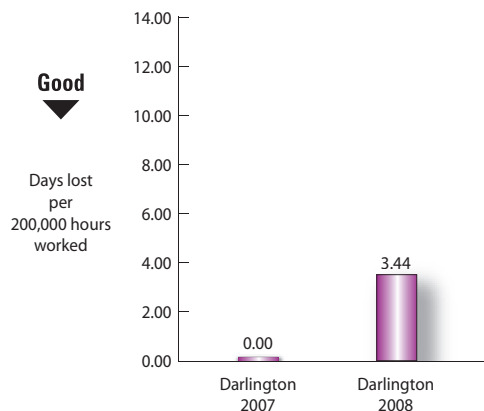
Keeping Our Employees Safe

OPG's first priority is the health and safety of employees and the public. In 2008, OPG received two major safety awards from the Canadian Electricity Association and the Electrical and Utilities



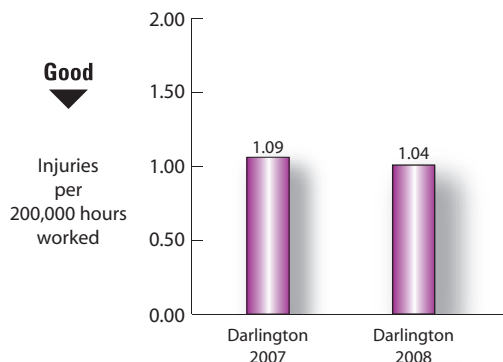
Safety Association in recognition of OPG's safety management system and safety culture. Darlington's employee safety performance is measured against other companies. One measure is the employee Accident Severity Rate (ASR) which measures the number of days lost due to injuries per 200,000 hours worked. In 2008, Darlington's ASR was higher than top quartile Canadian Electricity Association (CEA) performance due to a leg injury resulting in a lost-time accident.

Employee Accident Severity Rate



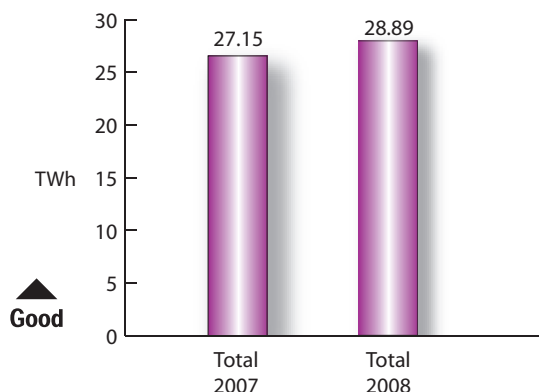
The employee All Injury Rate (AIR) measures the number of workplace injuries per 200,000 hours worked. In 2008, Darlington recorded 1.04 injuries per 200,000 hours worked. This result is excellent and is slightly below the top quartile industry performance set by the CEA.

Employee All Injury Rate



Electricity Production

Darlington Electricity Production (TWh)

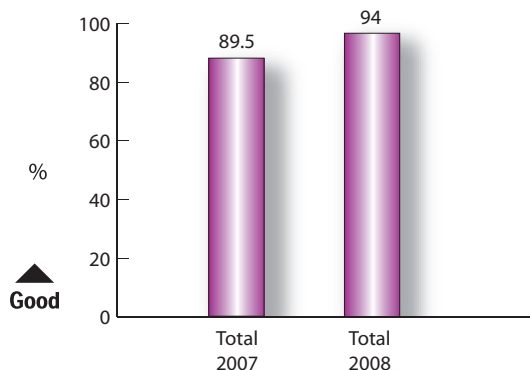


Darlington units demonstrated excellent reliability in 2008 generating 28.89 TWh, which can be attributed to the early completion of the Unit 1 planned maintenance outage.

The planned maintenance outage included work on both the unit's reactor and conventional steam supply systems, including replacement of reactor feeder tubes and the changing-out of turbine blades.

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 excellent performance in 2008 achieving a 94 per cent unit capability factor. Individual Darlington Units 2, 3 and 4 registered capability factors of over 90 per cent.

In addition, Darlington Units 2 and 3, achieved top quartile performance compared to other CANDU units worldwide.

Protecting the Environment

During 2008, the Darlington station did not record any major or moderate spills to the environment.

Milestones & Items of Interest

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

- In 2008, as part of OPG's annual charity campaign Darlington and Pickering Nuclear employees donated \$847,000 to charities and local organizations.
- Darlington Nuclear was selected from 146 sites across North America to be recognized as Corporate Habitat of the Year Award from the international Wildlife Habitat Council. The award recognizes continuous site improvement in wildlife habitat enhancement and restoration, and use of lands for teaching.
- In celebration of their 20th Anniversary, the Wildlife Habitat Council also awarded 21 sites with the Signatures of Sustainability. This designation was received by both Darlington and Pickering.
- Darlington Nuclear employee Scott Yeo received the Exemplary Service Medal for twenty years of volunteering with Clarington Fire and Emergency Services. Scott works as a Civil Maintainer and has been a Volunteer/Part-Time Firefighter since 1988.
- OPG is helping drive the future of mass transportation with cleaner, environmentally-friendly buses. With OPG's financial support, the University of Ontario Institute of Technology (UOIT) restored two electric buses rerouted from the rim of the Grand Canyon. Previously used to transport tourists, the buses were refurbished to make them roadworthy for environmental research and education in Ontario.



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