

# Performance Report for Pickering Nuclear

## FIRST QUARTER OF 2010

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



### OPG continues to maintain a 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 safety 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 monitoring of radiation exposure at the perimeter of our stations. Most people are not aware that 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 Pickering Nuclear, the estimated additional exposure during 2009 for people living nearest the station, based on their actual lifestyle characteristics and food consumption patterns, was 1.8 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.

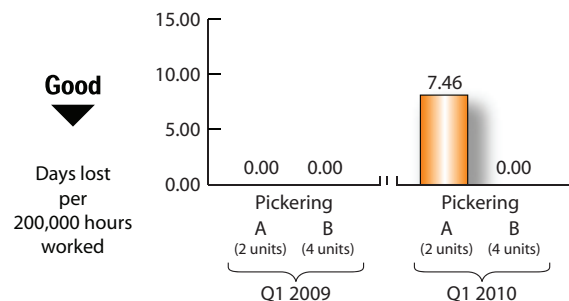
### Keeping Our Employees Safe

OPG's first priority is the health and safety of employees and the public. In 2009, OPG received a ZeroQuest Gold Award from the Electrical and Utility Safety Association. The award recognizes OPG's effort to continuously improve our safety performance, health and safety management systems and safety culture. OPG was first recognized with the Gold Award in 2005. This 2009 award recognizes OPG's maintenance of this high level of performance for four consecutive years.

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 3,000 employees at Pickering Nuclear take personal responsibility to consistently build safety into every task they perform.

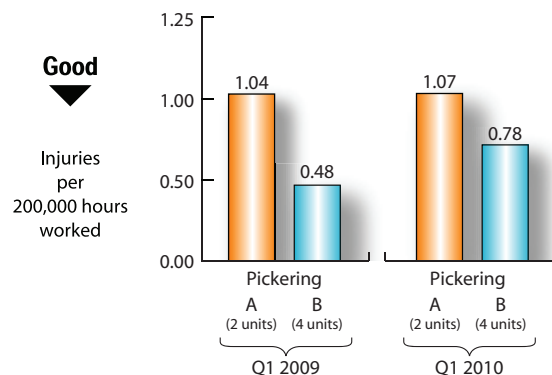
### Employee Accident Severity Rate

Pickering'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 first quarter, Pickering A did not achieve Canadian Electricity Association (CEA) top quartile performance. Pickering A's ASR of 7.46 days lost was the result of an employee who sustained a leg injury while walking in the parking lot. Pickering B recorded 0.00 days lost per 200,000 hours worked in the first quarter of 2010. This is excellent performance and better than CEA top quartile performance.



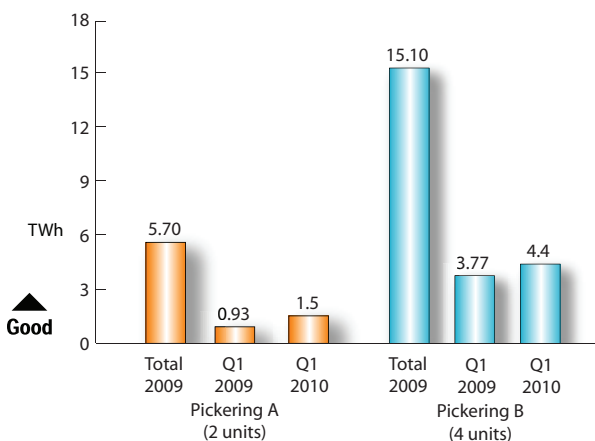
### Employee All Injury Rate

Another key safety measure is the All Injury Rate (AIR) which measures the number of workplace injuries per 200,000 hours worked. During the first quarter, Pickering A recorded 1.07 injuries achieving good performance and better than the top quartile industry performance category set by the CEA. Pickering B registered 0.78 AIR achieving excellent performance and better than the top quartile industry performance category set by the CEA.



## Electricity Production

### Pickering A and B Electricity Production (TWh)



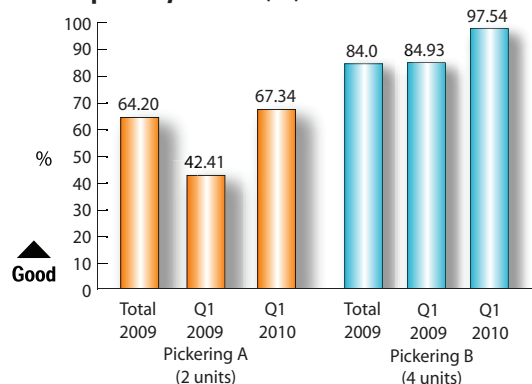
During the first quarter of 2010, Pickering A produced 1.5 TWh generation, a strong performance. This is an increase compared to the same period last year. Overall generation production was affected by an unplanned maintenance outage on Unit 1 for repairs on shutdown cooling pump seals.

During the first quarter of 2010, Pickering B produced 4.4 TWh generation, a strong performance. This is an increase compared to 3.77 TWh for the same period last year.

Nuclear's largest project for 2010 - Pickering's Vacuum Building Outage (VBO) – was on track during the first quarter. VBO planning was well underway and involved mobilizing 2,200 additional staff from across the company, and building trades and contractors to help execute more than 4,100 work orders involving in excess of 40,000 tasks.

## 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.

Pickering A achieved improved performance compared to the same period last year recording a unit capability factor of 67.34 per cent.

During the first quarter, Pickering B achieved a 97.54 unit capability factor, better than the same period in 2009, and excellent performance.

## Protecting the Environment

During the first quarter of 2010, Pickering 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 Pickering Nuclear and across OPG include the following:

- OPG announced a two-part investment strategy for its current nuclear generating stations in Durham Region: 1) OPG will proceed with a detailed planning phase for the mid-life refurbishment of the Darlington Nuclear station, with construction expected to start in about 2016. 2) OPG will also invest an additional \$300 million in the continued safe and reliable performance of the Pickering B station for approximately 10 years. Following this OPG will begin a safe storage project followed by the longer term decommissioning process for the Pickering station.
- Pickering Nuclear site continued preparations for the start of the Vacuum Building Outage (VBO) - a critical part of the site's safety system. It's the largest and the most complex project to be undertaken across OPG's nuclear fleet this year. A VBO is completed every 10 years at Pickering.
- The complex project to place Pickering Units 2 and 3 into safe storage is near completion. On March 31, the project met a key milestone, on time and slightly under budget.
- OPG employees and pensioners donated approximately \$180,000 following the devastating earthquake in Haiti.



Do you want to discuss any of our performance results with us? If so, please call us at 905-837-7272.