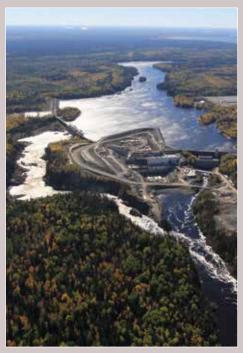


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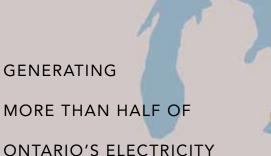
# AT WORK ACROSS ONTARIO OPG PERFORMANCE REPORT











UNTARIO 5 ELECTRICITY

Committed To Being Ontario's Low-Cost Electricity Generator



# We Commit To Do Better

"OPG's business transformation has set us on the right course, but there is more to transforming our company than reorganizing and downsizing. It's just as important to create a culture where small expenditures are contemplated with the same care as the money spent on large, multi-million-dollar projects."

Tom Mitchell, OPG President and CEO (December 2013, responding to Auditor General's Report)

#### **MOVING FORWARD THROUGH CHANGE**



In 2011, OPG initiated a business transformation aimed at meeting the expectations of ratepayers by being an efficient, low-cost generator that pushes down the overall rate paid by consumers. The ongoing transformation has already achieved a number of results including a headcount reduction of about 1,500 people since January 2011.

In December 2013, OPG accepted the findings of the Auditor General's report which looked at the company's human resource policies over a 10-year time period. In some cases the report highlighted areas which OPG has already addressed, or was in the midst of changing through initiatives that had not yet concluded. In other areas, it provides insights into issues upon which the company is acting and reporting its progress via its website **www.opg.com**. Key actions include:

- Continuing to decrease the number of senior positions. In the past year, the number of senior managers has gone down by six per cent, and since 2010 there's been a nine per cent drop in total base salary costs for management;
- Building on reductions already achieved to save an estimated \$1 billion over six years (2011-2016) by reducing headcount, from ongoing operations, by 2,330 or 20 per cent of 2011 levels;
- · Implementing pension and benefit reforms;
- Ensuring fair, well documented hiring practices by centralizing hiring and putting in place clear expectations and controls; and
- Adopting the Ontario Public Service relocation policy for all management.

OPG continues to generate electricity at a price that keeps rates lower than they would be otherwise. As we continue moving forward with our business transformation, the Auditor General's report will serve as a catalyst for further positive changes at OPG that will allow us to serve Ontarians better.

#### **PARTNERING TO POWER ONTARIO**

Moose Cree First Nation Chief and Council and the OPG Board of Directors celebrated the completion of construction at Little Long Unit 3 on Aug. 12, 2013. The new unit has been synchronized to the system and is now generating 67 MW of clean, renewable, emission-free electricity for Ontarians, ahead of schedule and on budget.

Little Long Station is part of OPG's Lower Mattagami Project. The project is a unique partnership between the Moose Cree First Nation and Ontario Power Generation – one that is creating jobs, local economic benefits through employment and the involvement of local businesses, and more clean energy, with virtually no negative environmental impact.

The entire Lower Mattagami Project is on schedule and on budget, and by the time work is completed in 2015, the capacity of the Lower Mattagami plants will have increased to 924 MW from 486 MW. At peak construction, the Lower Mattagami Project employed about 1,600 workers, including more than 250 First Nation and Métis individuals.



# **Operations and Projects Update**

"We look forward to working with the Ministry of Energy and OPG on the New Post Creek Project, which will also provide benefits to the surrounding municipalities with economic development opportunities and creating employment."

Chief Linda Job, Taykwa Tagamou Nation (August 2013)





#### **CLEAN POWER PROJECT ANNOUNCED FOR THE NORTH**

OPG and its partner, Coral Rapids Power, a wholly owned company of the Taykwa Tagamou Nation, are moving forward to develop approximately 25 MW of renewable hydroelectric power through the construction of a generating station on New Post Creek about 180 kilometres north of Timmins. The project will create up to 100 new construction jobs in Northern Ontario. Construction is targeted to begin in 2014, and the project is expected to be in service by 2017.

#### **MAJOR MILESTONE FOR CLIMATE CHANGE MITIGATION**

On Dec. 31, 2013, as part of Ontario's effort to phase out coal-fired generation, OPG's Nanticoke generating station stopped burning coal — leaving Thunder Bay as OPG's only remaining coal-fuelled station. More than 95 per cent of the electricity OPG generates comes from sources that produce virtually no emissions contributing to smog, acid rain, or climate change. OPG's implementation of Ontario's commitment to stop burning coal at its thermal stations by the end of 2014 is a significant step in the fight for cleaner air and climate change mitigation. In November, the government of Ontario announced it intends to convert one of Thunder Bay's units to run on advanced biomass over a five-year term, starting in 2015.

### • ON TRACK: NORTH AMERICA'S LARGEST BIOMASS PLANT

The Atikokan Biomass Conversion project continues to make good progress. Construction was completed on the two biomass storage silos this past fall. All 15 redesigned burners were installed and commissioning of the combustion systems has begun. The converted station will provide renewable electricity generation from a sustainable fuel recognized as beneficial to climate change mitigation. Atikokan will be the largest 100 per cent biomass-fuelled power plant in North America and will generate renewable, dispatchable, peak capacity power.

# EXCELLENCE IN SAFETY PERFORMANCE

OPG has been recognized by the Canadian Electricity Association (CEA) for its Safety Excellence in 2012. The CEA's Occupational Health and Safety Awards celebrate excellence in employee safety and recognize members who have achieved top-quartile health and safety performance. OPG also received two 2013 CEA Lifesaving Awards, recognizing the lifesaving efforts of an employee at the Pickering Nuclear Generating Station and a group of employees at the Otto Holden Generating Station.



# **Nuclear Performance**

"The Pickering licence renewal was a significant accomplishment, recognizing high safety performance standards and a tremendous amount of work completed by many employees over the past year." Glenn Jager, Chief Nuclear Officer, OPG

## **STRONG SAFETY MARKS FOR CANADIAN NUCLEAR POWER PLANTS**

The Canadian Nuclear Safety Commission's annual safety assessment shows OPG's nuclear facilities continue to operate safely. Pickering received an overall integrated rating of "satisfactory" similar to other Canadian nuclear power plants. Darlington received a rating of "fully satisfactory" for the fourth year in a row. Ratings for both Pickering and Darlington were unchanged from last year, demonstrating sustained performance. The ratings underscore the commitment by station staff to maintain high standards of safety.

### **PICKERING NUCLEAR LICENCE RENEWED**

In August, Pickering Nuclear received a five-year, single-site operating licence from the Canadian Nuclear Safety Commission. Receiving a five-year licence as a combined station marks a first for Pickering, which previously operated as two stations (Pickering A and B). Pickering Nuclear has operated safely for more than 40 years and has significantly contributed to meeting Ontario's energy needs. In 2012, the station produced 13 per cent of the electricity consumed in Ontario and has produced more than 700 terawatt-hours over its lifetime. At the rate of current consumption, that's enough electricity to power the entire province of Ontario for more than four years.



## SUCCESSFUL PEER REVIEW FOR OPG NUCLEAR

This summer, Pickering Nuclear received its best review results from an international team of industry peers. Members of the peer review team recognized the significant performance improvements made at the station since its previous evaluation. They were also impressed with Pickering employees, noting their obvious care for the plant, openness and willingness to help out, and an appetite to learn and improve. OPG relies on both internal and external audits and assessments to provide insight into best practices. These measures help maximize safety, reliability, and enhance the company's ability to see itself more objectively.



# **Nuclear Safety and Performance**

"OPG is one of those exceptional clients who approaches projects collaboratively and openly, with a joint commitment to safety, cost efficiency and schedule. OPG is to be commended for developing a thoughtful and prudent commercial approach to the Darlington Refurbishment project, establishing a solid foundation for success and trailblazing the way for similar large-scale projects. Our best people want to work with such partners."

John M. Beck , Chairman and CEO, Aecon Group Inc.





#### **INNOVATIVE APPROACH TO REFURBISHMENT PREPARATIONS**

This past fall, with the help of two 15-tonne cranes, key components were lifted into the mock-up reactor within the Darlington Energy Complex (DEC) Training Facility. The cranes will help to bring tooling, materials and equipment onto the retube work platform. The DEC mock-up reactor is designed to accurately represent the size and space within the real reactor vaults and identify all interferences that will be encountered during the actual retube and feeder replacement work on the Darlington Refurbishment project. OPG and its partners have taken this innovative approach to nuclear training to ensure certainty on project schedule and cost.

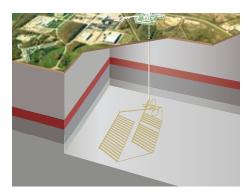
### PICKERING EMPLOYEES SURPASS 14 MILLION HOURS OF SAFE WORK

Pickering Nuclear employees have surpassed 14 million hours worked without a lost time accident. This is the best ever safety record at the station, extending over a period of more than two years.



### NUCLEAR WASTE STORAGE HEARINGS CONCLUDE >

This past fall, the Deep Geologic Repository (DGR) Joint Review Panel (JRP) adjourned, having completed its planned public hearings for OPG's proposed DGR at the Bruce Nuclear site in Kincardine. The proposed DGR would safely and permanently isolate and contain low and intermediate level nuclear waste. It would be located 680 metres below ground, well below the water table and in stable rock formations over 450 million years old. The JRP will prepare a report for the Minister of Environment this year, with a licence decision expected in 2015. To find out more about the project, please visit **www.opgdgr.com**.





# **Environmental Performance**

"Our ongoing partnership with OPG Biodiversity has significantly allowed Rouge Park to grow its Fall Hikes Series, as well as provide opportunities for thousands of visitors to Rouge Park to connect with nature and discover the fascinating features that make the area so special."

Michelle Holmes, Manager, Visitor Experience, Rouge Park



### NANTICOKE WETLAND ENHANCES WILDLIFE HABITAT

In an effort to expand and diversify area wildlife habitat, Nanticoke Generating Station has created a five-acre wetland on its site. Within this variety of habitats, the Nanticoke marsh provides a critical component that attracts a wide diversity of wildlife. Since the project's completion, the area has been rapidly colonized by waterfowl, wetland birds, amphibians and turtles. OPG's efforts were recognized by Nanticoke's nomination in 2013 for the Wildlife Habitat Council's prestigious "Corporate Habitat of the Year" award. Nanticoke was also a finalist in the "Wings over Wetlands" and "Prairies for Tomorrow" award categories.



#### **• KETTLE CREEK CELEBRATES THE MILLIONTH TREE**

For more than 12 years, OPG and Kettle Creek Conservation Authority, in St. Thomas, Ontario, have partnered to plant native trees and shrubs in the Authority's watershed. OPG's support has resulted in the reforestation of approximately 364 hectares of land. This past summer, OPG helped celebrate the planting of Kettle Creek's One-Millionth Tree at the Dan Patterson Conservation Area. Since 2000, OPG, through its conservation partners, has planted more than 5 million native trees and shrubs on 2,500 hectares of land. The success of OPG's biodiversity restoration program can be attributed to the efforts of its front-line partners, such as the Kettle Creek Conservation Authority.

#### **PARTNERING TO HELP THE BLANDING'S TURTLE**

OPG is pleased to be partnering with Earth Rangers' Bring Back the Wild Blanding's turtle project for the 2013-2014 school year. Staff at Earth Rangers teach students to get involved in solving environmental issues. By combining kids' passion for animals and the environment with their love of entertainment, Earth Rangers has inspired millions of youngsters to become environmental stewards. The Wild Blanding's Turtle project helps educate young people about the ways in which they can help preserve the habitat of the Blanding's turtle. To learn more about this educational program visit **OPGbiodiversity.ca** or **earthrangers.com**.



# **OPG In Your Community**

"Employees at OPG and Darlington Nuclear, show a clear understanding and commitment to earning the 'social licence' that is so important in operating a nuclear generation station in our community. OPG's recognized operational excellence at the station as well as genuine engagement with the municipality establishes Darlington Nuclear as one of Clarington's most valued corporate citizens."

Mayor Adrian Foster, Municipality of Clarington





#### **STUDENTS LEARN LIFESAVING SKILLS**

In Durham Region, OPG has partnered with the Advanced Coronary Treatment (ACT) High School CPR and Defibrillator Training Program. The program's launch in Durham (pictured above) drew representatives from ACT, OPG and other partner organizations -- as well as students from the Donald A. Wilson Secondary School. Under the program, students are trained to recognize and respond to developing medical emergencies and are given the skills to use an automated external defibrillator (AED). To date, 25 Durham high schools have implemented the ACT CPR and Defibrillator Training Program – for a total of 7,000 students trained in CPR and defibrillator use. In addition to Durham, OPG has also partnered with ACT to deliver the program at several of its other sites. The program will donate mannequins and defibrillator training units, and participating schools will receive an AED for onsite emergencies.





### **OPG POWERS THE WINTER FESTIVAL OF LIGHTS**

The OPG Winter Festival of Lights in Niagara Falls is one of Niagara Region's pinnacle events and recognized as one of the Top 100 Events in North America. The festival which runs from November to January each year, attracts about 1.5 million people and features more than 120 animated displays and millions of sparkling lights within the Niagara Parks Winter Wonderland and City tourist districts. For more information visit: **www.wfol.com** 

# FOSTERING INNOVATION IN YOUTH

As a Founding Partner of FIRST Robotics Canada and a major engineering, science and technologybased company, OPG provides support to Ontario robotics teams and helps foster young people's interest in science, technology, engineering and math. Through the annual FIRST programs, students win recognition and gain self confidence building and competing customized robots. Kaley Bibic from Kingston Ontario's W.A.F.F.L.E.S. Team was one of only 10 students at the 2013 FIRST world championship to be named as a Dean's List winner for her outstanding accomplishments and commitment to FIRST. Kaley is pictured here at the awards ceremony with entertainer and FIRST supporter, will.i.am. To learn more visit firstroboticscanada.org or usfirst.org.





# **Financial and Operational Highlights**

"OPG will save an estimated \$1 billion over six years (2011 - 2016) by reducing the overall headcount, from ongoing operations, by 2,330 or 20 percent of 2011 levels. The departure of 1,500 people since January 2011 has already saved \$275 million."

Tom Mitchell, OPG President and CEO

### DELIVERING VALUE AND PROTECTING ONTARIO'S INFRASTRUCTURE INVESTMENT

Producing more than half of Ontario's power, OPG's generating facilities provide considerable value to ratepayers. Equally important, OPG is operating, maintaining and investing in these assets to get reliable generation today and for the future.

#### OUR INVESTMENT IN ONTARIO'S ELECTRICITY INFRASTRUCTURE INCLUDES:

#### Maintaining and operating our nuclear generation units:

- Operating our Darlington plant, which is consistently among the best operating CANDU plants in the world and provides about 18 per cent of Ontario's electricity;
- Planning for a mid-life refurbishment of Darlington to produce another 30 years of power.

#### Revitalizing and developing OPG's heritage hydroelectric plants:

- Expanding and refurbishing hydro stations on the Lower Mattagami River in partnership with the Moose Cree First Nation; and
- Developing the Niagara Tunnel, now in service and producing clean, renewable energy today and for the next 100 years.

**CLEAN AND SAFE**. OPG's nuclear and hydro plants are the backbone of Ontario's virtually emission-free electricity system. These valuable assets annually produce over 80 TWh of electricity – representing more than half the electricity generated in Ontario.

**RESPONSIBLE STEWARDSHIP**. OPG's responsibilities go beyond generating electricity. We also ensure financial and environmental impacts from OPG's activities (and activities by private sector companies operating at our facilities), are well managed. Investments today pay for the future storage of nuclear waste and station decommissioning at all three Ontario nuclear stations (Darlington, Pickering and Bruce) so as not to burden future generations.

**OPG'S RATES - REGULATED AND VALIDATED.** In September 2013, OPG filed a rate application with the Ontario Energy Board (OEB), which will be considered at a public hearing in the spring of 2014. The amount OPG receives is decided by the OEB after reviewing input from OPG as well as from many other stakeholders.

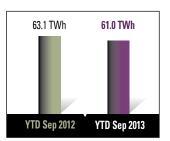
If OPG were granted its full request, it would mean about a four per cent increase on the total consumer bill. OPG continues to generate electricity at a price that keeps rates lower than they would be otherwise.

OPG has not had a base-rate increase since April 2008. In 2014, the company is requesting its first base-rate increase in six years to allow us to maximize the benefit to ratepayers from the original capital investment. This provides the best value for Ontarians -- not only for today, but for years to come.

#### NET INCOME



#### ELECTRICITY PRODUCTION



#### **GENERATION PERFORMANCE**

FUEL TYPE %	YTD Sep 2012	YTD Sep 2013
HYDRO Availability	91.3	91.5
THERMAL Start Guarantee Rate	97.8	98.3
NUCLEAR Unit Capability Darlington Pickering	91.2 82.1	85.7 73.5

#### Where to go for more information about OPG

General information, including press releases, speeches and financial, environmental and safety information: **www.opg.com** Follow us on Twitter@**ontariopowergen** 



