COMMITTED TO BEING
ONTARIO’S LOW-COST
ELECTRICITY GENERATOR

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AT WORK ACROSS ONTARIO

OPG PERFORMANCE REPORT
Advances continue on the Niagara Tunnel Project – Good progress continues to be made on the tunnel lining and its intake and outlet sites. Students of Port Weller School joined Minister of Energy Chris Bentley at Table Rock on Nov. 8, to mark a major milestone in the Niagara Tunnel Project. Just 36 hours earlier workers in the tunnel poured the last bit of concrete required to finish the tunnel liner.

Maximizing our Value to Ontario

“Atikokan’s biomass conversion is good news for the town of Atikokan in many ways...we are able to hold onto the station jobs and the tax base that goes along with it. “

– Dennis Brown, Mayor of the Town of Atikokan, October 2012

ADVANCES CONTINUE ON THE NIAGARA TUNNEL PROJECT – Good progress continues to be made on the tunnel lining and its intake and outlet sites. Students of Port Weller School joined Minister of Energy Chris Bentley at Table Rock on Nov. 8, to mark a major milestone in the Niagara Tunnel Project. Just 36 hours earlier workers in the tunnel poured the last bit of concrete required to finish the tunnel liner.

CONVERSION PROJECT GENERATES JOBS AND RENEWABLE ELECTRICITY – OPG is proceeding with construction of the $170-million Atikokan Generating Station biomass conversion project. With over 200 MW of capacity, the converted station will be the largest capacity, 100 per cent biomass fuelled plant in North America and will generate renewable, dispatchable, peak capacity power. The project will create about 200 construction jobs and help to protect existing jobs at the plant. In October, Chris Fralick, Plant Manager, Northwest Thermal (OPG); Tom Mitchell, President and CEO (OPG); Bill Mauro, MPP Thunder Bay-Atikokan; Dennis Brown, Mayor of Atikokan; and Brent Boyko, Atikokan Generating Station Manager (OPG) joined Atikokan community members to officially launch the project.
Operations and Projects Update

“"We have a wealth of talent at OPG that can benefit the nuclear industry in Canada. Our work with Point Lepreau is an example of our expertise and how we are using our experience to benefit the industry.”
— Wayne Robbins, Chief Nuclear Officer, June 2012

OPG NUCLEAR STAFF ASSIST WITH POINT LEPREAU PROJECT – To assist with New Brunswick Power’s transition of Point Lepreau from refurbishment to full power, OPG has sent a group of experienced nuclear employees to share their expertise with the project team. This is just one example of how OPG’s highly-skilled employees contribute to Canada’s nuclear industry.

DARLINGTON ENERGY COMPLEX CONSTRUCTION PASSES FIRST YEAR ANNIVERSARY – In just over 14 months, the home of the future Darlington Energy Complex has been transformed from an empty field to a busy site covering over 300,000 square feet. The complex will include office space for 450 staff, and a public information centre with interactive displays and a 160-seat auditorium. It will also have an employee-processing centre and warehousing space to support the people and material required for the Darlington Refurbishment Program. Key components will be the tool testing facility and training centre. The facility, which is expected to be completed in 2013, will be vital for training staff and contractors needed to complete the refurbishment, scheduled to begin in 2016.

CONSTRUCTION BOOMING ON LOWER MATTAGAMI PROJECT – Located north of Kapuskasing, the Lower Mattagami River Project is a partnership between Moose Cree First Nation and OPG. The redevelopment project will produce more clean, renewable electricity by adding generating units at existing stations in Little Long, Harmon, and Kipling. It will also replace the existing Smoky Falls Generating Station with a new three-unit station. There are now over 1,100 people working on site, including over 250 First Nation and Métis persons. The project has poured more than 102,563 cubic metres of concrete – enough to build a sidewalk 320 kilometres long.
The Wawaitin hydro site has produced clean, reliable electricity for the people of Ontario for one hundred years due in large part to the efforts of the men and women who built, maintained and operated the equipment over the last century. Congratulations on this milestone.”

– Peter Murray, OPG Plant Manager, June 2012

Operations and Projects Update

PUBLIC AND EMPLOYEE SAFETY IS A PRIORITY AT OPG – The Canadian Electricity Association has recognized OPG’s outstanding 2011 employee safety performance by awarding the company the President’s Award of Excellence. OPG has consistently improved its safety performance and in 2011 performed better as a company in the prevention of injuries than at any other time in its history. Mary Lou Sinclair, Director Corporate Safety and Jason Fitzsimmons, Vice President Safety & Wellness accepted the award on behalf of the company.

RUNNER UPGRADES PASS HALFWAY MARK – Des Joachims GS, OPG’s largest hydroelectric facility on the Ottawa River, is more than halfway through an extensive runner upgrade program. The project began in 2007 and involves replacing one runner per year, with the final runner installed in 2014. The new runners will increase efficiency while significantly decreasing maintenance.

NANTICOKE GS CELEBRATES 40TH ANNIVERSARY – OPG president Tom Mitchell joined community leaders this past June to mark Nanticoke’s 40 years of operation. Those in attendance included: Six Nations of the Grand River Councillor Bob Johnson, Haldimand-Norfolk MPP Toby Barrett, Haldimand County Mayor Ken Hewitt, Norfolk County Mayor Dennis Travale, and OPG’s Jeff Hansen. The station also hosted an open house in September which attracted about 1300 community residents. Visitors had the opportunity to learn more about Nanticoke, its employees and its many community partners.
**BIG STEP TOWARD SITE PREPARATION AT DARLINGTON**

Following the federal government’s approval of the Darlington New Nuclear Project Environmental Assessment in May, the Canadian Nuclear Safety Commission (CNSC) Joint Review Panel, announced its decision to issue the Licence to Prepare Site for the project. This is the first of three licences required in the preparation, construction and operation of new nuclear reactors. It is the first licence for new nuclear in over a quarter century. A decision on whether to move forward with the two potential nuclear reactors will be made by the Government of Ontario.

**PUBLIC HEARINGS BEGIN FOR DARLINGTON REFURBISHMENT** – The CNSC public hearings for the Darlington Refurbishment project are scheduled to begin in December. This highly complex project involves the replacement of all major components of the Darlington Nuclear station. The refurbishment promises to provide an economic boost to the Durham Region as the project will create thousands of direct and indirect jobs through new business development and spin-off activity. In 2011, Darlington provided about 20 per cent of Ontario’s electricity.

**UPDATE ON PICKERING** – The Pickering Nuclear station, located in Durham Region, supplies about 13 per cent of Ontario’s power. As 2012 progresses, the station has undertaken several important operational and performance initiatives.

Pickering Nuclear’s continued strong performance into the year 2020 will be essential in providing dependable baseload power to Ontario during the refurbishment of OPG’s Darlington Nuclear units later in the decade.

**Recent achievements include:**
- Over 7 million hours worked without a lost-time injury.
- Three Pickering reactors achieved unit capability factors well above 90 per cent.
- Pickering is having its best forced-loss rate performance since returning Units 1 and 4 to service nine years ago.

**Key initiatives:**
- Completed amalgamation of the Pickering A and B stations, leading to greater efficiencies and savings of about $20 million.
- The CNSC accepted Pickering’s fuel-channel strategy for Units 5 to 8 – a key element in OPG’s plan to operate the station through to 2020.
- September saw the launch of two major planned outages involving more than 40,000 work tasks to be completed on Pickering Units 1 and 7.
PARTNERING TO HELP THE EELS – In July, the St. Lawrence River Institute of Environmental Sciences and OPG partnered to host the first ever Eel Day. Held at the OPG Visitor Centre in Cornwall, Eel Day featured activities for the entire family. Visitors had the opportunity to learn more about this endangered species through hands-on activities, including interactive fish workshops and demonstrations using live eels. OPG’s eel ladder, which enables upstream migration of the American Eel, has been in operation since the mid-1970’s.

LAMBTON WINS ENVIRONMENTAL AWARD
This past spring, Lambton Generating Station received the Regional Corporate Habitat of the Year Award from the Wildlife Habitat Council. This award recognizes the station’s Biodiversity Management Plan and Lambton’s work in managing its operations in a way that encourages the existence of native species and ecosystems.

SUSTAINABLE DEVELOPMENT COMMITMENT RECOGNIZED
In June, OPG received the Canadian Electricity Association’s Sustainable Electricity Company of the Year Award for 2011. The award acknowledges OPG’s commitment and efforts to reduce its environmental footprint while contributing to a better Ontario through corporate citizenship, commitment to host communities, and the safe, low-cost, efficient generation of electricity.

BRINGING BACK THE WILD WITH EARTH RANGERS – In 2011, OPG teamed up with Earth Rangers to protect Ontario’s spotted turtle population through the organization’s Bring Back the Wild project. The program educates children and inspires them to come together in support of protecting the species and its habitats across the province. New in 2012, OPG’s continued support of the Bring Back the Wild program in Ontario will focus on the American Badger. To learn more about this educational and fundraising program visit OPGbiodiversity.ca or earthrangers.com.
**OPG in Your Community**

“The Biodiversity Field Trip program demonstrates the valuable hands-on learning opportunities that can be developed for students when community partners work together.”

— Wendy Lee, Executive Director, Environmental Earth Angels, June 2012

**HANDS-ON LEARNING WITH EARTH ANGELS** – In June, the natural environments of Lakehead Region Conservation Authority (LRCA) Mission Island Marsh Conservation Area and Kakabeka Falls Provincial Park (KFPP) became outdoor classrooms for 250 elementary students from Thunder Bay and the surrounding area. Through the support of OPG, LRCA and KFPP, the students were able to participate in the Environmental Earth Angels’ Biodiversity Field Trip program.

**OPG SUPPORTS HISTORY MUSEUM** – Through support from OPG and other community partners, the Niagara Falls History Museum recently completed its new two-storey addition and building renovations as part of the Lundy’s Lane Battlefield Legacy Project to commemorate the Bicentennial of the War of 1812. The new museum opened July 21 and features the OPG Gallery on the first floor. The OPG Gallery will feature temporary exhibits beginning with *Electricity* from the Franklin Institute. The exhibit runs until Dec. 23, 2012. To learn more visit niagarafallshistorymuseum.ca.

**RECOGNIZED FOR GIVING BACK** – This past May, the Thunder Bay Chamber of Commerce recognized OPG’s Northwest Hydro-Thermal Operations with its Quality of Life award. Chris Fralick, Plant Manager, Northwest Thermal, and Art Rob, Plant Manager, Northwest Plant Group, accepted the award from Don Campbell, President and CEO of TBayTel, sponsor of the award. The award recognized the charitable work of OPG and its employees, dedication to environmental stewardship and the many volunteer hours given to the important work of organizations throughout the community.

**COME FLY WITH ME** – Fun is had by all during Tuesdays on the Trail in the summer, when OPG plays host to a variety of outdoor education programs for area families in the natural settings at our Darlington and Pickering sites. A young Pickering resident (below) learns all about kites from Gary Mark of Toronto Kite Flyers (TKF). With wonderful partners like TKF, the Canadian Peregrine Foundation, Scientists in School, and Pickering Museum Village and countless others, the learning and enjoyment is endless.
“In the first six months of this year, we continued to deliver safe, clean, and reliable electricity that Ontarians expect, while driving down our costs. This was accomplished, in part, by the implementation of OPG’s ‘Business Transformation’ initiative.”

– Tom Mitchell, President and CEO, August 2012

Financial and Operational Highlights

1) MID-YEAR NET INCOME – OPG reported a mid-year net income of $197 million for 2012 compared to $262 million for the same period in 2011, a decrease of $65 million. The decrease was primarily a result of lower earnings from Nuclear Funds and lower electricity spot market prices that significantly affected revenues from OPG’s unregulated hydroelectric stations.

2) ELECTRICITY PRODUCTION (TWH) – OPG’s total electricity generated during the first half of 2012 was 42.5 TWh which was slightly lower than the 42.9 TWh produced in the first six months of 2011. The decrease was primarily due to lower unregulated hydroelectric generation as a result of below normal water levels in the Ottawa and northwestern Ontario river systems.

3) HYDRO AVAILABILITY (%) – The availability at OPG’s hydroelectric generating stations remained at high levels for the first six months of the year. Although there was a slight decrease in availability when compared to the same period in 2011, OPG’s hydroelectric stations continued to demonstrate strong performance.

4) NUCLEAR UNIT CAPABILITY FACTOR (%) – Compared to the same period in 2011, Darlington’s capability factor was lower as a result of an increase in unplanned outages days. The capability factor at Pickering increased due to a decrease in unplanned outage days.

5) THERMAL START GUARANTEE (%) – The Start Guarantee rate of the thermal generating stations for the six months ended June 30, 2012, improved compared to the same period in 2011, reflecting the ability of these stations to respond to market requirements when needed.