

**DNGS Community Advisory Council
and
PNGS Community Advisory Council
Joint Virtual Meeting
Tuesday, December 7, 2021
Highlights**

Pickering and Darlington Site Updates

Jon Franke reviewed the operating status of the two stations. He noted that Darlington received an Award of Excellence from the Institute of Nuclear Power Operations. He also talked about the great progress of the refurbishment project at Darlington. And he talked about the outcome of the Polar Dip charity fundraising duel between Pickering and Darlington.

Update: Centre for Canadian Nuclear Sustainability

Analiene St. Aubin presented an update on The Centre for Canadian Nuclear Sustainability, an OPG organization bringing innovative solutions to the challenges of decommissioning, waste stewardship, and site repurposing.

Announcement about Darlington New Nuclear Project

Robin Manley announced that OPG has selected GE Hitachi Nuclear Energy to construct a small modular reactor (SMR) for the Darlington New Nuclear Project. Council members asked a number of questions about the Darlington project and potential SMR opportunities in Canada and other countries.

Equity, Diversity and Inclusion at OPG

Aamer Esmail talked about OPG's equity, diversity and inclusion strategy. He discussed steps OPG is taking to drive accountability and measure progress.

OPG's Reconciliation Action Plan

Christine John reviewed OPG's progress to date in bringing about reconciliation with Indigenous communities affected by its operations. She also talked about the barriers to native involvement in OPG that remain and the company's strategy for overcoming those barriers.

Pickering and Darlington Community Affairs Reports

Lindsay Hamilton (Darlington) and Carrie-Anne Atkins (Pickering) presented updates about their sites' involvement in community activities. Also mentioned were activities in which both sites participated, such as: the Royal Canadian Legion's poppy campaigns; the Movember campaign to raise awareness and funding for research into men's health issues; the campaign to make the public aware that there is no path to net zero without nuclear.

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Darlington CAC:

Jim Boate
Jim Cryderman
Sheila Hall
Penny Smith

Regrets:

Shirley Crago
Mary Ann Found
Janice Jones
Brenda Metcalf
Mary Novak

Pickering CAC:

Frank Dempsey
Natalie Harder
Bill Houston
Tim Kellar
Greg Lymer
Tracy MacCharles
Pat Mattson
Cody Morrison
Peter Ottensmeyer
Dan Shire
John Simpson

Regrets:

Jill Adams
John Earley
Donna Fabbro
Sean McCullough
John Miseresky
Zachary Moshonas
Helen Shamsipour
John Stirrat

OPG:

Carrie-Anne Atkins
Aamer Esmail
Jon Franke
Lindsay Hamilton
Christine John
Jennifer Knox
Analiese St. Aubin

Hardy Stevenson and Associates:

Francis Gillis
Dave Hardy

Topic #1: Greg Lymer

CAC Facilitator Dave Hardy welcomed all to the meeting. Dave announced that this was the last meeting for Pickering CAC member Greg Lymer, who is retiring from the Regional Municipality of Durham at the end of the year. Dave noted that Greg joined the Council in 2007. On behalf of OPG and the CAC, he thanked Greg for his thoughtful participation over the years, in particular his expertise on water supply issues.

Dave added that he was looking forward to the participation of Tavis Nimmo, who will be the new representative of the Regional Municipality.

Topic #2: Review of Minutes

The minutes from the Joint CAC Meeting of October 19, 2021 were approved without changes.

Topic #3: Health and Safety Update

Following a Land Acknowledgement, Senior Vice President Jon Franke said that OPG continues its focus on COVID-19, Ninety percent of employees are vaccinated and unvaccinated employees are regularly screened. Stations continue to mandate masks, social distancing, etc. As Ontario relaxes COVID controls, OPG will keep on monitoring unvaccinated employees.

Topic #4: Site Updates

Jon Franke presented site updates for Pickering and Darlington:

Pickering Nuclear

- Units 1, 4, 6, and 8 are operating at or near full power. Units 5 and 7 are undergoing planned maintenance outages, which are proceeding well. All six units are expected to be in service by year end.

Darlington Nuclear

- Units 1 and 2 are operating at, or close to, full power. Unit 3 is in refurbishment and Unit 4 is in a planned maintenance outage.
- On Nov. 16, Darlington received an Award of Excellence for the fifth consecutive time from the Institute of Nuclear Power Operations (INPO) as a result of the station's 2020 World Association of Nuclear Operators (WANO) Peer Review. This major award is a testament to the Darlington staff and the station's strong safety culture.
- The combined Calandria Tube and Pressure Tube removal (CT-PT) in the refurbishment at Unit 3 is unique in the nuclear power industry. This industry first has gained a tremendous cost and time saving for OPG.
- The disassembly of Unit 3 is now complete, and reassembly will start in the new year. The refurbishment of Unit 1 will start in February.
- Earlier this month, the Pickering and Darlington stations competed to see who could raise the most money for charity. Leaders of the winning team would be spared from taking a dip in chilly Lake Ontario. This year, Pickering employees raised \$8,571 through the Polar Dip fundraiser, but Darlington won the charity duel, raising a total of \$9,654.

Topic #5: Update: Centre for Canadian Nuclear Sustainability

Analiene St. Aubin, Manager, Corporate Relations, Nuclear Decommissioning Strategy and CCNS, presented an update on The Centre for Canadian Nuclear Sustainability, an OPG organization bringing innovative solutions to the challenges of decommissioning, waste stewardship, and site repurposing (Appendix 1). The CCNS is meeting these challenges through collaboration with industry, community partners and homegrown talent to create innovative long-term solutions.

Analiene noted that the CCNS has announced three additional Collaboration Research Agreements:

- with Westinghouse to study techniques to minimize and reclassify nuclear by-products;

- with Canadian Nuclear Laboratories (CNL) and SNC-Lavalin on nuclear decommissioning;
- with Kinectrics to study Canadian solutions that will process and dispose of mixed nuclear materials.

Analièse also talked about the CCNS role in OPG's Reconciliation Action Plan involving Indigenous partners.

More information is available at www.theccns.com.

Analièse responded to Council questions:

- *Who is accountable for nuclear waste management?*
The Nuclear Waste Management Organization (NWMO) is responsible for the long-term storage of used nuclear fuel. This material is currently safely stored at nuclear power plants. As well, nuclear power plants are accountable for the management of nuclear by-products from their operations.
- *You talked about CCNS looking at nuclear recycling. Does this refer to recycling of low-level waste or also to used nuclear fuel?*
CCNS has invested in Moltex Energy's project to develop a process to recycle used nuclear fuel, but our main focus is on recycling low and intermediate-level nuclear waste.

Topic #6: Announcement about Darlington New Nuclear Project

Robin Manley, Vice President New Nuclear Development, announced that OPG has selected GE Hitachi Nuclear Energy to construct a small modular reactor (SMR) for the Darlington New Nuclear Project. The timeline mentioned at a previous meeting remains. OPG hopes to get a licence to construct from the Canadian Nuclear Safety Commission (CNSC) by the end of 2024 or early 2025. It is estimated that the SMR will be in operation in 2028/29.

Robin said that OPG is looking forward to opportunities for more small reactors to be built and is working with other countries toward such opportunities.

Robin responded to Council questions:

- *What other countries is OPG working with around SMR opportunities?*
Other countries would include France and the USA. There are opportunities all over the Western world. France is putting money into SMRs as well as big reactors. In England, Rolls-Royce is developing an SMR around the same size as the project at Darlington. Multiple designs are being developed in the USA, and GE Hitachi is based in the U.S. GE has been operating in Canada for over 100 years. Being the first mover in constructing an SMR gives OPG a

competitive advantage. Poland, which is going to partner with GE Hitachi, is another potential market for OPG.

- *Congratulations on selecting a design for the project. I'm hoping that OPG will become more versatile in looking at reactor design. For example, fast-spectrum reactors, which I just wrote about in my book, Neutrons at the Core.*
More than one design will be built. A boiler reactor design is basically ready, though other designs are better for industrial uses, which means further developments are coming down the road.
- *SMRs hold promise for the Far North. Are there SMR prototypes on a scale appropriate for remote communities?*
SMRs are not prototypes; this is a tried-and-true technology. Which is why work is being done on micro reactors for small communities and other applications. Global First Power has applied to the CNSC for a licence to prepare a site for an SMR project at the Chalk River Laboratories.
- *There is nuclear hesitancy in the North and in other quarters. How is OPG addressing that?*
We are trying to address that. We have launched a myth-buster campaign. This is not a hard sale campaign but more a process of getting the facts out and working with communities in a respectful way.
- *What's behind the long lead-time on reactor projects? Are there environmental or technical reasons?*
The licencing process and community involvement inputs that are somewhat out of our control. We have to get the engineering "homework" done first. And site preparation and construction take a certain amount of time.

Robin expressed appreciation for CAC questions and interest. More details on the DNNP and SMR developments in general will be available at future Council meetings, he said.

Topic #7: Equity, Diversity and Inclusion (ED&I) at OPG

Aamer Esmail, Senior Manager Ethics and Equity, talked about OPG's equity, diversity and inclusion strategy (Appendix 2). He presented OPG's ED&I promise to:

- Accelerate Equity – ensure our workforce is reflective of the communities we serve
- Celebrate Diversity – attract, retain and celebrate employees with unique backgrounds, skills and characteristics
- Foster Inclusion – create an inclusive culture where everyone can connect, belong and grow

Looking back over the past five years, Aamer noted an increased appetite for ED&I work within the company. He also talked about speed bumps along the way and system level advances.

Aamer then talked about OPG's ED&I strategy, launched internally in November 2021. The external launch is set for January 2022. To drive accountability and measure progress, OPG is targeting two external benchmarks:

- 2023 – become one of Canada's Best Diversity Employers (Globe and Mail)
- 2030 – become a Global Leader in ED&I Best Practices (Global Diversity, Equity and Inclusion Benchmarks (GDEIB))

Aamer responded to a Council comment:

- *At the University of Toronto back in the 1980s, there were three women among the 100 students in our program, yet we felt we were welcoming to women. Now there are about 200 students in that program, about half of them women. There are similar ratios of women in engineering and in medicine. So, it's society that makes the success of your ED&I program possible.*
Yes, benchmarks are aspirational. We are working to make sure we are looking at trends in the external world. We have to work with society.

Topic #8: OPG's Reconciliation Action Plan

Christine John, Senior Advisor Indigenous Relations, talked about OPG's Reconciliation Action Plan (Appendix 3). She noted that OPG (formerly part of Ontario Hydro) has a 100-year history in the province. It has provided excellent energy sources but also some of its operations have had negative impacts on native peoples. OPG has to acknowledge that.

OPG/Ontario Hydro developed a framework for reconciliation in the 1990s and came up with a settlement with 21 First Nations. This was a remarkable and industry-leading accomplishment, bringing improved relations and prosperity to Indigenous communities. However, Christine noted, barriers to native involvement in OPG remain.

To address these barriers, OPG has made two commitments:

- Grow its impact for Indigenous communities and businesses to \$1 billion over the next 10 years
- Increase representation of Indigenous people at all levels of OPG by 2030

Christine remarked that increasing representation of Indigenous people at the company involves a lot more than just hiring. It also involves retention.

Christine said that she sees reconciliations champions across OPG. The company is developing strategies and plans to fulfill its reconciliation commitments. However, OPG can't do it alone; it will be working with partners in the community.

Christine responded to a Council question:

- *On the Great Lakes Waterfront Trail there is a plaque at the Saunders Hydro Dam in the Cornwall area about the Mohawks of Akwesasne. Are there plans to increase such educational elements along the Trail?*
There are certainly opportunities to do that.

Carrie-Anne Atkins noted that new signage, including information about the Indigenous community in this area, is planned for the north part of the park at OPG's Pickering site.

Topic #9: Pickering and Darlington Community Affairs Reports

Lindsay Hamilton, Senior Manager Corporate Relations Darlington Nuclear, and Carrie-Anne Atkins, Manager Corporate Relations Pickering Nuclear, presented updates about their sites' involvement in community activities.

Darlington Nuclear

Lindsay presented a Darlington community report:

- From Oct. 29 to Nov. 11, both Darlington and Pickering facilities welcomed veterans from the Royal Canadian Legion back to site for in-person poppy campaign collections. This year a combined (DN & PN) total of \$9,125 was raised through employee donations—a record high.
- Movember is a month-long event in which men are encouraged to grow mustaches to raise awareness of, and funding for, men's health issues. This year the OPG team raised over \$50,000, making the company eighth in all of Canada.
- A new campaign supported by Bruce Power and OPG has one message: there is no path to net zero without nuclear. Economies around the world have less than 30 years to cut overall carbon emissions to net zero. OPG's is committed to be a carbon neutral company by 2040 and help build a net zero economy by 2050. The many positive contributions nuclear energy systems make across the globe was celebrated on World Nuclear Energy Day on Dec. 2.
- On Oct. 28, OPG announced the 2021 John Wesley Beaver Scholarship recipients. Three Ontario Indigenous students received \$10,000 each.
- OPG has received a number of awards in 2021. A few examples include:
 - A Whitby Chamber of Commerce Business Achievement Award

- A Governance Professionals of Canada (GPC) 2021 Excellence in Governance Award
- Sustainable Electricity Award for [OPG's Climate Change Plan](#)
- Occupational Health and Safety President's Awards (1,500+ employees) *Recognizing the safety performance of Canadian Electricity Association (CEA) Utility Members*
- Lifesavers Award to RGPM Service Trade Maintainer, Greg Miller for [heroic actions](#) to respond to a boater in distress
- Centre of Excellence Net Zero by 2050 Awards for [SMR deployment](#) at the Darlington New Nuclear Site

Pickering Nuclear

Carrie-Anne presented a Pickering community report:

- On Nov. 16, OPG participated in a full-day drill in which utilities demonstrated how they would respond to and recover from simulated and coordinated cyber security and physical security threats and incidents.
- OPG and partner organizations are participating in a multi-level emergency response exercise at the Darlington Nuclear Generating Station on Feb. 23 – 25, 2022. All levels of government will be involved. A focus group will be held on Day Two, which Darlington and Pickering CAC members have been invited to participate. (Council members who have questions or concerns about the drill or focus group are urged to contact carrie-anne.atkins@opg.com or lindsay.hamilton@opg.com.)
- OPG representatives met with Six Nations members on Oct. 26 and with Métis Nation of Ontario Region 8 on Nov. 18. OPG teams provided information on: Cobalt-60 licence amendment to CNSC; Darlington Waste Management Facility re-licencing to CNSC; and Pickering End of Commercial Operations.
- The City of Pickering presented their “Winter Nights, City Lights: Walk-Thru Experience” as City Hall and Esplanade Park “came to light” over three evenings in November, combining the annual Santa Claus Parade and the Tree Lighting extravaganza. OPG is proud to “power” the light tunnel and selfie stations. The tunnel has been lit daily since Nov. 19 and will continue to be lit through to Feb. 28, 2022.
- Windreach Farm will be offering a Festival of Lights Drive-Thru from Dec. 10 through Dec. 14. OPG is an active participant and sponsor of this event.

- On Oct. 26, Pickering Nuclear completed another harvest of Cobalt-60, a life-saving medical isotope. Cobalt-60 is used in medical radiotherapy, and about 40 percent of the world's single-use medical devices are sterilized with this isotope.
- On Nov. 19, the Ontario Legislature recognized the province's nuclear industry for global leadership in isotopes, with unanimous MPP support. About half of the world's Cobalt-60 comes from Ontario nuclear plants.
- On Nov. 30 and Dec. 1, as part of a three-year project, the Invasive Phragmites Control Centre (IPCC) removed non-native, invasive phragmites from Hydro Marsh. The IPCC group is contracted by OPG. This phase of the project was completed in consultation with the Toronto and Region Conservation Authority (TRCA), the City of Pickering and the local community.

Regarding Cobalt-60, a Council member noted that a very important use of the isotope is the "gamma knife," where multiple beams are focused on the tumour.

Topic #10: Concluding Remarks

Dave Hardy congratulated the CACs on a very productive year and said he looked forward to an even more productive 2022. He wished all a Merry Christmas on behalf of himself, Francis Gillis and Eileen Clark.

Jon Franke remarked that OPG appreciates all the support they get from the community and from the CACs, whose members do an excellent job of communicating with their contacts in the broader community. Engagement with the community is becoming more and more important, he said.

Topic #11: CNSC News

For selected news items from the CNSC, please see Appendix 4.

Forthcoming Meetings

Pickering Community Advisory Council (Virtual)

Tuesday, January 18, 2022
5:30 pm – 7:30 pm

Darlington Community Advisory Council (Virtual)

Tuesday, January 25, 2022
5:30 pm – 7:30 pm