

VOLUME 7 ISSUE 1 SPRING 2012

AT WORK ACROSS ONTARIO

OPG PERFORMANCE REPORT



COMMITTED TO BEING
ONTARIO'S LOW-COST ELECTRICITY
GENERATOR OF CHOICE



ONTARIOPOWER
GENERATION



Maximizing our Value to Ontario

"OPG's thermal and hydro assets have served Ontario for many decades. As the province moves to a more sustainable future, OPG will ensure these valuable assets continue their contribution for many years to come."

Frank Chiarotto, Senior Vice President Hydro-Thermal Operations

DARLINGTON'S BEST EVER WANO EVALUATION

— Earlier this spring Darlington Nuclear received its highest ever safety and performance evaluation from the World Association of Nuclear Operators (WANO). This achievement demonstrates OPG's focus on safety, and its commitment to performance excellence and reliability.

OPG REACTORS AMONG 10 BEST PERFORMING CANDUS IN THE WORLD

In March, the CANDU Owners Group released the 2011 year-end performance numbers of all CANDU reactors worldwide. OPG received top honours with one Pickering unit scoring in the top ten and three Darlington units scoring in the top five.



NEW PENSTOCKS INSTALLED AT DECEW

After more than 100 years, the four operational penstocks supplying water to the DeCew Generating Station reached their end of life and were taken out of service in January 2009. By the end of 2011, new penstocks had been installed and the plant was back on-line delivering 23 MW of clean power.



SAVING MONEY — TRANSFORMING BUSINESS

— As part of OPG's cost savings efforts, staff identified a way to save \$3 million by shipping components from a retired generating unit at Lambton GS to Lennox GS, to avoid rebuilding one of the station's existing turbines.

In addition to cost reduction efforts across the company, OPG is also undergoing a business transformation that will save \$200 million over 2012-2014 and reduce headcount by 1,000 through attrition.

Operations and Projects Update

"These types of investments are important for our business and the community. Our hydroelectric stations are a part of our heritage and with this type of work they will provide clean, renewable power for decades to come,"

Art Rob, Plant Group Manager for OPG's Northwest Plant Group speaking about the Alexander GS overhaul, February 2012



Alexander GS

MAJOR MILESTONE FOR DARLINGTON REFURBISHMENT

– OPG has signed an important Re-tube and Feeder Replacement contract with SNC-Lavalin Nuclear Inc. and Aecon Construction Group Inc. This two-phase contract is to plan for and then replace major components of the four reactors at Darlington. This is the first of a number of contracts that will be awarded for the refurbishment, which involves the replacement of reactor components and maintenance of station systems that have reached the end of their planned lifespan.

▼ **DARLINGTON ENERGY COMPLEX TAKES SHAPE** – Progress continues on the Darlington Energy Complex (DEC) under construction just west of the Darlington Nuclear Station. In keeping with OPG's commitment to environmental protection and accountability, 97.8 per cent of construction waste from the site

has been diverted from landfill. The facility will also be a candidate for a Leadership in Energy & Environmental Design registered project with the Canada Green Building Council. Scheduled for completion in 2013, the DEC will function as a critical support facility for OPG's planned

Darlington Nuclear refurbishment.



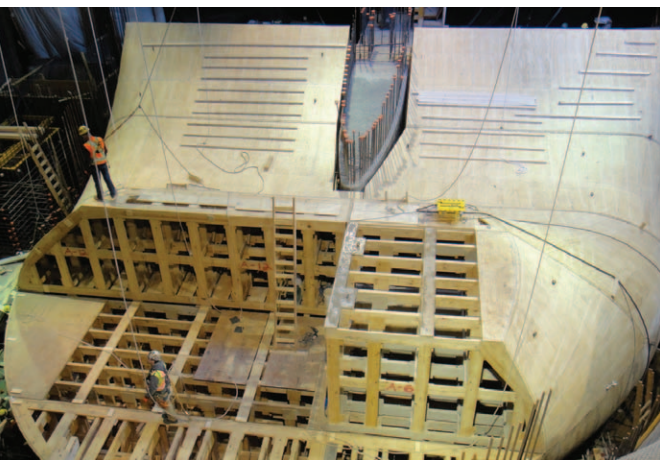
▲ **SUCCESSFUL UNIT OVERHAUL** – Alexander GS, which has been in operation on the Nipigon River since 1930, recently completed a six-month overhaul. As part of OPG's ongoing investment in renewing its hydroelectric facilities, Northwest Plant Group's recent project to refurbish generating Unit 4 at the station was safely and successfully completed ahead of schedule and on budget. Upgrades like this are an investment that will ensure the station's continued safe and reliable operation.



Operations and Project Update

"The Niagara Tunnel Project is an example of how the province is transforming Ontario's electricity system and investing in the clean energy economy. We are ensuring a clean, modern, reliable and affordable energy system that will power us today and for generations to come."

Minister of Energy, Hon. Chris Bentley, January 2012



▲ CONCRETE IS FLOWING AT THE LOWER MATTAGAMI PROJECT

– Work continues on the Lower Mattagami River Project. OPG's partner in the project is the Moose Cree First Nation. About 1,400 workers are currently employed with the project, including over 200 First Nation and Métis people. During the first quarter of 2012, concrete work was in progress at the intake, powerhouse, and service areas at the Smoky Falls site. At the Little Long and Harmon sites, concrete operations are in progress in the powerhouse area. Cofferdam installation continues at the Kipling site.

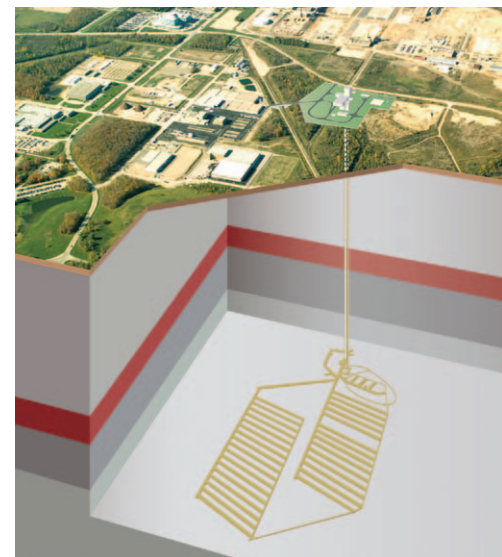
ENERGY MINISTER VISITS TUNNEL

OPG's president, Tom Mitchell accompanied Ontario's Minister of Energy, Chris Bentley on a tour of the Niagara Tunnel Project and Sir Adam Beck stations in January. The visit also marked a significant construction milestone as the tunnel is now fully lined with concrete to the halfway point.



▲ PUBLIC COMMENT PERIOD BEGINS FOR OPG'S DEEP GEOLOGIC REPOSITORY

OPG's proposed Deep Geologic Repository Project for the safe storage of low and intermediate level nuclear waste met another milestone. On Feb. 3, a federally-appointed Joint Review Panel (JRP) announced the beginning of a six-month public comment period for the project's Environmental Impact Statement, Preliminary Safety Report and supporting documents. The public comment period provides an opportunity for the JRP, federal agencies, the public and First Nations and Métis communities to review, assess and comment on the project.



Nuclear Safety and Security

"We are — and will be — a better and safer industry after Fukushima, than before."

Tom Mitchell, OPG President and CEO
Speaking at the Canadian Nuclear Association Conference February 2012



DARLINGTON NUCLEAR ACHIEVES NEW SAFETY MILESTONE – The more than 2,300 employees at Darlington Nuclear Station achieved over 12 million hours – roughly four years – without a lost time injury. This is a tremendous accomplishment and represents a “personal best” for OPG’s nuclear operations.



NUCLEAR SAFETY ENHANCEMENTS POST – FUKUSHIMA

OPG is strengthening the already robust safety systems at our nuclear stations. Following the Fukushima nuclear event, OPG looked for opportunities to improve its nuclear stations and has taken steps to provide even greater measures of defense. This includes

purchasing and installing portable diesel generators and pumps (as shown in photo, bottom left). This equipment adds flexibility by supplying essential fuel cooling through multiple paths. This complements the company’s existing safety measures which include standby generators, emergency power generators and auxiliary power generators. In response to Fukushima, OPG has almost a dozen projects underway or planned for implementation by the end of 2016.

CHANGE OF COMMAND

OPG has assumed direct responsibility for security at its two nuclear stations in Durham Region. Following the September 11, 2001 terrorist attacks in the U.S., OPG partnered with Durham Regional Police Service (DRPS) to provide protection and armed response service at Pickering and Darlington nuclear stations. In 2007, OPG announced it would create its own armed security teams that would include highly-trained, elite recruits – many of which come from a police or military background. A Change of Command ceremony took place at the Darlington Nuclear Station on April 18 to mark the official passing of responsibility and accountability from DRPS to OPG.





Environmental Performance

"Through its innovative Biodiversity Program OPG is effectively contributing to the ecological, economic and social sustainability of our community and many others throughout southern Ontario,"
Long Point Region Conservation Authority's Paul Gagnon speaking in 2011 about OPG's biodiversity program



▲ **BRINGING BACK THE SALMON** – As the lead partner in the Bring Back the Salmon program, OPG is working with the Ontario Federation of Anglers and Hunters and local school groups to help restore the Atlantic salmon population in Lake Ontario. Here students join OPG staff at the Pickering Information Centre for the opening of an educational salmon hatchery.

▼ FISH PROTECTION NET INSTALLATION

The arrival of spring brought with it the installation of Pickering Nuclear's fish protection net. In its third full year of operation, the Pickering fish net has significantly reduced the volume of fish entering the station's water intake channel.



Research indicates the net has reduced mortality by more than 80 per cent annually. The fish net is part of a comprehensive program that has included restoring fish habitat and wetlands at Duffins Creek Marsh, Frenchman's Bay and Hydro Marsh.

EXPANDED BIODIVERSITY EFFORTS

OPG, along with its conservation partners, anticipates planting more than 500,000 native trees and shrubs in 2012 as part of the company's biodiversity management program. The program has recently been expanded to include wetland restoration through partnership with the Rural Lambton Stewardship Network. Since the spring of 2000, OPG has supported the planting of more than five million native trees and shrubs on about 1,500 hectares of ecologically significant lands in southern Ontario.

COAL UNIT SHUTDOWN – OPG's growing proportion of low-emission generation is in part a result of the company's effective implementation of the Ontario government's policy to phase out coal-fired generation by the end of 2014. As part of this commitment, OPG removed from service Units 1 and 2 at the Nanticoke Generating Station at the end of 2011. A total of six OPG coal units have been shut down; and since 2005, OPG's coal-fired electricity production has been reduced by almost 90 per cent. In 2011, 96 per cent of the company's total generation came from hydroelectric and nuclear sources that produce virtually no emissions contributing to smog or climate change.

OPG in the Community

"With OPG's involvement, the program has sprouted wings." What started out as a small, grass-roots project, has evolved into a full-blown education program that reaches over 20,000 elementary students in Greater Sudbury".

Sudbury's Deputy Mayor, Joscelyne Landry-Altmann speaking about the Junction Creek Water Safety Campaign – *Where Water Flows Do Not Go*, April 2012



- ◀ **SPREADING THE SAFETY MESSAGE** – OPG has partnered with the City of Greater Sudbury and the Junction Creek Safety Committee to promote safety awareness of fast flowing water. In April, a new curriculum package was launched which focuses on shoreline safety and the dangers associated with rapidly flowing waters.



- ◀ **2012 SPECIAL OLYMPICS ONTARIO** – As the sponsor of the volunteer program, OPG employees lent a hand to help make the 2012 Special Olympics Ontario Spring Games memorable for all. The games were held in Kingston from May 31 to June 3, and were the largest ever Provincial games in Canada, with more than 900 athletes and over 800 volunteers.



- ◀ **PROJECT SCHOOL VISIT** Alexandria the owl visited Muskoka Falls Public School in Bracebridge courtesy of the Canadian Peregrine Foundation's (CPF) Project School Visit education program. For more than 10 years OPG has supported the CPF's research, recovery and education programs for the peregrine falcon and birds of prey.

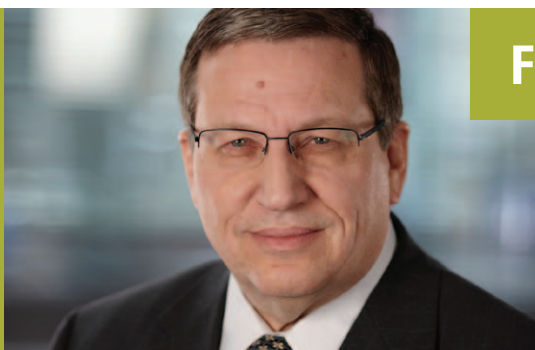


- ◀ **FOSTERING YOUNG FRIENDSHIPS** – Since 2010, OPG has been a proud supporter of the Pen Pal Project, an initiative created by Suzie Miller, a teacher from the Six Nations of the Grand River Territory. Thousands of elementary students from Six Nations and Caledonia/Haldimand County have participated in the project which encourages lifelong friendships based on understanding. With support from Haldimand-Norfolk Reach, local school boards, partners and volunteers, the Pen Pal Project enables students to correspond during the year and gather in June for a day of partnership activities.

- ◀ **MARCH BREAK MADNESS** – This past March, thousands participated in March Break Madness programming at OPG's Pickering and Darlington

Nuclear Stations. Activities included, nature walks, an interactive astronomy exhibit, family skate, and the return of LEGO building competition. The two stations, along with community partners, hosted activities at OPG's nuclear information centres, on the waterfront trail, and at various locations in the Durham Region.





Financial and Operational Highlights

"The company had a successful first quarter in moderating electricity prices while reliably and safely generating more than half the power produced in the province."

Tom Mitchell, President and CEO of OPG

OPG CONTINUES TO MODERATE ONTARIO ELECTRICITY PRICES – OPG

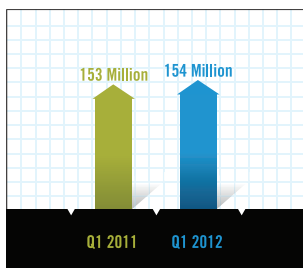
continued to be Ontario's low-cost electricity generator in the first quarter of 2012; receiving 5.0 cents per kilowatt hour — the lowest electricity price received by any Ontario generator. This role delivers value to Ontarians by helping to moderate the price of electricity.

OPG is also the only generator in the province whose rates are set through an open and transparent public hearing process, conducted by the Ontario Energy Board (OEB).



OPG RELEASES ITS 2011 ANNUAL REPORT

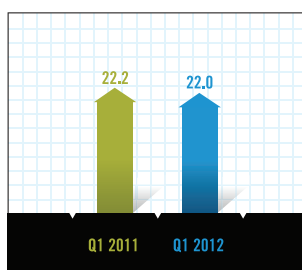
OPG's 2011 Annual Report was recently released and is now available at opg.com.



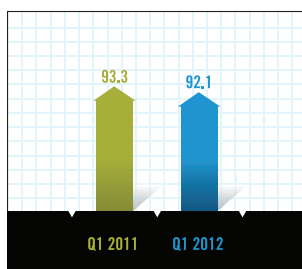
FIRST QUARTER NET INCOME

OPG reported a net income of \$154 million for the first quarter of 2012 compared to \$153 million for the same period in 2011. The

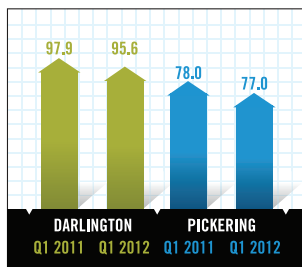
increase was primarily a result of higher earnings from Nuclear Funds and lower OM&A expenses.



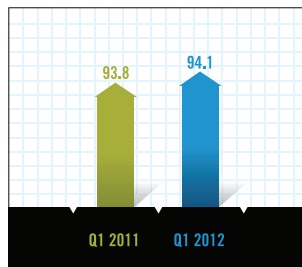
ELECTRICITY PRODUCTION (TWh) – OPG's total electricity generated during the first quarter of 2012 was 22.0 TWh which was slightly lower than the 22.2 TWh produced in the first quarter of 2011. This decrease was primarily due to lower unregulated hydroelectric generation as a result of below normal precipitation and water flows across the northwestern Ontario river systems.



HYDROELECTRIC AVAILABILITY (%) – The slight decrease in availability in 2012 was a result of an increase in unplanned outage activities at certain generating stations. Hydroelectric's consistently high availability reflects the continuing strong performance of these stations.



NUCLEAR UNIT CAPABILITY FACTOR (%)
Both Darlington and Pickering experienced a marginal increase in unplanned outage days, resulting in slightly lower capability factors at both stations for the first quarter of 2012 compared to the same period in 2011.



THERMAL START GUARANTEE (%)

Beginning in 2012, OPG adopted Start Guarantee as a key thermal reliability measure. The high Start Guarantee for the first quarter of 2012 and 2011 reflects the ability of the thermal generating stations to quickly respond to market requirements when needed.



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Where to go for more information about OPG

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

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