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On The Cover: A group of Atlantic salmon
(© Michel Roggo/roggo.ch)
Growing up in Norwood, Ont., a community of 1,200 people east of Peterborough, OPG’s new President and CEO learned quickly the values of hard work, teamwork and community.

For Ken Hartwick and his five siblings, it was their parents’ dairy and beef farms that served as the classroom for these important life lessons.

“I learned how to work really hard, which is a good trait to have,” says Hartwick. “I loved growing up on a farm but I wanted to challenge myself in other ways.”

With the lessons from the farm and an Honours Bachelor’s degree in Business Administration from Trent University, Hartwick charted a 34-year career in the finance and energy sectors that saw him serve as Chief Financial Officer (CFO) at Hydro One and Wellspring Financial, and as CEO of Just Energy Group.

In 2016, the Chartered Professional Accountant joined OPG, serving as CFO and Senior Vice-President of Finance. Under his leadership, OPG launched Canada’s first utility green bond and expanded to the U.S. with the acquisition of Eagle Creek Renewable Energy.

On April 1, Hartwick will take the reins as President and CEO of OPG from Jeff Lyash, who leaves the company on March 31 to take on another role in the U.S. Leading the company is a daunting task, he says, but it’s a task made easier by the solid work of his predecessor and OPG’s management team.

“I have an immense amount of respect for what Jeff has done for OPG in building relations with our Shareholder and the community,” he says. “My job is to build on what he has done and reaffirm our role as a leader in the sector.”

Hartwick’s main priority will be to keep the company’s momentum going. This includes a clear focus on the Darlington Refurbishment project, broadening the Renewable Generation business, improving the company’s operational, financial and safety performance, and growing the company. All of this will be done with a continued push toward building a diverse and inclusive workplace.

The incoming President and CEO says he will rely heavily on the company’s leadership team and OPG’s more than 9,300 employees to get the job done. “I don’t subscribe to the superstar theory. We have a great team and a great group of employees,” says Hartwick, who aims to be an accessible and open leader.

Outside of OPG, Hartwick has been married for 32 years to wife Linda and has three adult children. Together, they spend time taking family trips, and he’s an avid golfer in the summer.

This spring, the new CEO will be meeting with employees and touring OPG’s generating stations across the province, many of which are located in small communities similar to the one Hartwick grew up in.

“It definitely gives you a greater appreciation of the communities and towns in which we operate,” he says.
MAJOR MILESTONES IN SIGHT FOR THE DARLINGTON REFURBISHMENT

More than two years after OPG and its project partners began the Darlington Refurbishment project, Unit 2 remains on track for completion early next year.

Since the reactor’s successful disassembly last spring, the project team has been putting the unit back together through a complex series of work that includes the installation of hundreds of calandria tubes, fuel channels and feeder tubes.

This reassembly phase is scheduled for completion this spring. The focus will then shift to returning the unit to commercial service and full power operation by February 2020. At the same time, OPG is making the final preparations for the start of Unit 3’s refurbishment.

“We’ve entered a critical phase on the project,” said Mike Allen, Senior Vice President of Nuclear Refurbishment. “OPG and our project partners continue to work as an integrated team to meet our commitments on Unit 2 and our other three reactors at Darlington Nuclear Generating Station.”

Also this spring, OPG will receive a special delivery, on time for another major milestone.

A 350-tonne generator stator, a component that converts a rotating magnetic field into electric current, is on its way by train and ship from Poland where it was manufactured by General Electric (GE), one of OPG’s project partners.

The massive part will be installed in the Unit 3 reactor.

“Working with project partners with key industry expertise is vital to the success of OPG’s Darlington Refurbishment project,” said Dietmar Reiner, Senior Vice President of Enterprise Projects. “GE’s delivery of the stator this spring will mark the successful completion of another milestone on the project.”

The Darlington Refurbishment project is a 10-year undertaking that will generate at least 30 more years of clean, low-cost and reliable energy for Ontario.
NEW RADAR SYSTEM KEEPS A CLOSE EYE ON NIAGARA RIVER

On the Niagara River, OPG and its cross-border counterpart, the New York Power Authority (NYPA), have invested in a new radar system that keeps an eye out for vessels venturing into dangerous waters near Niagara Falls.

Developed by Niagara Falls-based Accipiter Radar, the new public safety detection and alerting system has been in use since November 2018 at the International Niagara Control Works (INCW), a 472-metre-long structure in the middle of the Niagara River that diverts water for power generation and the Falls.

Using a steerable high-powered acoustic device equipped with a searchlight and a high resolution camera, operators at the INCW are now monitoring the river day and night for vessels that inadvertently or deliberately approach restricted or risky areas.

Vessels in imminent danger will be confronted with an audible alert to turn back.

The radar is currently tracking watercraft on the Chippawa-Grass Island Pool between the INCW and the North Grand Island Bridge as well as between the INCW and the Horseshoe Falls.

“Boaters who fail to stay clear of marked exclusion zones are exposing themselves to a real risk due to the high turbulence and strong currents which can be encountered near the International Control Dam,” said Mike Martelli, OPG President of Renewable Generation.

The OPG-operated INCW diverts huge amounts of water on the Niagara River, dispatching it between OPG’s Sir Adam Beck generating stations and NYPA’s Robert Moses Niagara station in accordance with the 1950 Niagara Treaty.

As part of this accord, the 18-gate dam also ensures enough water is diverted to Niagara Falls during tourist season.

While this new tool will help ensure the public’s safety, boaters are held responsible for their own navigation safety and must obey all warning signs and buoys, Martelli said.
It took an experience after high school for Hunter Taylor to learn never to second-guess herself or her passions.

During this time, the young professional, who is now a Hydroelectric Operating Technician Trainee (HOTT) with OPG, began to take an interest in a technical career. But, discouraged by one of her high school teachers, she instead entered a non-technical program at Algonquin College.

After a year, she listened to her true calling and transferred into the Electrical Engineering Technician program at Loyalist College in Belleville, which offered both in-class and hands-on practical training.

“Never let anyone tell you what you are capable of or set limits for yourself,” Taylor said. “It’s important to trust yourself and follow any passion you have.”

Taylor began her OPG career nearly two years ago at the Pickering Nuclear Generating Station, where as a Radiation Protection Technician, she worked on unit outages, daily inspections and special projects.

Taylor is now busy learning about what it takes to be a hydro operator in the HOTT program. The two-year program includes one-week training sessions every three months, followed by an exam. As a trainee, she is also learning on the job by touring OPG’s numerous hydroelectric stations and becoming familiar with region-specific equipment and processes.

Being new to the hydroelectric side of the business, Taylor naturally has lots of questions, but the experienced operators around her are always happy to answer.

“It’s helped me become a better operator,” she said. “I have people I can rely on to help me and have my back.”

Outside of work, Taylor is a big advocate for women in the energy sector. She also works to give back to the community, having volunteered at her local humane shelter and at Habitat for Humanity’s “Women Build” event.

**OUR PEOPLE: HUNTER TAYLOR**
OPG joins EV100 Group, pledges commitment to electric fleet

OPG wants to help make electric transport the new normal by 2030.

The company recently became the first Canadian member to join EV100, a campaign launched by the Climate Group, an international non-profit devoted to fighting climate change.

The EV100 initiative currently consists of 31 companies – including HP and Ikea – that have publicly committed to accelerating the transition to electric vehicles (EVs) and cutting millions of tons of greenhouse gas (GHG) emissions per year.

To reach its EV100 target, OPG will transition its fleet of over 400 vehicles, where technically and economically feasible, by 2030. The company is also installing charging points across its sites.

“The goal is that by 2030, most of our vehicle fleet will be converted to electric, with the necessary charging infrastructure at our facilities and possibly across Ontario,” said Tyler Seed, Program Coordinator for Electrification Development at OPG. “The other part of the effort is to raise awareness among OPG employees so that they will consider an EV.”

In Ontario, transportation accounts for approximately 30 per cent of GHG emissions. Electric transport offers a major solution in cutting carbon emissions as well as curbing transport related air and noise pollution.

Currently, OPG has 29 EVs in its fleet, most of them hybrids. In addition, 52 charging ports have been installed across OPG sites, and that number continues to grow.

In 2018, OPG’s electric fleet saved 3,180 litres of gasoline, travelled more than 53,000 kilometres and saved more than 7,000 kilograms in GHG emissions, or the equivalent of 180 trees growing for 10 years. Over the same period, OPG’s workplace chargers displaced over 13,000 litres of gasoline and saved over 30,000 kilograms of GHG emissions.

In 2019, OPG is planning to test electric boats as well as electric pick-up trucks, and continue to explore options to further electrify its fleet. It’s all part of OPG’s broader effort to help support the electrification of Ontario’s transportation sector with clean, reliable power.
Dozens of elementary students congregated at the Darlington Information Centre in February to meet a batch of tiny Atlantic salmon eggs they will study and nurture.

The Grades 5 and 6 students from St. Joseph and St. Michael elementary schools in Cobourg are currently tracking the progress of the 100 eggs as they hatch and grow into small fry. On April 23, the students will work with the Ganaraska Region Conservation Authority to clean up Cobourg Creek, where they will release the little hatchlings in late spring.

The all-new hatchery at the Darlington site is part of the Classroom Hatchery Education program run by the Ontario Federation of Anglers and Hunters (OFAH), which supports the Lake Ontario Atlantic Salmon Restoration Program, also known as Bring Back the Salmon. OPG is the lead sponsor of Bring Back the Salmon, a partnership that includes OFAH, the Ontario Ministry of Natural Resources and Forestry, and other organizations.

For the past eight years, OPG and OFAH have also supported a hatchery at Pickering Nuclear. Along with monitoring the eggs, the program emphasizes hands-on learning about habitat restoration and responsible stewardship.

“These students are the future, and they will be looking after the creek and helping to keep the Atlantic salmon population healthy in Lake Ontario for many years to come,” said Kathryn Peiman, Atlantic Salmon Restoration Program Coordinator with OFAH.

Launched in 2006, Bring Back the Salmon seeks to restore a self-sustaining Atlantic salmon population to Lake Ontario and its streams. As lead sponsor of the program since 2011, OPG has helped stock more than seven million Atlantic salmon in Lake Ontario and four target tributaries (Credit River, Duffins Creek, Cobourg Creek, and Ganaraska River).

FAST FACTS

- Atlantic salmon is a cold-water fish native to Ontario
- The fish settled in Lake Ontario about 12,000 years ago
- They were declared locally extinct in 1896 due to human activities
They came, they listened, they left inspired.

Hundreds of high school students from the Ottawa and Cornwall areas recently attended OPG’s first Women in Science conference on March 6 and 7 at the NAV Centre in Cornwall, where OPG operates the R.H. Saunders Generating Station.

Sponsored and hosted by OPG, and in partnership with many community groups, the inaugural conference featured inspiring talks and sessions from OPG employees and remarkable women leading professional careers in science within the community.

Almost 280 female Grade 9 and 10 students, aged 14 to 15, from local area high schools listened to an inspiring opening video message from Her Excellency, the Right Honorable Governor General Julie Payette, and talks from keynote speakers Gina Cody and Kelly Bergeron. They also took part in breakout sessions on environmental science, health science, engineering and trades hosted by speakers from community partners like the Cornwall Community Hospital, St. Lawrence College, the River Institute and the Mohawk community.

“This was a great opportunity to expose young women to a variety of careers in science, and inspire them to confidently pursue studies in science, technology and other disciplines,” said Jessica Polak, Regional VP of OPG’s Niagara Operations and co-chair of the event.

Cody, who spoke on day one of the conference, became the first woman in Concordia University history to earn a PhD in building engineering in 1989. In 2018, Concordia University received a $15 million donation from Cody and renamed its School of Engineering and Computer Science after her, becoming the first university in Canada with an engineering faculty named after a women.

Bergeron, a creative digital entrepreneur who teaches Eastern Ontario youth about digital literacy, addressed the students on the second day of the conference.

“Perfection is not a great quality. Don’t try to be perfect. No one is perfect, and it will stop you from taking chances,” Cody told students. “Don’t take what you have for granted. Take your time, experiment and learn one step at a time. Then go build a better future. I dare you. I know you can do it, as I did.”
INDIGENOUS CARPENTER’S DREAM LEADS TO THE DARLINGTON REFURB

Jenelle LaFonte was headed for a career in accounting until she decided to follow a dream that led to working on OPG’s Darlington Refurbishment, Canada’s largest clean energy project.

“After two years in an accounting program, I realized I would much rather be building my house than doing that,” said LaFonte, a member of Hiawatha First Nation. “So I entered the carpentry program at Fleming.”

During her time at Fleming College, LaFonte completed 60 hours of volunteer service with Habitat for Humanity, building affordable housing across the Peterborough and Kawartha Lakes regions. Noticing her skill in carpentry, the charitable organization hired her on to continue building homes.

More than a year later, Kagita Mikam Aboriginal Employment and Training Agency, a non-profit organization that had supported LaFonte during a semester of her education, notified LaFonte about Indigenous Opportunities in Nuclear (ION) – OPG’s job placement program targeting members of Indigenous communities.

“ION was really responsive to any questions I had,” said LaFonte, now a member of the Carpenters’ Union Local 397. “They were a big help guiding me through the process.”

Having successfully completed the program, LaFonte is now working at Black and McDonald, assembling scaffolding at Darlington Nuclear Generation Station in support of the Darlington Refurbishment.

“Everyone is really welcoming and willing to teach – it’s been a great experience.”

LaFonte will continue her contract on the Darlington Refurbishment then plans to finish her schooling to obtain the rest of her required hours for apprenticeship.

“It’s still my dream to build my own house one day,” she said. “Working here will help make that dream a reality.”

ION AT A GLANCE

• To date, OPG’s ION program has placed 16 Indigenous workers in the nuclear industry
• This includes carpenters, millwrights, administrators and welders
• ION recruits and places workers in jobs at OPG and its partner organizations
OPG reported net income attributable to the Shareholder of $1,195 million for the full-year of 2018, compared to $860 million in 2017.

The company’s net income in 2018 was favourably impacted by new regulated prices for OPG’s nuclear and most of its hydroelectric generation set by the Ontario Energy Board, and the after-tax gain of $205 million from the sale of the former Lakeview Generating Station (GS) site.

OPG’s total electricity production remained consistent in 2018 at 74 terawatt hours (TWh) compared to 74.1 TWh in 2017. The company saw an increase in nuclear electricity generation due to fewer planned outage days at Darlington Nuclear GS, which was offset by a larger number of outage days at Pickering Nuclear GS. On the regulated hydroelectric front, generation was down slightly due to lower water flows across most river systems.

“Overall, 2018 was a milestone year for OPG,” said Jeff Lyash, OPG’s President and CEO. “Our hard work and commitment to generating clean, reliable and safe electricity for Ontario was reflected in a number of major achievements.”

In November, the company expanded into the United States for the first time by completing the acquisition of Eagle Creek Renewable Energy, which owns and operates 63 hydroelectric facilities across the U.S. The Canadian Nuclear Safety Commission also granted Pickering Nuclear a 10-year licence renewal, which allows Pickering to operate until 2024, followed by safe storage activities between 2024 and 2028.

The Darlington Refurbishment project, which remains on schedule and on budget, also made significant progress as Unit 2 was successfully disassembled and work began to put the reactor back together again with new components. The project’s progress and execution were acknowledged by the Auditor General of Ontario in her 2018 Annual Report.

2018 also saw significant progress on OPG’s other generation development and life extension projects. Construction advanced on the 44-megawatt (MW) Nanticoke Solar project and work progressed on a 10 MW single-unit powerhouse at the Ranney Falls GS site. Both projects are tracking on schedule and on budget.
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