

INSIDE:
SPOTLIGHT ON
BIODIVERSITY



VOLUME 5 ISSUE 2

AT WORK ACROSS ONTARIO

OPG PERFORMANCE REPORT



GENERATING
NEARLY TWO THIRDS
OF ONTARIO'S
ELECTRICITY

Adding Value to Ontario's Energy System



"THE MOOSE CREE FIRST NATION'S PARTNERSHIP WITH ONTARIO POWER GENERATION ON THE LOWER MATTAGAMI PROJECT IS THE WAY OF THE FUTURE."

Moose Cree First Nation Chief, Norman Hardisty

Moose Cree First Nation Chief, Norman Hardisty, Ontario Energy Minister, Brad Duguid and OPG President and CEO, Tom Mitchell.

BECK STATION GETS FACELIFT



OPG is restoring the exterior of the Sir Adam Beck I generating station powerhouse. The expected completion date of the \$6.6 million project is late 2010. The project's impressive scaffolding is 30 metres high and about 250 metres long.

LOWER MATTAGAMI PROJECT LAUNCHED



On August 26, Ontario Energy Minister Brad Duguid visited OPG's Lower Mattagami hydroelectric redevelopment project in Northeast Ontario. At its peak, the \$2.6 billion project will create about 800 jobs and will also provide an additional 438 megawatts (MW) of capacity for Ontario.

NIAGARA TUNNEL'S PROGRESS



By early October, the Tunnel Boring Machine had advanced over 8,000 meters, or nearly 80 per cent, of the Niagara Tunnel's 10.2 kilometer length. The Tunnel is expected to be in service by December 2013. The \$1.6 billion project, when completed, will provide clean, renewable electricity for nearly 100 years.

PICKERING B UNIT 8 SUCCESSFULLY RETURNED TO SERVICE



Following the Spring Pickering Vacuum Building Outage (VBO), Pickering Unit 8 stayed off line as part of a major planned maintenance outage. On July 6, the unit was successfully returned to service. The unit is expected to run reliably until its next planned outage.

Around Ontario



"THIS NEW FACILITY IS AN IMPORTANT ADDITION TO THE CITY'S MIX OF CULTURAL AND EDUCATIONAL AMENITIES. [IT] IS SURE TO BE POPULAR WITH BOTH RESIDENTS AND VISITORS ALIKE."

Bob Kilger, Mayor of Cornwall

OPG's St. Lawrence Power Development Visitor Centre near the company's Robert H. Saunders generating station in Cornwall opened in September 2010.

A LANDMARK NUCLEAR PROJECT

Completed safely, ahead of schedule and under its \$350 million budget, OPG's Pickering Safe Storage Project was the first time a multi-unit station permanently removed two commercial CANDU reactors from service while continuing to produce electricity. The experience gained from this successful execution strengthens OPG's ability to undertake new projects such as the refurbishment of Darlington nuclear.



OPG staff work on the pressure relief duct bulkhead as part of the Safe Storage Project.

PICKERING A LICENCE RENEWED

On June 29, OPG's Pickering A nuclear generating station received a three-year operating licence extension from the Canadian Nuclear Safety Commission. The CNSC's decision reflects its intent to harmonize the licencing terms of Pickering A and B stations over the next decade. In achieving the licence renewal, Pickering A successfully demonstrated compliance with a number of new standards for nuclear facilities in Canada.

BIOMASS MILESTONE FOR ATIKOKAN

On August 26, the Ontario Government announced the negotiation of a power purchase contract for electricity produced from biomass at OPG's Atikokan generating

station in Northwest Ontario. If the project goes forward, it will protect jobs and help stimulate growth of the biomass industry in Northern Ontario. OPG is also assessing converting units at its other coal-fired stations to run on natural gas with biomass co-firing.



Atikokan Mayor Dennis Brown, Ontario MPP Bill Mauro and OPG staff.

SUCCESSFUL REHAB PROJECT AT ABITIBI

A planned, tailrace pier rehab project at OPG's Abitibi hydro station in Northeast Ontario was completed safely, on budget and seven days ahead of schedule in early September. The project involved shutting down all five units at the 350 MW station. This was the most significant hydroelectric outage undertaken by OPG in 2010. The \$9.3 million project was completed under budget at \$8.4 million and employed 84 people - including 12 First Nations members -- for its duration.



Members of the tailrace pier rehab project team. The tailrace allows water that has powered the turbines to leave the station.

Supporting Habitat Preservation...

OPG CONTINUES TO DEMONSTRATE LEADERSHIP IN BIODIVERSITY

HALDIMAND COUNTY/NANTICOKE

In June, OPG's Nanticoke Thermal generating station partnered with Ontario's Ministry of Natural Resources (MNR) to plant 60 acres of tallgrass prairie as part of the station's biodiversity program and commitment to habitat enhancement. The tallgrass prairie is one of the most endangered ecosystems in North America.



MNR staff planting tallgrass prairie at OPG's Nanticoke station.

DURHAM REGION/PICKERING

Installed in the Fall of 2009, the fish protection net at OPG's Pickering nuclear station has helped prevent fish deaths by reducing the number of fish entering the station's intake channel. The net is part of a comprehensive environmental program that includes fish habitat and wetland restoration work at other Durham locales – like Duffins Creek Marsh, Hydro Marsh and Frenchman's Bay.



An OPG diver helps install OPG's protective fish net.

"OPG HAS DEMONSTRATED EXCEPTIONAL CORPORATE LEADERSHIP BY INVESTING IN SIGNIFICANT HABITAT PROTECTION AND RESTORATION EFFORTS IN THE COMMUNITIES WHERE THEY OPERATE AND IN STRATEGIC LOCATIONS ACROSS SOUTHERN ONTARIO..."

Paul Gagnon, Lands and Waters Supervisor,
Long Point Region Conservation Authority

Brian Craig, Director, Long Point World
Biosphere Reserve Foundation

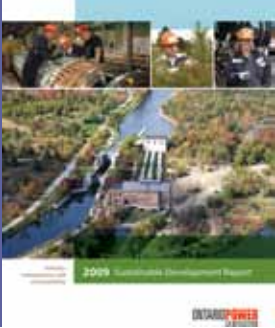
TORONTO

Throughout the month of July, OPG partnered with the non-profit organization, Earth Rangers, to present its *Bring Back the Wild* show at Ontario Place. More than 5,200 visitors learned about habitat protection. *OPGBiodiversity* partners with a number of groups to help people of all ages get closer to nature.



"Echo," the barn owl, was one of many animals in the spotlight at Ontario Place this summer as part of OPG's "Bring Back the Wild" show, in partnership with Earth Rangers.

...throughout Ontario



OPG released its 11th annual Sustainable Development Report in June. It can be accessed at www.opg.com.

"THE GOAL OF OPG'S BIODIVERSITY POLICY... IS TO DEMONSTRATE THAT WE CAN CO-EXIST WITH NATURE."

OPG President and CEO, Tom Mitchell

OPG BIODIVERSITY 2010



OPG partners with six respected biodiversity groups to help enhance Ontario habitats.

SOUTHWESTERN ONTARIO

For the past five years, OPG has provided continued support for reforestation of the Luther Marsh Wildlife Management Area. In 2010, OPG helped plant over 55,000 trees in the region, and over the past four years, OPG support led to the planting of more than 200,000 trees – helping to create 126 hectares of new forest areas. Since 2000, OPG has been responsible for planting more than 4.5 million native trees and shrubs across the province.

NORTHWESTERN ONTARIO/THUNDER BAY

In June, OPG joined the Lakehead Region Conservation Authority (LRCA) to enhance the Mission Island Marsh near the Thunder Bay GS. OPG contributed 14 new trees to the marsh and provided support for a lookout platform.



Mission Island Marsh.

OTTAWA/ST. LAWRENCE REGION

The St. Lawrence River Institute of Environmental Sciences (SLRIES) Eco Friends Summer Camp at the Cooper Marsh Conservation Area attracts young people interested in the natural environment, offering them a fun, hands-on experience. OPG has supported this important summer program for several years as part of its biodiversity commitment.



Participants in the SLRIES Eco Friends Summer Camp.

Operating Safely for All Ontarians

"THE HIGHEST LEVEL OF THE ZEROQUEST® PROGRAM IS SUSTAINABILITY (PLATINUM) LEVEL. FOR THE FIRST TIME SINCE ITS CREATION, A FIRM HAS ACHIEVED THIS AWARD. THAT FIRM IS ONTARIO POWER GENERATION."

IHSA, *Health and Safety News*, July 2010

OPG RECEIVES MAJOR SAFETY AWARD

In June, OPG received the ZeroQuest Platinum Award from the Infrastructure Health and Safety Association (IHSA). The award recognized OPG's efforts to improve and sustain its safety performance, strong safety culture and safety management systems over the last five years. The award is the highest recognition a company can achieve in the ZeroQuest program, and OPG is the first company in Ontario to receive it.



The IHSA Award for safety was given to OPG at a special ceremony in Toronto.

DARLINGTON ACHIEVES SAFETY MILESTONE

In May, OPG's Darlington nuclear station achieved seven million hours worked without a lost time injury (LTI). By October, Darlington surpassed that number



Darlington nuclear station has an excellent workplace safety record.

by attaining eight million hours without an LTI. Many other OPG sites have also achieved impressive safety milestones so far this year, confirming a strong dedication to safe work practices and a commitment to achieving a corporate goal of zero workplace injuries.

OPG CONTINUES WATER SAFETY PROGRAM

In the summer, OPG once again launched its Public Water Safety program to educate Ontarians about the dangers of getting too close to hydroelectric stations and dams. Under this program, OPG has developed water safety information appropriate to each season in the year. In addition, popular water safety TV ads aired with subtitles in French, Italian, Portuguese, Hindi, Chinese, Russian and Spanish. OPG has also partnered with The Lifesaving Society of Canada to provide boating safety tips in 33 languages. For more information on water safety, including brochures and a free DVD, go to www.opg.com/safety/nsafe/watersafe.asp.

STAY CLEAR STAY SAFE

Recreational activities near hydro stations and dams are dangerous

For your own safety obey all warnings at hydroelectric stations, dams and their surrounding shorelines and waterways. These facilities operate year-round, affecting water flows. Water that looks safe can become treacherous in minutes and ice forming near, or even several kilometres away, can become dangerous. Signs, fences, buoys and safety booms are there to warn you, but if you see water levels changing, move a safe distance away immediately. Be advised that people trespassing on OPG property may face charges, with fines of up to \$2,000.



**ONTARIO POWER
GENERATION**

Visit opg.com to receive your free water safety DVD or brochure.

Our People Make a Difference



"A DEDICATED SERVANT OF THE PEOPLE,
AN ACCOMPLISHED BUSINESS LEADER AND
A CHAMPION OF COMMUNITY BETTERMENT."

Ontario Premier Dalton McGuinty,
in letter congratulating Jake Epp

JAKE EPP RECEIVES ORDER OF CANADA

On June 30, OPG Chairman Jake Epp (above) was named an Officer of the Order of Canada. Mr. Epp was recognized for his public service as a federal Cabinet Minister, for his business leadership and for his many years of charitable work.

NIAGARA CHARITY CAMPAIGN

During the year, members of OPG's Niagara Plant Group (NPG) Charity Committee worked to raise enough money to purchase a Portable Vital Sign Monitor for the new Niagara Health System hospital under construction in St. Catharines.



OPG Clean Sweep volunteers – making a difference in seniors' lives.



NPG Charity Campaign Committee

EMPOWERING WOMEN TO SUCCEED

In October, OPG Treasurer and Vice President Colleen Sidford, was recognized by Catalyst Canada for her efforts in promoting the advancement of women. One of three inaugural award recipients, Colleen is the founder of the emPOWERed Women program at OPG, a leadership and mentoring program to help women employees with their career development. To date, 240 women from across OPG have participated in the program.



Colleen Sidford

"CLEAN SWEEP" BRIGHTENS SENIORS' LIVES

Twice a year, OPG employee-volunteers offer a unique service to local seniors in Durham Region. It's called Operation Clean Sweep – an OPG community initiative that provides yard work and clean up services free-of-charge to seniors living in the Pickering and Ajax communities. To date, 58 seniors' homes have benefited from the program, which has attracted over 55 young volunteers – primarily new engineering graduates and their family and friends.

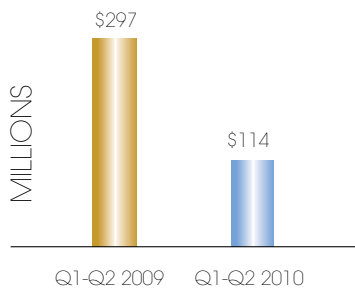
Financial and Operating Performance Highlights



"ELECTRICITY CONSUMERS PAY LESS FOR POWER FROM OPG THAN THEY DO FOR POWER FROM ANY OTHER GENERATOR."

Tom Mitchell, August 20, 2010

OPG'S MID-YEAR NET INCOME



Two primary factors contributed to OPG's reduced earnings during the first half of the year compared to the same period in 2009:

- a decrease in gross margin due to declining hydro-electric production caused by lower water levels; and
- lower returns on OPG's Nuclear Funds due to a decline in valuation levels of global financial markets.

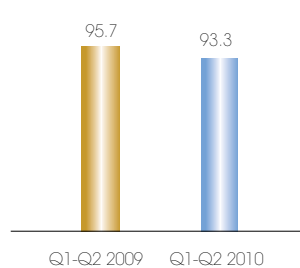
OPEN AND TRANSPARENT

The rates OPG receives for electricity produced by its regulated nuclear and large hydroelectric stations have not changed since April 2008. Electricity from these stations represents 70 per cent of OPG's generation.

OPG is the only electricity generating company in Ontario whose rates are set through an open and transparent process. Under this process, OPG's costs and operations are scrutinized by the Ontario Energy Board and a wide range of intervenors.

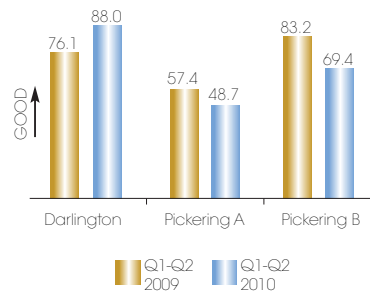
This process benefits all Ontarians, to whom OPG is ultimately accountable.

HYDRO AVAILABILITY (%)



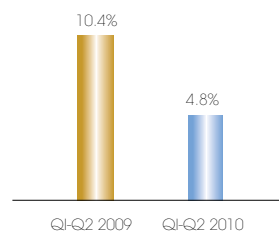
Hydroelectric availability was lower for the first six months of 2010 compared to the first half of 2009 primarily due to the advancement of some planned outages at stations in Northwest Ontario and the Ottawa/St. Lawrence Plant Group. Despite this decline, the availability of OPG's hydroelectric stations remained high, reflecting their continued strong performance.

NUCLEAR UNIT CAPABILITY FACTOR (%)



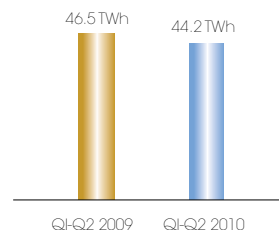
Compared to the same period in 2009, Darlington's capability factor improved in the first half of 2010 primarily because all four units were shut down in Q2 2009 for a planned Vacuum Building Outage (VBO). Capability factors at Pickering A and B decreased due to the Pickering VBO which shut down all six of the station's operating units this past spring.

THERMAL FORCED OUTAGE RATE (%)



The reliability of OPG's thermal generating stations improved during the first six months of 2010 compared to 2009, primarily as a result of fewer unplanned outages at the Nanticoke and Lambton stations.

OPG ELECTRICITY PRODUCTION



OPG's electricity production fell by more than 2 TWh in Q1-Q2 2010 compared to Q1-Q2 2009. This was primarily the result of lower unregulated hydroelectric production caused by lower water flows.

