

VOLUME 8 ISSUE 1 SPRING/SUMMER 2013

AT WORK ACROSS ONTARIO

OPG PERFORMANCE REPORT



GENERATING

ALMOST 60 PER CENT

OF ONTARIO'S ELECTRICITY

Committed To Being Ontario's Low-Cost
Electricity Generator of Choice



Maximizing our Value to Ontario

"The tunnel has claimed the attention of the entire world and is a fitting representation of Canada's, Ontario's – and OPG's – great legacy of electricity development and operation."

– Jake Epp, OPG Chairman



▲ \$24 MILLION UPGRADE TO CENTURY-OLD STATION COMPLETED ON TIME, ON BUDGET

OPG's Matabitchuan Generating Station returned to service earlier this year after the successful completion of a \$24 million upgrade project, which included replacing the two original steel penstocks with one partially buried penstock (shown above). The project employed 141 workers from Northeastern Ontario and an additional 18 from outside the region. In total, the project invested \$11 million in the region through the purchase of material and services. Located near North Cobalt, the Matabitchuan GS has been providing clean, renewable hydroelectricity to Ontario since 1910. Investing in the 100-year old asset ensures it will continue to benefit Ontario for many years. The Matabitchuan project is one of over 180 Hydro-Thermal projects OPG has underway.

NIAGARA TUNNEL PRODUCING MORE CLEAN POWER

Ontario's new Niagara Tunnel is now in service producing more clean, renewable electricity at OPG's Sir Adam Beck generating complex. The tunnel is a source of pride not only as an engineering feat, but also as a practical solution for meeting Ontario's energy needs through clean sources. It can annually produce more power, on average, than cities the size of Niagara Falls or Kingston use every year. With minimal maintenance costs, this energy will be generated year-in, year-out for a hundred years or more. In March, students from Port Weller Public School joined Ontario Energy Minister Bob Chiarelli, Environment Minister Jim Bradley, OPG Chairman Jake Epp and OPG President Tom Mitchell to celebrate the Tunnel's completion. ▼



KEY FACTS ABOUT THE TUNNEL

- 580 workers were employed at peak construction
- Workers' safety record exceeded the industry average
- 12.7 metres in diameter and 10.2 km long
- Lined with enough concrete to build a sidewalk from Windsor to Quebec City
- Capable of providing an additional 500 cubic metres per second of water to the Sir Adam Beck generating complex – enough to fill an Olympic-sized swimming pool in seconds

Operations and Projects Update

“The conversion of the Atikokan Generating Station to use Ontario grown fuel is great news. The plant is necessary to provide reliable power in the Northwest, and having a local source for this sustainable fuel will both preserve and create good jobs in the North.”

– Bill Mauro (far right), MPP Thunder Bay -Atikokan, pictured with Atikokan Mayor Dennis Brown and OPG's Tom Mitchell



IMPORTANT MILESTONE ON THE LOWER MATTAGAMI PROJECT

– Work continues on all four sites of the 438 MW Lower Mattagami River Project, a partnership between OPG and the Moose Cree First Nation. Earlier this spring, a major milestone was reached with the installation of the turbine runner at Little Long GS, which is the first major mechanical component to be installed.

BIOMASS FUEL SUPPLIERS ANNOUNCED

OPG has awarded two contracts to supply 90,000 tonnes of biomass wood pellets to fuel the Atikokan Generating Station. This will make a significant economic contribution to Northwestern Ontario and help supply the much needed electricity required to position the community and the region for an anticipated mining expansion. Over 150 new jobs will be created from supplying wood pellets to Atikokan.

NORTH AMERICA'S LARGEST BIOMASS CONVERSION UNDERWAY

The conversion of OPG's Atikokan GS to use biomass is on target for completion next year. The project includes plant modifications and the construction of a fuel-storage and handling system to repower the plant from coal to biomass fuel. When it's converted, Atikokan will be the largest capacity 100 per cent biomass power plant in North America.



CHATS FALLS DAM REHABILITATION WORK PROGRESSING WELL

– The first phase of OPG's five-year Chats Falls GS dam rehabilitation project was completed on schedule and on budget at the end of 2012. Originally constructed in 1930, the 5.6 km dam spans the Ontario-Quebec Border. The dam's original concrete will be reinforced allowing the dam to continue serving both provinces safely and reliably. The project's rehab work includes full repair of the dam sections and sluiceways. Since much of the dam is located under water, a significant amount of work will be completed by divers supported by on-land personnel.

Chats Falls





Spotlight on Darlington Nuclear Refurbishment

"The construction phase of the Darlington Energy Complex has gone extremely well...I'm proud to say we are ahead of schedule and under budget which reflects OPG's commitment to sound project management."

– Tom Mitchell, OPG President and CEO

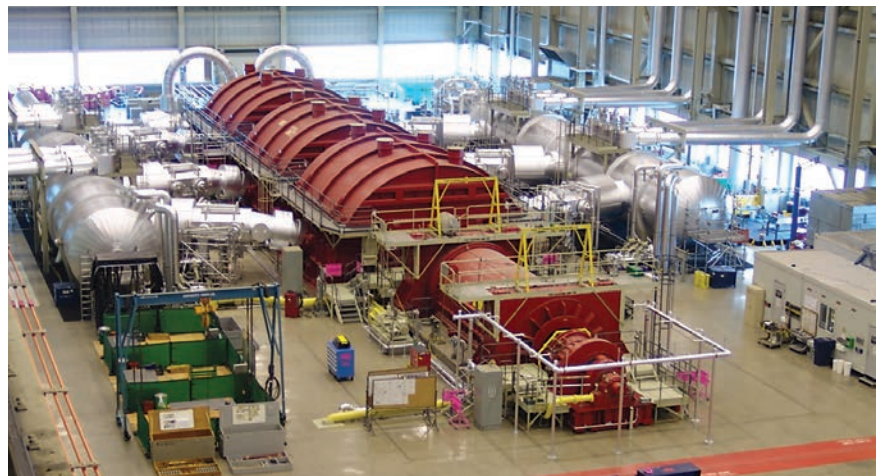
► WHAT IS REFURBISHMENT?

The Darlington Nuclear Generating Station uses CANDU reactors. This technology is designed to be refurbished after 25-30 years of service – a process that involves replacing their major components. In addition to ensuring Darlington can continue to operate into the second half of the century, refurbishment will create significant economic benefits – including jobs, business and supplier opportunities and increased municipal revenue.

OPG REFURBISHMENT MILESTONE

– In March 2013, the Canadian Nuclear Safety Commission, the federal safety regulator, issued its decision that the refurbishment and continued operation of the Darlington Nuclear Generating Station will not result in any significant adverse environmental effects, given mitigation. This decision enables OPG to move ahead with a number of activities in support of the Darlington refurbishment which will allow the station to continue to operate until approximately 2055.

DARLINGTON ENERGY COMPLEX AHEAD OF SCHEDULE – OPG has completed construction of the Darlington Energy Complex (DEC), which will serve as the headquarters for refurbishing the Darlington Nuclear Generating Station and support on-going station operations into the future. The 300,000 square foot building, located to the east of the Darlington station in Clarington, will house a technologically-advanced training centre, full-scale mock-up of the reactor core and tool testing facility that is vital to train, test and qualify the many people needed to complete the refurbishment. The DEC will also anchor the Clarington Energy Park in Durham – helping to attract other high-tech industries and suppliers.



▲ OPG AWARDS TURBINE CONTRACT FOR REFURBISHMENT

OPG continues to move forward with detailed planning preparations for the Darlington refurbishment. In April, Alstom Power & Transport Canada Inc. was awarded an equipment supply and technical services contract to refurbish the four turbine generator sets at the Darlington Nuclear Generating Station. This is one of several major contracts that will be awarded for the refurbishment. Nuclear energy is an important component of the Province's power supply, accounting for roughly half of its power. It's also a major contributor to the fight against climate change because it is virtually greenhouse gas emission free.

Investing in Ontario's Future

"The Darlington Nuclear Generating Station has been in Clarington since the early eighties. It is a positive presence in our community and we anticipate this will continue for many years."

– Mayor Adrian Foster, Municipality of Clarington



► MEET A MEMBER OF THE REFURBISHMENT TEAM

Mark Arnone is Vice President, Refurbishment Execution, Nuclear Refurbishment at OPG. As a key member of the Darlington refurbishment team, Mark is responsible for providing leadership to ensure the successful execution of the project.

More about Mark:

- Mark joined Ontario Hydro, OPG's predecessor company in 1990, and has held various roles of increasing responsibility throughout the organization.
- He has been a Professional Engineer in the Ontario for over 24 years and has over 26 years of experience in the project management field.
- Mark's role on the refurbishment team includes defining and delivering overall strategic direction in the areas of project management and field execution.



Pickering Nuclear



PLANNING FOR PICKERING'S CONTINUED OPERATION

To ensure Ontario's ongoing electricity needs are met safely, reliably and at a low-cost, OPG is planning for the continued operation of the Pickering Nuclear Station until 2020. An application has been submitted to Canada's nuclear regulator to renew Pickering Nuclear's operating license for a five-year term allowing for the continued operation of Pickering's units 5, 6, 7 and 8. The Pickering Nuclear Generating Station supplies about 13 per cent of Ontario's electricity.

PICKERING NUCLEAR'S RECENT ACHIEVEMENTS

- Over 10 million hours worked without a lost-time injury.
- Four Pickering reactors achieved unit capability factors of well above 90 per cent with three over 98 per cent in the first three months of 2013.
- Two Pickering reactors ranked among the top ten performing CANDU reactors worldwide for 2012.



Environmental Performance

“The St. Lawrence Power Development Visitor Centre continues to exceed all our expectations. We aimed for LEED Silver and achieved LEED Gold.”

– Jim Moreland, Plant Manager, Ottawa-St. Lawrence Plant Group
speaking about the St. Lawrence Power Development Visitor Centre’s LEED Certification

OPG VISITOR CENTRE WINS DESIGN AWARD

– OPG has been awarded its first LEED (Leadership in Energy and Environmental Design) Gold Certification by the Canada Green Building Council for the St. Lawrence Power Development Visitor Centre, located outside of Cornwall’s RH Saunders Generating Station. In achieving this distinction, OPG ensured efficiency and environmental sustainability were part of design and construction decisions. These included selecting a sustainable site, recycling construction material and using ground source heat.



PICKERING NUCLEAR A “POLLINATOR ADVOCATE”

Pickering Nuclear Generating Station has become the first Canadian organization to win the Wildlife Habitat Council and North American Pollinator Protection Campaign’s *Pollinator Advocate Award* in recognition of its efforts to improve biodiversity, public education and habitat for pollinators on OPG lands and other community locations. Since the inception of Pickering Nuclear’s wildlife enhancement programs, more than 100 station employees and numerous community members have volunteered their time to plant native trees and shrubs, remove invasive species, plant wildflower gardens, conduct marsh cleanups, and install bird nest boxes and turtle basking logs.



OPG in Your Community

“Since 2010, OPG has been one of our most dedicated supporters. Their company-wide commitment to biodiversity perfectly complements our *Bring Back the Wild* program, which gets children across the country engaged in learning about and protecting at-risk species.”

— Peter Kendall, Executive Director, Earth Rangers



◀ OPG HELPS SET NEW GUINNESS WORLD RECORD

In 2012, OPG partnered with Bolton C. Falby Public School and Scientists in School (SiS), a leading Canadian science education charity. Together they helped break the Guinness World Record for the largest practical science lesson at multiple venues. OPG's Pickering Nuclear Information Centre was one of 88 venues across Canada participating in the successful world record attempt, which involved 13,000 participants. For over a decade, OPG has supported SiS, encouraging more than 600,000 students annually with hands-on science, engineering, technology, and environmental workshops. For more information visit: www.scientistsinschool.ca

LITTLE “NHL’ers” CELEBRATE 42 YEARS — In March, more than 3,600 First Nation youth participated in the 42nd Annual Little Native Hockey League (Little NHL) Tournament in Mississauga hosted by the Six Nations Minor Hockey Association. The tournament has a long history. Beginning in 1971 in Little Current, Ontario, with 17 teams and 200 players, the league has grown to 153 teams from 61 First Nations communities. OPG is proud to support the development of youth through sporting initiatives like the Little NHL. OPG's Joe Heil, Director, First Nations & Métis Relations, dropped the ceremonial puck at the Pee-Wee Division “A” Championship game between the Moose Factory Thunder Chiefs (left) and the Curve Lake Screaming Eagles.



TOP CORPORATE CITIZEN DISTINCTION

— OPG has once again been recognized by the environmental organization Corporate Knights Inc. as one of Canada's top 50 corporate citizens. The corporate rankings were based on environmental, social and governance indicators as well as on the management of carbon, energy, water usage and waste production. In announcing the 2013 rankings, Corporate Knights' managing director Doug Morrow observed that the organizations chosen for this honour “stand out as top performers on a suite of forward-looking, financially-relevant sustainability metrics” - including leadership diversity, low greenhouse gas levels, and health and safety performance.



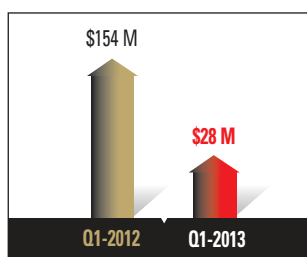
Financial and Operational Highlights

In the first quarter, OPG contributed \$153 million to the Province through a variety of taxes and transfers. Further, OPG's net income of \$28 million is incorporated into the Province's revenue."

– Tom Mitchell, OPG President and CEO

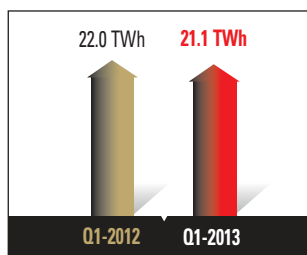
1) FIRST QUARTER NET INCOME

OPG reported a net income of \$28 million compared to \$154 million for the same quarter in 2012. The decrease can be primarily attributed to lower earnings from Nuclear Funds.



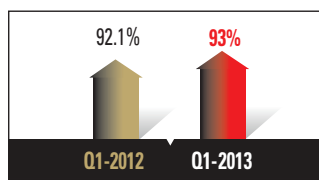
2) ELECTRICITY PRODUCTION (TWh)

OPG's total electricity generated during the three months ended March 31, 2013 was 21.1 TWh compared to 22.0 TWh for the same period in 2012. This decrease was mainly due to lower nuclear generation, partially offset by higher generation at OPG's thermal generating stations.



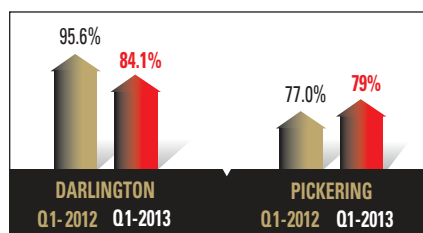
3) HYDRO AVAILABILITY (%)

The availability of OPG's hydroelectric generating stations remained at high levels.



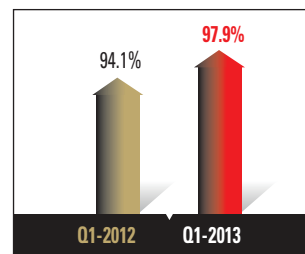
4) NUCLEAR UNIT CAPABILITY FACTOR (%)

– The capability factor at the Darlington nuclear station was 84.1 per cent in the first quarter of 2013, compared to 95.6 per cent for the same quarter in 2012, reflecting an increase in planned outage days to execute scheduled maintenance. The Pickering station had a 79.0 per cent capability factor compared to 77.0 per cent in the first quarter of 2012, primarily as a result of excellent performance at Units 4-8, partially offset by the impact of an outage extension at Unit 1.



5) THERMAL START GUARANTEE (%)

The Start Guarantee rate of the thermal generating stations for the first quarter of 2013 was 97.9 per cent, compared to 94.1 per cent for the same period in 2012. These high Start Guarantee rates reflect the ability of the thermal generating stations to respond to market requirements when needed.



BUSINESS TRANSFORMATION EFFORTS CONTINUE

OPG continues to implement a company-wide business transformation. This includes achieving a headcount reduction, since January 2011, of approximately 1,200 employees, largely through attrition. While lowering costs and improving efficiencies, OPG has maintained a strong focus on performance excellence and providing low-cost electricity, safely and reliably.



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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

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