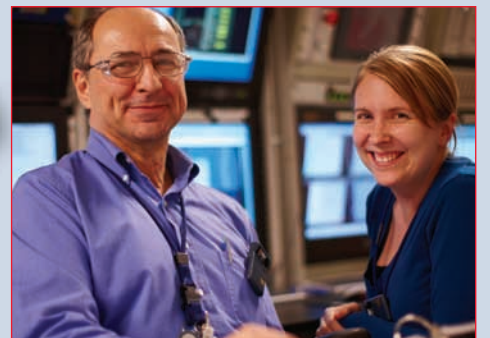




VOLUME 6 ISSUE 1

AT WORK ACROSS ONTARIO

OPG PERFORMANCE REPORT



GENERATING
ALMOST 60 PER CENT
OF ONTARIO'S
ELECTRICITY

Nuclear Safety in Ontario



“OVER THE COMING DAYS, WEEKS, MONTHS AND EVEN YEARS, THE INDUSTRY WILL INCORPORATE LESSONS LEARNED BASED ON THE JAPANESE EXPERIENCE TO IMPROVE THE SAFETY OF OUR OPERATIONS.”

Wayne Robbins
Chief Nuclear Officer, March 14, 2011

JAPAN: LESSONS LEARNED

On March 11, Japan suffered one of the largest earthquakes in its recorded history. The cumulative impact of the 9.0 earthquake and subsequent tsunami caused devastating human and physical losses.

In a preliminary report to the Canadian Nuclear Safety Commission (CNSC), OPG determined that the risk related to OPG station operations remains very low and that its nuclear facilities are safe, robustly designed and will withstand emergencies. In addition, a number of expert studies have confirmed that Durham Region is an area of low seismic risk.

The Pickering and Darlington designs consider a wide array of accident and event scenarios and incorporate a number of emergency response capabilities and safety features, including backup systems and equipment to maintain power supply to the plants in the event of a blackout.

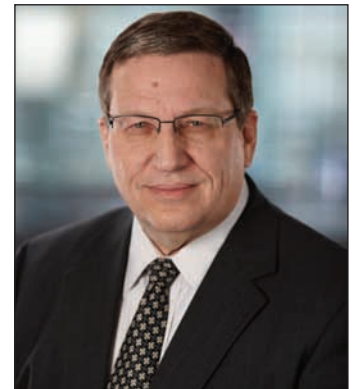
10 MILLION INJURY-FREE HOURS

On May 13, employees at OPG’s 2,500-person Darlington Nuclear station achieved 10 million hours – roughly three years – without incurring a single lost-time injury. This significant safety milestone is a ‘personal best’ for OPG’s nuclear operations.

Other OPG facilities have also reached major safety milestones including: Pickering A (three million hours); Pickering B (five million hours); Darlington’s Tritium Removal Facility (12 years); Atikokan GS (six years); and Nanticoke GS (two years).

In the wake of this disaster, OPG maintains its commitment to safely operate its stations and provide support, where possible, with industry partners to the devastated nation. OPG President and CEO, Tom Mitchell, has been named Chair of the World Association of Nuclear Operators (WANO) Post-Fukushima Commission. “With our industry partners, OPG has offered assistance to Japan in its recovery efforts at the Daiichi site. The information we are learning and sharing has been invaluable,” said Mitchell.

Ontario Power Generation also examined additional improvement opportunities for events beyond worst case scenarios that were previously planned for. This investigation was completed mid-summer when OPG reported back to the CNSC on July 28.



President and CEO Tom Mitchell



Darlington GS

Nuclear Operations Update



“THE HEARINGS PROVIDED AN OPPORTUNITY FOR OPG, THE PUBLIC AND INTERVENERS TO PRESENT DIFFERING POSITIONS ON THE PROJECT. SOME POSITIONS WERE NEGATIVE WHILE OTHERS SPOKE TO OVERWHELMING SUPPORT OF THE COMMUNITY AND THE INDUSTRY FOR THIS PROJECT.”

Albert Sweetnam

Executive Vice President - Darlington New Nuclear Project, April 11, 2011

NEW NUCLEAR EA HEARINGS COMPLETE

On April 8, OPG completed a three-week Joint Review Panel public hearing on the Darlington New Nuclear Project Environmental Assessment (EA) and the Licence to Prepare Site Application. OPG submitted more than 10,000 pages of EA documentation, the result of work undertaken since 2006.



The hearings marked the final public phase in the EA review process and an important step toward new nuclear units at the Darlington site.

DARLINGTON RANKED TOP PERFORMER

In March, the CANDU Owners Group released the 2010 year-end performance numbers of all CANDU reactors worldwide. OPG's Darlington nuclear station received the distinction of having two of its reactors rated among the top five in the world. Darlington's Unit 3 placed second and Unit 1 ranked fifth.



World class performance: Darlington Units 1 and 3.

DID YOU KNOW?

- OPG continually seeks ways to improve its stations to ensure they meet or better federal regulations.
- No member of the public has ever received a harmful dose of radiation from a Canadian reactor or waste management facility in more than 40 years of operation.
- OPG nuclear facilities are located in an area of low seismic activity but are designed to withstand the forces from the strongest earthquake possible for the area.
- OPG, Emergency Management Ontario, and regional and local governments work together to protect the public. Each organization has responsibility for a distinct area of emergency response and are available 24/7.

Hydroelectric Development



“FROM THE BEGINNING, [THE MATTAGAMI RIVER] HAS BEEN A CATALYST FOR ECONOMIC DEVELOPMENT, AND TODAY, IT CONTINUES TO CONTRIBUTE SIGNIFICANTLY TO THE CITY’S WELL-BEING.”

Tom Laughren
Timmins Mayor, May 26, 2011

LOWER MATTAGAMI

Construction activities continue on the Lower Mattagami Hydroelectric Project. In the first quarter of 2011, a cofferdam at Smoky Falls was completed, allowing the powerhouse foundation and intake excavation to proceed. The Little Long cofferdam was installed and dewatered in April and access routes for the Kipling and Harmon cofferdam work areas were also completed. The project is expected to increase the capacity of the four stations by 438 MW and reach completion by June 2015.



The cofferdam at Little Long GS was completed this April.

NEW ADDITIONS TO NIAGARA FLEET

In March, OPG and local officials celebrated the on time and on budget installation of two new generators at the Sir Adam Beck 1 Generating Station. The units use existing water more efficiently and add more than 70 MW of clean, renewable hydro capacity, enough to meet the needs of 70,000 homes. With proper care and maintenance, these units – and many other units in OPG’s hydro fleet – can last several decades before major rehabilitation is required.



Welcoming a new generator to Sir Adam Beck 1.

DES JOACHIMS RENEWS RUNNERS

As OPG’s hydro turbine runner refurbishment and replacement project continues, its mission is almost accomplished at Des Joachims with half the runners already replaced. The remainder are scheduled to be replaced by 2014. When complete, the project will enable a more efficient use of water. This will translate into an increased annual production of about 55 GWh at the station.



Des Joachims GS is OPG’s largest hydro generating station on the Ottawa River.

Niagara Tunnel

BIG BECKY BREAKTHROUGH

On May 13, excavation of Ontario’s largest clean energy project – the Niagara Tunnel – was completed. This was a major milestone for the project. The Tunnel is scheduled to be operating in 2013 and generating enough clean energy to power about 160,000 homes. A ceremony marking the event attracted hundreds of on-lookers, including Premier Dalton McGuinty and Energy Minister Brad Duguid. The excavation was completed safely – with no fatalities and no serious injuries.

“THIS MAJOR MILESTONE BRINGS US ONE STEP CLOSER TO INCREASING ONTARIO’S SUPPLY OF CLEAN, RENEWABLE POWER.”

Dalton McGuinty
Premier of Ontario, May 13, 2011



As Big Becky breaks through the last of its 10.2-km route under the City of Niagara Falls, employees of Strabag, the Tunnel contractor, celebrate the safe completion of the project’s excavation phase.



Energy Minister Brad Duguid (L) and OPG President and CEO Tom Mitchell (R) describe the Niagara Tunnel Project to the media in February.



CBC television personality Rick Mercer got an insider’s look at Big Becky in March as it bored through a portion of the Tunnel. Visit www.cbc.ca/mercerreport for a video of Rick’s visit to Niagara.



Chief Clifford Bull and Chris Angecone of Lac Seul First Nation stand at the entrance to the Niagara Tunnel, providing a dramatic image of the Tunnel’s immense size.

Environment



“OPG, TOGETHER WITH ONTARIO CENTRES FOR EXCELLENCE, HAS FOUNDED PLUG ‘N DRIVE ONTARIO, A PARTNERSHIP TO RESEARCH WHAT ONTARIO NEEDS TO DO TO PREPARE FOR THE INTRODUCTION OF ELECTRIC VEHICLES.”

OPG 2010 Sustainable Development Report

CONVERTING OPG’S COAL PLANTS

OPG will phase out the use of coal by the end of 2014. Ontario’s Long Term Energy Plan calls for the conversion of Atikokan GS to biomass and Thunder Bay GS to natural gas. It recognizes potential benefits of converting some Nanticoke and Lambton units to natural gas with potential for adding biomass. Converted plants can help Ontario meet peak demands and provide backup reserve.

This April, the Pembina Institute completed a biomass analysis for OPG. Findings showed that the use of wood-based biomass fuel had both environmental and socio-economic benefits in the generation of electricity.



The Pembina report cites benefits of repowering some of OPG’s thermal units by using wood pellets as a fuel source.

TAKING THE PLUNGE TO PROTECT FISH

This past March, OPG divers installed a fish protection net near the cooling water intake channel at Pickering Nuclear. In its second year of operation, the net has significantly reduced the volume of fish entering the plant and has improved OPG’s environmental performance.

OPG has also recently partnered with the Ontario Federation of Anglers and Hunters as a lead sponsor to help restore Atlantic Salmon in Lake Ontario.



The OPG Dive Team poses for a group photo after installing fish nets at Pickering Nuclear.

OPG AND LEAF GET FAMILIES GROWING

OPG and LEAF (Local Enhancement & Appreciation of Forests) took to malls across the Greater Toronto Area to distribute native white spruce seed kits. More than 2,500 free kits were handed out this April in support of Earth Month and the International Year of the Forests. OPG and its conservation partners have planted more than 4.4 million native trees and shrubs on more than 22,000 hectares of land since the year 2000.



OPG’s seed kit giveaway was an opportunity to answer questions about trees and the importance of urban forests.

Caring About People and Communities



“PICKERING NUCLEAR IS VERY DESERVING OF THIS AWARD, AS A CORPORATION THAT HAS BEEN SO INSTRUMENTAL IN DRAWING ALL FACETS OF THE COMMUNITY TOGETHER IN ENVIRONMENTAL WORK.”

Wendy Lee, Executive Director of Environmental Earth Angels, on OPG winning the 2011 Environmental Achievement Award

SUPPORTING JAPAN RELIEF EFFORTS

In the weeks following the devastating earthquake and tsunami that struck Japan, OPG employees responded generously by pledging over \$65,000 to disaster relief agencies.

A small group of spirited employees also founded the “Powerful Friends Trust Campaign” an initiative involving the sale of wristbands as a symbol of the connection between Canada and Japan, particularly among energy workers. Proceeds for this initiative have totalled over \$35,000 and will benefit the Japanese rebuilding effort.



The wristbands convey a message of caring today while the proceeds for rebuilding signal hope for the future.

SUPPORTING SPECIAL OLYMPICS 2011

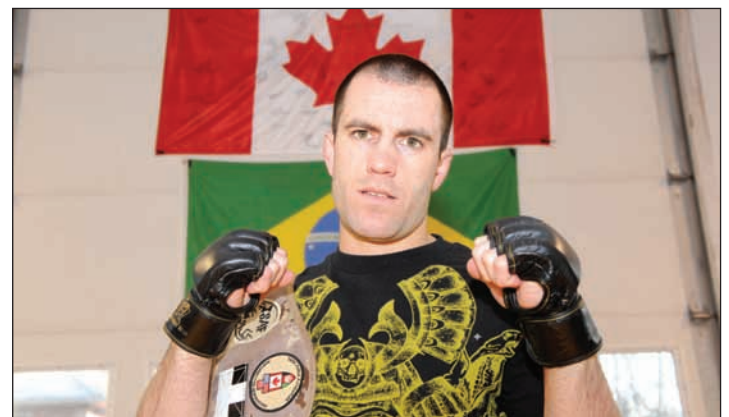
In January, over 440 athletes, coaches and managers, along with family and friends, gathered in Thunder Bay to compete in the Special Olympics Ontario 2011 Winter Games. OPG played an active role in the event as the Official Sponsor of the Volunteer Program. OPG Thermal and Hydroelectric employees from the Northwest Region teamed up with the Thunder Bay community and more than 750 volunteers who made the event a great success for truly inspiring athletes.



OPG volunteers stand with Thunder Bay Detective Constable Diane Maclaurin (middle) and Sophie, a Special Olympics skier.

MISSION TO SUPPORT CANADIAN TROOPS

OPG’s Bryan Edge travelled to Kandahar, Afghanistan in April to entertain over 2,000 Canadian troops by showcasing his skills as a Mixed Martial Arts fighter. The Nanticoke Mechanical Technician notes that the highlight of his trip was having the opportunity to speak with soldiers and hear their stories. “I’m amazed at how positive they were and I appreciate now, more than ever, the significance of their commitment to serve and the everyday risks that they face in their job.”



OPG Mechanical Technician Bryan Edge.

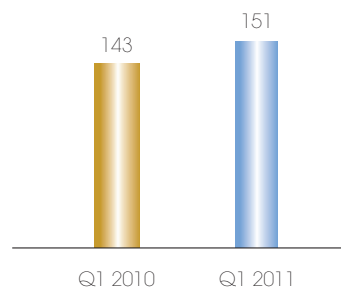
Financial and Operational Highlights



"OUR OPERATIONAL AND FINANCIAL PERFORMANCE CONTINUES TO REFLECT OPG'S COMMITMENT TO PROVIDE LOW COST ELECTRICITY TO ONTARIANS. DURING THE FIRST QUARTER OF 2011, OUR NUCLEAR UNITS SUPPLIED 34% OF ONTARIO'S PRIMARY ELECTRICITY DEMAND AND THE RELIABILITY OF OUR HYDROELECTRIC AND THERMAL STATIONS REMAINED AT HIGH LEVELS."

Donn Hanbidge, Chief Financial Officer

FIRST QUARTER NET INCOME (\$ M)



OPG reported a net income of \$151-million for Q1 2011 compared to \$143-million for Q1 2010. The increase was primarily the result of a reduction in operations, maintenance and administration expenses at OPG's nuclear and thermal stations, an increase in nuclear

generation, recognition of expenses during Q1 2010 for the closure of four coal-fired units in 2010, and a reduction in income tax expense related to prior taxation years.

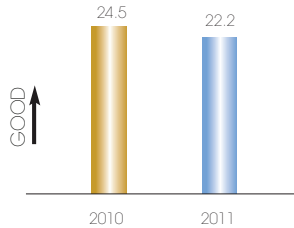
FIRST BONDS ISSUED FOR LOWER MATTAGAMI PROJECT

As part of its financing strategy for the Lower Mattagami River hydro project, OPG successfully completed its first privately placed bond issue of \$475-million in May. This transaction is an important first step in raising approximately \$1.9-billion of project financing over the next four years. There was significant demand for the bonds from institutional investors across Canada.

OEB RATE HEARING DECISION

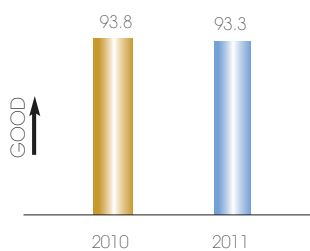
The Ontario Energy Board's (OEB) decision on OPG's application for new regulated prices for its regulated facilities was issued on March 10, 2011. The OEB established regulated prices of \$34.13/MWh and \$55.85/MWh for production from OPG's regulated hydroelectric and nuclear facilities, respectively, effective March 1, 2011. This compares to previously established regulated prices of \$36.66/MWh and \$54.98/MWh, respectively.

ELECTRICITY PRODUCTION (TWH)



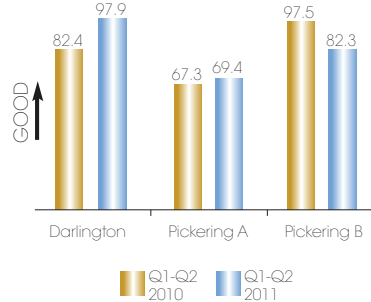
Electricity generation in Q1 2011 was 22.2 TWh, compared to 24.5 TWh in Q1 2010. Production decreased primarily as a result of lower thermal generation, partially offset by an increase in nuclear generation.

HYDRO AVAILABILITY (%)



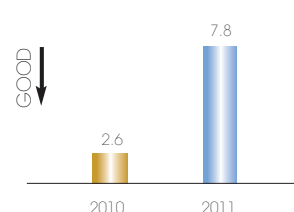
Hydroelectric reliability remains at high levels. The slight decrease in Q1 2011 compared to the same period in 2010 was primarily due to increased planned maintenance, and forced outages at Saunders GS.

NUCLEAR UNIT CAPABILITY FACTOR (%)



The capability factor at Darlington increased in Q1 2011 due to a lower number of planned outage days. Pickering B experienced a higher number of planned outage days in Q1 2011 compared to Q1 2010 as planned outage work originally scheduled for Q1 2010 was deferred to Q2 2010 to be performed during the Vacuum Building Outage.

THERMAL FORCED OUTAGE RATE (%)



The higher forced outage rate in Q1 2011 compared to Q1 2010 was primarily due to a higher number of unplanned outage days at Lambton and Nanticoke GS. This is consistent with Thermal's strategy to take additional outage days in situations when a unit is not required immediately by the electricity system, in order to save on overtime and other costs.