

Generating 70% of Ontario's Electricity

It's All About Performance

REPORT ON 2007 PERFORMANCE



ONTARIOPOWER
GENERATION

Employees make us stronger

OPG replenishes its workforce for the future

OPG named a top employer

Employees account for OPG's present and future success and OPG prides itself on being a good employer. In recognition of its efforts to provide career advancement opportunities, job satisfaction and a supportive workplace for employees and their families, OPG was named as one of Canada's Top 100 Employers for 2008. OPG was also named as one of the Greater Toronto Area's Top 50 Employers for the second year in a row.

Community focused

OPG's employees and pensioners are an asset to the communities where they

live. They do a tremendous amount of volunteer work in areas such as education, sports, social service, local and regional politics and business groups such as Rotary Clubs and Chambers of Commerce.

In 2007, our employees and pensioners contributed over \$2 million to registered charities.

A committed corporate citizen

OPG supports non-profit, local initiatives that benefit education, the environment, and the community. More than 900 such initiatives received support in 2007. Most were small, grass-roots initiatives.



OPG has developed a number of programs and initiatives to enhance its skilled workforce. Here, OPG Senior Staffing Consultant Michelle Mejaski greets students attending the Canadian Nuclear Association's annual conference held in Ottawa in February 2008.



Employees and community members prepare to kick off OPG's 2007 Charity Campaign at the Atikokan generating station. Pictured (l to r) are: Local Coordinator, Debbie Douglass; Acting Manager, Randy Angus; Town Councillor, Mike Shusterman; and AGS Committee Member, Sheila Hansson.



In October, two OPG employees - Don Terry, Public Affairs Manager, Pickering; and Pat McNeil, SVP Nuclear Generation Development - were honoured with major awards for their contribution to the Durham Region. Their commitment typifies the community involvement of hundreds of OPG employees across Ontario.

Building the workforce of tomorrow

More than a third of OPG's employees are over the age of 50 and many will be eligible to retire over the next five years. To address this challenge OPG continued to develop and implement programs to recruit, develop and retain high calibre, qualified employees.

OPG expanded its Graduate Recruitment Program in 2007, participating in career fairs and information sessions at 12 university campuses across Ontario and Eastern Canada. Over 4,300 applications were received for new graduate positions across the company. To broaden the pool of candidates and attract talented young people to the company, OPG also attended career events at half a dozen community colleges and other community events. In partnership with its unions, OPG continued to support education and learning programs for youth to build awareness about careers at OPG, especially the skilled trades.

Training programs to enhance employee performance were developed and implemented throughout 2007. Initiatives to strengthen and grow the company's leadership, including an expanded supervisory training program, were also rolled out during the year.

It was a banner year for safety

Our environmental commitment was internationally recognized

Best ever workplace safety

As measured by frequency of injuries and the number of workdays lost due to injuries, OPG had its best safety performance ever in 2007. This performance is well within top quartile safety performance (2006) as set by the Canadian Electricity Association. This excellent performance was complemented by numerous safety milestones achieved at sites across the company. Individual OPG stations, plant groups, and entire businesses celebrated multiple years and multi-million hours without a lost time injury. OPG's safety culture is based on the goal of achieving zero injuries. This kind of success shows that we are making progress in achieving our goal.



Durham community leaders joined OPG in November to officially open the new Darlington Waste Management

Continued nuclear safety

In the four decades that nuclear energy has served Canada's energy needs, no member of the public has ever been harmed as a result of a radiation emission from a nuclear power plant or a nuclear waste storage facility. OPG's Nuclear Waste Management division continued to build on that proud tradition with a number of important initiatives in 2007. They included:

- a new facility at the Darlington station to safely store used nuclear fuel;
- moving forward with approvals to build a Deep Geologic Repository to safely store low and intermediate nuclear waste; and
- 10 year operating licence for the Western Waste Management Facility.

Environmental developments

OPG adopted a Greenhouse Gas Management Plan in 2007. Its key features included:

- investing in nuclear and hydro generation to reduce reliance on fossil fuels;

- improving the energy efficiency of OPG facilities;
- using biofuels as a partial replacement for coal; and
- expanding OPG's biodiversity efforts.

OPG's Pickering Nuclear site was named 2007 Corporate Habitat of the Year by the internationally renowned Wildlife Habitat Council. This was the second time Pickering has won this honour. A total of 11 OPG sites have now been certified for their wildlife habitat programs by the WHC. Darlington and Pickering were also honoured by the WHC with Signature of Sustainability awards.

"As a company committed to performance excellence, we can never be satisfied with anything less than zero injuries."

Jim Hankinson,
OPG President and CEO

2007 Safety Honour Roll*

Years and hours worked
with no lost-time injuries

January Atikokan GS-2 years	September Hydro Business Unit-2 years
February Sir Adam Beck 2, Electrical Crew-Over 10 years	Pickering B-3 million hours
Otto Holden GS-8 years	Northeast PG-2 years
March Stewartville GS-11 years	Cameron Falls Work Centre -12 years
May Northwest PG-7 years	October Lennox GS-5 years
June Facility Services Dept, Real Estate Division-5 years	Lambton GS-1 year
July Pickering Waste Management-13 years	November Ottawa St. Lawrence PG -7 years
Des Joachims GS-7 years	Thunder Bay Work Centre -12 years
Evergreen Energy-7 years	Ear Falls Work Centre -12 Years
August Project Management Dept. and its Contractors, Lambton GS-Over 1 million hours	Niagara PG-4 years
	December Thunder Bay GS-10 years
	Darlington-4 million hours
	Pickering A-2 million hours

*Select examples

Hydro and fossil reliability was high in 2007

Darlington Nuclear has excellent year...wins a major award

Hydro maintains strong reliability

OPG's Hydro reliability, which is consistently strong, was the highest recorded in over 20 years. OPG's Hydro stations produced 31.9 TWh in 2007, accounting for almost 21 per cent of the electricity consumed in Ontario. This was slightly below 2006 levels due to lower water levels in the Province.

Fossil performed well

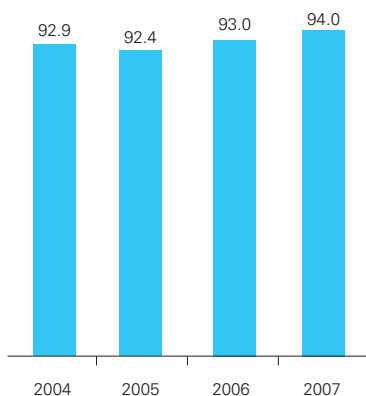
OPG's fossil-fuelled stations generated 29 TWh in 2007 – equal to 19 per cent of the electricity consumed in Ontario. Fossil reliability has continued to steadily improve and is now at its best level since the year 2000.

During the summer and throughout the year, these resilient and dependable assets helped ensure that Ontario had the energy needed to power its businesses, industries and homes.

Darlington has outstanding year

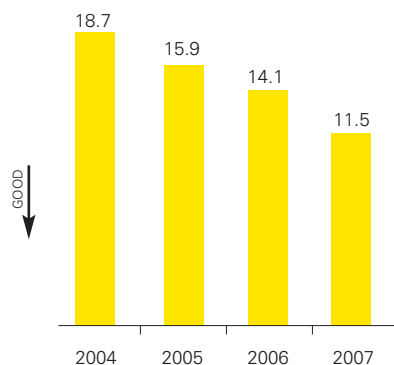
OPG's nuclear generation fell compared to 2006, but the company's overall nuclear performance was positive in many areas.

Hydroelectric Availability (%)



When the water was there, OPG's hydroelectric stations were available to produce power 94 per cent of the time in 2007. This is the highest availability for these stations - whose average age is 73 years - since 1984.

Fossil-Fuelled Stations - Forced Outage Rate (%)



OPG's fossil-fuelled stations continue to steadily improve their reliability. This excellent performance trend is the result of Fossil's effective maintenance programs.

OPG's Darlington nuclear station achieved excellent performance in planned outage execution, station reliability and reactor capability. Its success was recognized by the internationally respected Institute of Nuclear Power Operations, which in November awarded Darlington its prestigious Performance Improvement Award.

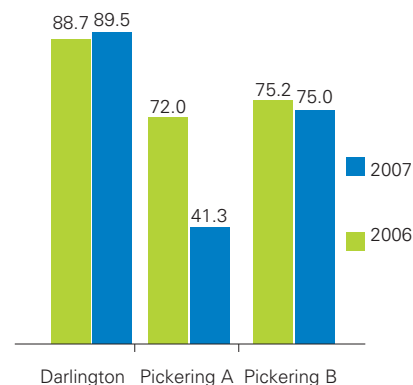
Challenges at Pickering

OPG's Pickering A and B nuclear stations were challenged in 2007 by two non-recurring events that impacted production. Pickering A was required to perform

modifications to its backup electrical system, while Pickering B was impacted by a contractor's inadvertent release of resin into its demineralised water system. Both issues, which led to extended shutdowns of affected units, have since been resolved.

Despite these challenges, Pickering A made good progress towards safely storing two out-of-service reactors; and both stations achieved strong results in workplace safety and environmental performance.

Nuclear Unit Capability Factor (%)



Coming off one of the best years in its history, OPG's Darlington nuclear station improved its performance (as measured by unit capability) to nearly 90 per cent. Two of Darlington's units were also among the top 10 performing CANDU units in the world. While OPG's nuclear production fell from 46.9 TWh in 2006 to 44.2 TWh in 2007, this was still almost 30 per cent of the total electricity consumed in Ontario in the past year.



The control room at the Nanticoke generating station: Fossil stations sometimes receive hundreds of instructions a day from Ontario's market operator, requiring them to increase or reduce output numerous times. That these stations continue to perform strongly under demanding conditions is a credit to their flexibility and to the employees who maintain and operate them.

Effective maintenance – key to performance

Planned outages play an important role

OPG's nuclear, hydroelectric and fossil stations face operational challenges as a result of age, technical complexity and general "wear-and-tear." To address these challenges, OPG every year temporarily shuts down some of these units to perform scheduled maintenance work. These planned outages are an important tool for maintaining effective operations.

Five nuclear planned outages

In 2007, OPG conducted five major planned outages on nuclear units at the Darlington and Pickering stations. Completing planned outages in a timely and efficient manner is a priority for OPG. The Darlington station achieved this goal in 2007, by finishing its two planned outages ahead of schedule. The older Pickering stations experienced challenges, which led to their outages being completed behind schedule.

In all outages, important work in inspection, maintenance and equipment improvement was undertaken and successfully completed.

Hydro improvements add capacity

OPG's hydroelectric stations are the oldest and among the most reliable assets in the company's generating portfolio.

In 2007, OPG completed 23 major planned outages at its hydro stations. These improvement initiatives will strengthen the performance and reliability of OPG's hydro fleet. Key improvements included:

- completion of major rehabilitations of hydro units at Abitibi Canyon, Chats Falls, Caribou Falls, Des Joachims, DeCew Falls, and Ranney Falls;
- completion of a new Control Centre at the Beck 1 station near Niagara Falls; and

- turbine-runner upgrades that added 12 MW to OPG's hydroelectric capacity.

Over the next five years, OPG plans further hydroelectric improvements that will add another 53 MW of capacity – for a total of 490 MW added through upgrades and improvements since 1992.

Fossil completes 20 planned outages

OPG is committed to operating all its fossil stations in a safe, reliable, efficient and environmentally responsible manner for as long as they are needed. To help meet this commitment, OPG undertook 20 planned outages in 2007, including major outages on units at its Atikokan, Thunder Bay, Lambton and Nanticoke coal-fired stations and the Lennox gas/oil-fuelled station.



Equipment improvements like this runner replacement at OPG's Caribou Falls generating station helped add 12 MW to OPG's hydroelectric capacity in 2007.



Completed in early 2008, the Nanticoke Unit 6 outage was one of the largest in the fossil station's history. It included: installation of a new high pressure turbine; re-tubing of the unit's condenser; and rebuilding and enlargement of the unit's Electrostatic Precipitator to help improve generation and environmental performance.

Building new, clean generating stations

OPG is focused on meeting this need for Ontario

OPG assesses nuclear refurbishment

OPG is determining whether or not to refurbish its Pickering B and Darlington nuclear stations. OPG will only recommend refurbishing these stations if there is a solid business case to justify such large and complex projects.

Pickering B refurbishment

In 2007, OPG continued assessing the feasibility of refurbishing Pickering B.

This included identifying the scope of work required to refurbish and continue to operate the plant for a further 25-30 years and estimating the refurbishment and post-refurbishment operating costs. OPG finished assessing the plant's current condition and is completing the Environmental Assessment (EA) and



OPG conducted five open houses in 2007 as part of the approvals process for Pickering B's potential refurbishment – as well as 13 municipal and regional council briefings and 12 community committee presentations.



An OPG information session in Oshawa, Ontario, informs local residents about proposed new nuclear units at OPG's Darlington site. Through its public consultations, OPG reached more than 1,500 community residents, employees and members of the public in 2007.

Integrated Safety Reviews (ISR) required for regulatory approval of refurbishment.

In January 2008, OPG submitted its EA Study Report to the Canadian Nuclear Safety Commission. The study concluded that no significant environmental effects will result from the plant's refurbishment or its continued operation. The next phase of the process is with the CNSC and includes preparation of an EA Screening Report, a public review, and CNSC hearings.

The large amount of work required to complete the EA and ISR activities is taking longer to complete than expected. OPG is therefore unlikely to decide on Pickering B's refurbishment until late 2008 or early 2009.

Darlington refurbishment

In 2008, OPG also will begin work on assessing the potential refurbishment of the Darlington nuclear station.

Nuclear new build process continues

OPG also continued with the federal approvals process for new nuclear units at its Darlington site. A Project Description was submitted to the CNSC in April. Field work on generating background data for performing an EA began in late summer.

In June, the CNSC announced that the EA had begun and in January 2008 recommended to the Federal Environment Minister that the project be referred to a review panel.

In late 2007, OPG and Bruce Power completed a joint operator's assessment of reactor designs for possible deployment in Ontario. The results were provided to the Ontario Government, which is expected to make the technology choice at the end of 2008.

Hydro and gas initiatives go forward

Government directive to OPA will facilitate new hydro development

OPG has three new generation projects under construction. Two had schedule delays, but continue to make progress, while the third is moving ahead on schedule. The projects employ design-build contracts which reduce risk for OPG.

Portlands Energy Centre on schedule

The 550 MW gas-fired Portlands Energy Centre is on schedule and on budget. It should be operating by early June 2008 – available as needed for the higher-demand, summer months. Portlands should be fully operational in high-efficiency, combined cycle mode by the second quarter of 2009.

Niagara Tunnel

By year end, work on the Tunnel had progressed about 1.6 kilometres, which was below target. Progress has been slow through rock conditions encountered under the St. David's Gorge. Schedule uncertainty will remain until the Tunnel Boring Machine moves well beyond this area.

Lac Seul

The 12.5 MW Lac Seul generating station in Northwest Ontario also experienced delays in the second half of 2007. The station is now expected to be finished by the latter half of 2008.

Other hydro projects moving forward

OPG also has a number of other proposed hydroelectric projects in various stages of development. These include a major expansion project on the Lower Mattagami River, representing 450 MW of new hydro capacity, and several smaller potential projects. Important developments occurred in December 2007 to help move these projects forward.

- OPG's Board approved redevelopment of four hydro stations on the Upper Mattagami and Montreal Rivers; and
- work began on expanding OPG's Healey Falls hydro station near Campbellford, Ontario.

In addition, the Ontario Ministry of Energy directed the Ontario Power Authority to negotiate Energy Supply Agreements on

"Here in Ontario, First Nations are becoming major players in the generation of electricity. First Nations communities are now working with Ontario Power Generation... in hydroelectric projects - and are developing future projects."

Phil Fontaine,
National Chief, Assembly of First Nations

OPG's hydro projects at Lac Seul, the Lower and Upper Mattagami, Healey Falls, and Hound Chute. This important decision will greatly facilitate progress on these projects while providing more revenue certainty to OPG.

Building First Nations relationships

In 2007, OPG settled two past grievances with First Nations groups and signed Agreements in Principle with three others to resolve outstanding issues. Negotiations and discussions were conducted with other First Nations communities as well.

Also, in November, OPG's Board approved the Company's Aboriginal Policy.

Progress on many of OPG's hydro projects is dependent on reaching successful settlements – including the potential for project participation agreements – with First Nations groups.

Lakeview site's potential

OPG's Lakeview coal-fired station was shut down in 2005 and its powerhouse demolished in June 2007. The site remains an important site in Ontario's electricity system, with the potential to be a location for a gas-fuelled electricity station.



Little Jackfish River in Northwest Ontario is the site for one of OPG's proposed hydroelectric expansion projects. The project would add 85 MW to OPG's hydroelectric capacity.

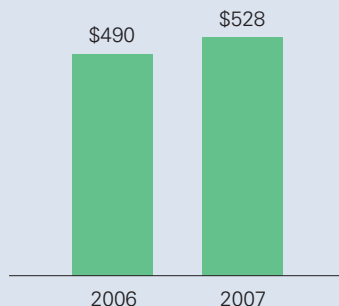
OPG is committed to financial strength

A financially sustainable OPG benefits the people and government of Ontario

Financial performance improves

OPG's net income in 2007 was \$528 million compared to \$490 million in 2006. Increases in Nuclear Funds earnings, non-electricity generation revenue, and fossil generation were among the factors that contributed favourably to OPG's higher earnings. Earnings were negatively affected by lower production from the Pickering A and B nuclear stations and by higher maintenance costs in OPG's nuclear and fossil businesses.

OPG Net Income (\$ million)



Efficiency improvements identified

In 2007, OPG undertook a review of the cost structure and work processes of its support functions. A number of potential cost-savings opportunities were identified – a portion of which were built into OPG's 2008 business plan. Disposition of the remaining cost-savings opportunities is now underway.

Rate application filed

The rates OPG receives on output from its regulated (i.e., nuclear and baseload hydroelectric) generating stations have not increased in three years. These stations account for 60 per cent of OPG's generation.

In November 2007, OPG filed a rate application with the Ontario Energy Board seeking a rate increase on production from its regulated assets. If approved, this would increase typical residential electricity bills by about 3 per cent annually.

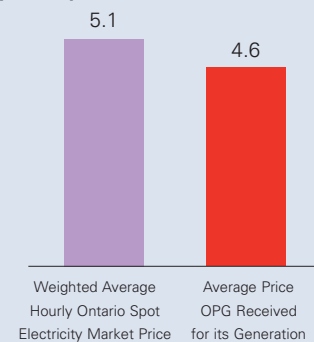
The additional revenue from a rate increase would enable OPG to continue to improve the performance of its regulated assets. It would also help OPG to undertake new generation projects that will provide Ontarians with much needed power to support future economic growth.

Price mitigation continues

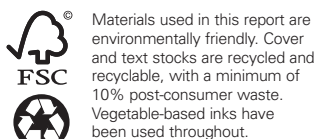
OPG receives fixed prices on production from its regulated assets and is subject to a revenue cap on the majority of production from its unregulated assets. As a result, the average price OPG receives is below

Ontario's market prices. While this structure holds down the price of power in the province, it reduces revenues that could strengthen the business. In 2007, OPG received an average price of 4.6 cents per kilowatt hour for its electricity production. In contrast, the average Ontario electricity market price was 5.1 cents.

Ontario Electricity Price: 2007 (¢/kWh)



The Darlington Unit 2 outage was completed on November 19 – four days ahead of schedule. This contributed to OPG's bottom line and provided enhanced reliability to better meet Ontario's electricity needs.



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General information, including press releases, speeches and financial, environmental and safety information: www.opg.com.

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