

**DNGS Community Advisory Council
and
PNGS Community Advisory Council
Joint Virtual Meeting
Tuesday, April 19, 2022
Highlights**

Site Update Pickering

John Franke provided an update on the operating status of the six units on the site, personnel changes, and a shift led by an all-women crew—an unplanned but positive event.

Site Update Darlington

Richard Geofroy provided an update on the operating status of the four units on the site. He also noted that a Canadian company has been awarded the contract to undertake site preparation activities for construction of an SMR at Darlington.

NWMO Update on Site Selection Process

Lise Morton and Karine Glenn presented an update on the implementation of Canada's plan for used nuclear fuel. Council members asked many questions about this process.

Nuclear Sustainability Services Update

Nuala Zietsma talked about the NSS and responsible management of nuclear byproducts. She explained the significance of the recently adopted new name for this division of OPG. She also talked about all the aspects of NSS activities to reduce, reuse, and recycle nuclear materials at OPG.

Darlington Community Affairs

Lindsay Hamilton talked about: OPG's Virtual Power Kids program; a science-based habitat stewardship program for tree swallows nesting on the Darlington site; Darlington Energy Centre hosting a "pit stop" for the first annual Allies for Autism car rally; and other activities.

Pickering Community Affairs

Carrie-Anne Atkins talked about: Pickering Nuclear involvement in a community curbside pickup of free native pollinating shrubs; PNGS providing updates to MPPs and mayors; OPG hosting virtual educational seminars in March; and other activities.

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Darlington CAC:

Jim Boate
Sheila Hall
Mary Novak
Penny Smith

Regrets:

Shirley Crago
Jim Cryderman
Mary Ann Found
Janice Jones
Brenda Metcalf

Pickering CAC:

John Earley
Bill Houston
Sean McCullough
Cody Morrison
Peter Ottensmeyer

Regrets:

Jill Adams
Frank Dempsey
Donna Fabbro
Natalie Harder
Tim Kellar
Tracy MacCharles
Pat Mattson
Tavis Nimmo
Helen Shamsipour
Dan Shire
John Simpson

OPG:

Carrie-Anne Atkins

Jon Franke
Richard Geofroy
Lindsay Hamilton
Fred Kuntz
Kaitlyn Nevill
Nuala Zietsma

NWMO:

Karine Glenn
Lise Morton

Hardy Stevenson and Associates:

Francis Gillis
Lauren Wingham-Smith

Topic #1: John Miseresky

Carrie-Anne Atkins talked about the recent passing of Pickering Community Advisory Council member John Miseresky. She noted that John was a very active member of the Pickering Naturalists and, since 2018, of the CAC. She added that OPG has reached out to John's family.

Topic #2: Health and Safety Update

Following a Land Acknowledgment, Richard Geofroy, Senior Vice President at Darlington Nuclear, talked about OPG's Reconciliation Action Plan and the company's working in partnership with Indigenous communities. He mentioned a recent tour of the Darlington site by the newly formed Indigenous Advisory Council for the Small Modular Reactor Action Plan.

Jon Franke, Senior Vice President at Pickering Nuclear, noted that OPG continues to focus on limiting the spread of Covid-19 among employees. In the face of an increase in Covid-19 rates in the broader community, OPG has instituted a new protocol known as "stand up, mask up." Employees are required to mask up when moving about. Anyone who has been in contact with someone with Covid-19, or who is sick themselves, is asked to stay home for a few days.

Topic #3: Review of Minutes:

Lauren Wingham-Smith, who was substituting for Dave Hardy for this meeting, noted that there was an error in the attendance list for the Pickering CAC meeting of Feb. 15,

2022: Cody Morrison did attend that meeting and was in attendance this evening. With this change, these minutes were approved.

The minutes for the Darlington CAC meeting of Feb. 22, 2022, were approved without changes.

Topic #4: Site Updates

Updates were presented for the Pickering and Darlington sites.

Pickering

Jon Franke presented an update for Pickering Nuclear:

- Of the six active units at Pickering, Units 1, 4, 6, 7, and 8 were operating at or near full power. Unit 5 is in a planned outage, which remains on schedule. A sample fuel channel has been extracted to be tested for fitness for service. The unit is expected to be returned to service by mid-May.
- Valentino Bevacqua has retired as Director of Operations and Maintenance at PNGS. Valentino was with OPG for 33 years, 21 of which were spent at Pickering.
- Dave Rogers started last Monday as the new Pickering Director of Operations and Maintenance. Dave was a senior leader of the Darlington refurbishment.
- Pickering Nuclear made history with the first-ever all women-led control room crew for a shift on March 17. This was not planned, but it was a testament to the station's commitment to Equity, Diversity and Inclusion.

Darlington

Richard Geofroy presented an update for Darlington Nuclear:

- Units 2 and 4 are operating at full power. Units 1 and 3 are in refurbishment.
- Unit 2 had the longest, uninterrupted run in the station's history: 170 days.
- The de-fueling of Unit 1 is over 90 percent complete, and calandria tubes have been installed in Unit 3. The refurbishment of both units is ahead of schedule.
- In March, the Darlington New Nuclear Project (DNNP) team announced that OPG has awarded E.S. Fox Ltd., a Canadian company, the contract to undertake site preparation activities for construction a small nuclear reactor (SMR) at Darlington. The project is expected to create approximately 100 jobs in Southern Ontario.

Richard responded to a Council question:

- *Have you established a timeframe for when the SMR is ready to operate?*
We are looking for the reactor to be ready by 2028.

Topic #5: NWMO Update on Site Selection Process

Lise Morton, Vice President Site Selection at the Nuclear Waste Management Organization (NWMO), and Karine Glenn, Strategic Project Director at NWMO, presented an update on Canada's plan for used nuclear fuel (Appendix 1).

Lise talked about NWMO's implementation of a safe, long-term plan for the storage of used nuclear fuel. She noted that 22 communities in Ontario had expressed interest in the site selection process. NWMO reviews have narrowed the search down to two communities, Ignace and South Bruce, where assessments are now underway. Site selection criteria in the areas of safety, transportation and partnership will be applied to identify a preferred location to take into detailed site characterization. Among the key project timelines are:

- 2023 – Select site
- 2028 – Impact assessment approved
- 2032 – Licence to construct granted
- 2043 – Operations begin

Community consultations include not just municipalities but also Wabigoon Lake Ojibway Nation in the Ignace area and Saugeen Ojibway Nation in the South Bruce area. Physical site investigations have taken place in each area and the results of that considered before a final selection is made.

Karine then talked about used nuclear fuel transportation. Since 2015, the NWMO has heard from thousands of individuals and groups affected by transportation issues. A Draft Transportation Planning Framework was released in August 2020, drawing on input from over 50 meetings and hundreds of questions.

Lise and Karine said that the approach to long-term storage of used nuclear fuel will be flexible and adaptive, and continue to involve people at key milestones along the way.

NWMO will apply the same standard of safety to managing nuclear fuel wastes from advanced reactors, including SMRs.

Lise and Karine responded to Council questions:

- *Is there a parallel program for managing uranium mine waste?*

Karine: Uranium mine tailings are regulated as radioactive waste. In Saskatchewan, they are already completing a long-term plan for the waste from their uranium mine.

- *I note that, in Sweden and Finland, their timeline for a deep geological repository for used nuclear fuel is less than a decade.*

Lise: Yes, the Finns have been developing their solution for quite a while.

- *Are you looking to Finland and other countries for best practices in long-term waste management?*

Lise: Yes, we recently participated in an international conference in Finland regarding technology and public discourse.

- *There was resistance from the State of Michigan to the proposed DGR for low- and intermediate-level wastes near Kincardine. Have you had any push-back from Michigan regarding the potential sites you're looking at for long-term storage of nuclear fuel?*

Lise: Yes, concerns from Michigan are starting to emerge again. We have reached out to them directly and via the Canadian embassy in Washington, DC. However, the two sites under consideration for a used fuel DGR are further inland than before, and our proposed plan moves the fuel further from the Great Lakes than it is now.

- *Why did the Saugeen Ojibway Nation turn down the proposed DGR in Kincardine?*

Lise: I'm sure there was a variety of reasons. We are engaging the SON a little earlier for the used fuel project. They have borehole monitors there every day, and we continue to work with them.

- *I note that, like us, Sweden and Finland are looking to construct DGRs in the northern shield.*

Lise: Yes, there are a lot of parallels there. They are sharing information coming from site boreholes.

- *In 2002, we had a brainstorming session with (then NWMO President and CEO) Elizabeth Dowdeswell. She would be disappointed with how long the siting process is taking, but she would be glad to see that there has been progress.*

- *Are the radioactive tailings in Port Hope going to be placed in a DGR?*

Lise: No.

Karine: The tailings in Port Hope are the byproducts of historic uranium refining operations run by a Crown corporation in that municipality. This low-level radioactive waste is being managed by near surface disposal in a program fully funded by the federal government.

Topic #6: Nuclear Sustainability Services Update

Nuala Zietsma, Director, Strategies and Stakeholder Relations Nuclear Sustainability Services, talked about the NSS and responsible management of nuclear byproducts (Appendix 2).

She noted that Nuclear Sustainability Services (formerly OPG Nuclear Waste Management) has never had a serious injury or fatality.

The new name, Nuclear Sustainability Services, gets away from “waste” and better reflects the division’s mission to reduce OPG’s environmental footprint. OPG’s goal is to be an industry leader in the three Rs: reduce, reuse, recycle.

Nuala remarked that many nuclear byproducts—such as medical isotopes, tritium, heavy water, Helium 3—are valuable, not “waste”.

She recommended a short video on Nuclear Sustainability Services:

<https://www.youtube.com/watch?app=desktop&v=nMb2eyfQ-Pc>

Nuala talked about NSS operations at Pickering and at Darlington. At each station, used nuclear fuel is placed in Dry Storage Containers (DSCs).

She noted that strong safety performance continues across the NSS division, and Covid protocols remain in place, enabling waste facilities to continue to safely transfer, process and store nuclear materials.

Nuala gave specific details on OPG’s embracing the 3 Rs. For example:

- Reduce: sorting and segregating materials to minimize waste at source
- Reuse: clean tools found in the waste stream are saved for reuse
- Recycle: clean materials, such as copper and steel; research into recycling of used fuel.

She also talked about OPG research and innovation in materials handling, for example through its subsidiary Laurentis Energy Partners, which is collaborating with McMaster University on sorting and recycling projects. In Pickering, OPG’s Centre for Canadian Nuclear Sustainability (CCNS) is focusing on innovations in decommissioning nuclear plants.

Nuala responded to Council questions:

- *In Slide 3 of your presentation, the reference to the radioactivity of low-level waste says C-137. That should be Cs-137.*
Yes, that is a typo. It should be Cs-137.

- *Is recycling used nuclear fuel under consideration?*
OPG is not looking at recycling nuclear fuel at this time.
- *When reactors are defueled as part of decommissioning or refurbishing, that fuel goes into storage. Does that not put stress on the Dry Storage Container system?*
We estimate how many DSCs we're going to need, taking into account all of the work going on at the site.

Topic #7: Pickering and Darlington Community Affairs

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:

- OPG announced today that it will collaborate with the Tennessee Valley Authority on the development of small modular reactors (SMRs) in both Canada and the USA.
- The Region of Durham Emergency Planning survey has been extended to the first week of May.
- The Region of Durham's nuclear emergency public alerting testing has been postponed to October.
- More than 60,000 children participated in OPG's Virtual Power Kids program in March. We're very proud of this program.
- OPG's Pollinating Partners program kicked off the month building bee hotels. On April 22, in celebration of Earth Day, the program will host a garbage cleanup along the Millennium Trail.
- On April 23, Darlington Nuclear will be hosting a community curbside pickup of free native pollinating shrubs.
- Under the Friends of a Feather program, the Tree Swallow project began in 1998. OPG works with community partners to support science-based habitat

stewardship as tree swallows return to the Darlington site for their nesting season (May – late June).

- On April 4, OPG’s Darlington Energy Centre hosted a “pit stop” for the first annual Allies for Autism car rally. The rally had over 250 participants.
- We have resumed our tour program for Darlington. Political parties have come out as well as key influencers and decision makers from across Canada.

Pickering Nuclear

Carrie-Anne Atkins presented a Pickering Nuclear report:

- On Saturday, April 23, Pickering Nuclear will be participating in a community curbside pickup of free Nannyberry shrubs (these are native pollinating shrubs) as part of Environmental Stewardship Pickering.
- The annual Steps for Life walk, which has been held at the Pickering Nuclear site since 2010, this year is moving to Darlington Nuclear. On Sunday, May 1st at 10 a.m., OPG will host the walk, which is a fundraiser to support families after a workplace fatality, life-altering injury or occupational disease.
- OPG hosted its last of three virtual educational webinars in March in collaboration with the Toronto and Region Conservation Authority (TRCA) as part of Environmental Stewardship Pickering.
- PNGS and Centre for Canadian Nuclear Sustainability (CCNS) staff and senior leaders are providing updates to MPPs and mayors throughout the month of April. Next Monday, April 25, they will be talking to David Ryan, Mayor of Pickering.
- The last Neighbours Newsletter was sent before the new year; the next newsletter is planned for the June timeframe.

Topic #8: Concluding Remarks

Richard Geofroy thanked CAC members for their participation and many questions this evening.

Jon Franke remarked that a nuclear plant operates at the will of the community. He thanked Council members for enhancing OPG dialogue with the community.

Topic #9: CNSC News

For selected news items from the CNSC, please see Appendix 3.

Next Meetings

Pickering Community Advisory Council

Tuesday, May 17, 2022

5:30 pm – 7:30 pm

Darlington Community Advisory Council

Tuesday, May 24, 2022

5:30 pm – 7:30 pm