DURHAM NUCLEAR HEALTH COMMITTEE (DNHC) MINUTES

Location

Virtual

Date & Time

June 20, 2025 at 1:00 PM

A regular meeting of the Durham Nuclear Health Committee was held on Friday, June 20, 2025 at 1:00 PM via Microsoft Teams.

Comments and questions from members of the public observing the meeting can be emailed to <u>dnhc@durham.ca</u>.

Attendance

Members

Dr. Robert Kyle, Durham Region Health Department (DRHD) (Chair) Anthony Di Pietro, DRHD Raphael McCalla, Ontario Power Generation (OPG) Loc Nguyen, OPG Philip Dunn, Ministry of the Environment, Conservation and Parks (MECP) Dr. Kirk Atkinson, Ontario Tech University (OTU) Deborah Kryhul, Public Member Veena Lalman, Public Member Susan Ebata, Public Member Jane Snyder, Public Member Hardev Bains, Public Member Alan Shaddick, Alternate Public Member

Presenters & Staff

Dianne San Juan, DRHD (Secretary) Helen Tanevski, DRHD Roger Inacio, Region of Durham, IT- Service Delivery Dave Tyndall, OPG Joseph Downey, OPG Nahil Rahman, OPG Analiese St. Aubin, OPG

Regrets

Caitlyn Paget, DRHD Dr. Lubna Nazneen, Public Member Dr. Seewoosunkur Gopaul, Public Member Bill Rattan, Alternate Public Member Madisen Wood, Youth Public Member Madison Kidd, Youth Public Member Dr. Robert Kyle opened the virtual meeting and welcomed everyone.

Land Acknowledgement by Dr. Kyle.

Dr. Kyle mentioned that observers who have questions concerning presentations should email or discuss their requests with Dianne San Juan, DNHC Secretary, at <u>dnhc@durham.ca</u>.

Dianne will follow-up with each of the presenters after the meeting with the observers' questions. Dianne will report back to Dr. Kyle the outcomes of the questions received.

1. Approval of Agenda

The Agenda was adopted.

2. Approval of Minutes

The Minutes of the April 25, 2025 meeting were adopted as written.

3. Correspondence

3.1 Darlington Nuclear Community Advisory Council (CAC)

Darlington Nuclear Community Advisory Council (CAC) is seeking to participate in the public hearing of the Canadian Nuclear Safety Commission (CNSC) on June 24, 2025, in support of the Application for Renewal of the Darlington Nuclear Generating Station (NGS) Power Reactor Operating Licence (PROL). List of CAC members, Terms of Reference and CNSC submission received for information.

3.2 Darlington Nuclear Generating Station (DNGS) and Pickering Nuclear Generating Station (PNGS) Community Advisory Council (CAC)

Agenda and minutes from the PNGS and DNGS CAC's meetings of January 2025 received for information.

3.3 Update on the Darlington New Nuclear Project (DNNP)

On April 4, the Canadian Nuclear Safety Commission (CNSC) <u>announced it had</u> <u>granted</u> Ontario Power Generation (OPG) a Licence to Construct one 300-megawatt BWRX-300 small modular reactor (SMR) at the Darlington New Nuclear site.

On May 8, the <u>Province of Ontario approved</u> OPG to begin construction on the first SMR unit at the Darlington New Nuclear site.

For questions about the project, contact the project phone line (1-800-461-0034), email darlingtonnuclear@opg.com or visit the public information centre (1855 Energy Drive, Courtice, open Monday-Friday 9 a.m. – 3:30 p.m.).

3.4 Nuclear Waste Management Organization (NWMO)

Regarding a question received during the NWMO's presentation to the DNHC April 25, 2025 meeting, "Is the preferred site deemed to be Crown land? If so, is it provincial Crown land and will it need to be transferred to NWMO? What is the status of the land that is the preferred site?", the following response was received from the NWMO:

The Nuclear Waste Management Organization further notes that the land in question is provincial Crown land that has been withdrawn from mineral exploration and development. The NWMO is working with the Ministry of Natural Resources and Forestry (MNRF) to formally acquire the land for the Adaptive Phased Management project and will provide an update on its status at a future presentation to DNHC.

4. Presentations

All meeting presentations will be made available on the Council and Committee Meetings Calendar. PDF files for each presentation can be accessed using the agenda HTML link and a video recording of the meeting can be viewed using the webstreaming link that will be provided approximately two weeks after this meeting date.

4.1. Project Update by OPG's Darlington New Nuclear Project (DNNP) Team regarding Construction of a Small Modular Reactor (SMR) at the Darlington Site

Presented by Dave Tyndall, VP New Nuclear Engineering, OPG

Highlights of the presentation

Timeline for the DNNP project discussed

- In accordance with license to construct, expect the first unit to be online and commercially available in 2030
- Licence to operate to be obtained in 2028 (with the application to be submitted in 2026), prior to being able to load nuclear fuel
- Subsequent units are intended to be in service between 2034 and 2035, subject to regulatory approvals
- Site preparation, land levelling and excavation activities are underway; construction of the administration building, warehouses, and utilities (drinking water and sewer) have also commenced
- Next steps: preparing licence to operate application, working with supply chain for parts and equipment, looking at recreational user surveys and integrating community features to the site
- Additional sites for new nuclear generation and other energy projects: Wesleyville (Port Hope), Nanticoke (Haldimand County) and Lambton (St. Clair) sites; OPG is conducting early community engagement

• Why Wesleyville? Large site that has been used by OPG for a number of uses and is under their ownership; existing infrastructure to support transmission and transportation

Questions

Alan Shaddick: With the contracts that have been signed, are there any long-term contracts signed to make sure we are capable of getting the enriched fuel, given current trade situation?

Dave Tyndall: We have looked into the long-term supply of our fuel and the security of the supply of fuel. We have signed contracts for the production of the fuel. We are not 100% reliant on the US, there are also supply chains for the fuel for this reactor from other sources such as Europe, Japan, etc.. Energy, specifically nuclear fuel, is exempt from the trade situations going on, given our reliance on electricity.

Alan Shaddick: Has OPG considered contacting the feds to consider building our own uranium facility?

Dave Tyndall: There are active discussions across multiple levels of government and industry around the potential for various facilities inside the nuclear fuel cycle. Nuclear fuel/enrichment facilities are heavily regulated and controlled and will take time to establish. It is being looked at and OPG is part of the discussion across the industry.

4.2. Progress Report by OPG concerning its Refurbishment of the Darlington Nuclear Generating Station (DNGS)

Joseph Downey, Director of Operations and Maintenance, Nuclear Refurbishment, OPG

Highlights of the presentation

- Refurbishment was a 20-year project, including 10 years of planning and 10 years of execution
- Refurbishment outage schedule discussed, progressing from Unit 2, 3, 1 and 4
- Unit 2 reconnection to electricity grid in 2020 preparation and planning for return to service overlapped with pandemic contingency plan; discussed OPG's role in supporting Ontario energy supply system and ensuring energy stability during the pandemic
- Unit 3 refurbishment also included a modification to upgrade the turbine control system from an analog to a digital system; this system is in operation today on Unit 3 and Unit 1 and is currently going through commissioning on Unit 4
- Lessons learned program and implemented process improvements discussed; lessons learned are tracked, applied, and incorporated into Pickering refurbishment scoping phase
- Unit 4 is the final stages of reassembly; return to service expected in Q1 of 2026
- Safety performance for this project discussed and considered strong in comparison to Ontario average in the construction industry

- Modifications across all four reactors to be able to allow production of medical isotopes; Darlington is now able to produce cobalt-60
- Target delivery system installed to allow production of other critical medical isotopes Molybdenum-99, Yttrium-90, and Lutetium-177
- For more information and access to reports, please go to opg.com

Questions

Susan Ebata: When you change how you take the tubes out, is there an environmental impact?

Joseph Downey: In terms of the retooling, there was no change over the environmental impact of that series. All the reactor components that are removed undergo a volume reduction process, sealed within a licensed, shielded flask, and stored safely within the Darlington Waste Management Facility.

Dr. Kyle: These projects are both capital and labour intensive. Are there challenges in obtaining the skilled workforce needed, with two large projects occurring at the same time?

Joseph Downey: It has been a challenge ensuring that there is a continual supply of proficient and qualified workers to support the Darlington refurbishment project. It is not only the Pickering and Darlington projects, Bruce Power is also undergoing their refurbishment project. These projects draw the same skill trades, so it has required attention. Industry peers at Bruce Power are engaged and OPG has shared their plans and schedules to avoid overlapping series. Collaborations with community partners such as Durham College, leadership at skilled trades unions, and high schools to promote trades programs, are all taking place. To date, no specific shortages have challenged execution, but it has required significant attention to ensure OPG has the necessary feed stock to support the execution.

Dr. Kyle: With respect to conventional capital supply chain requirements, have there been any disruptions in any of the projects (i.e.. for metal supply).

Joseph Downey: For the Darlington refurbishment project, there have been no direct challenges. All the components have been received and stored as OPG proceeded through the execution. Close to 98% of the expenditures for the refurbishment are spent within the province. As it pertains to Pickering, OPG will be engaging with the supply chain with sufficient time to ensure that the necessary equipment and materials are obtained.

Dave Tyndall: We have a dedicated team within supply chain and government organizations that are monitoring and planning to address any potential risks. A lot of what we do today is sourced within Canada. We follow made in Canada, made in Ontario as a priority. There are a few areas where it is not possible, but we remain vigilant of the landscape and identify risks proactively.

4.3. Overview by OPG's Pickering Refurbishment Project Team regarding Pickering Refurbishment Project Planning

Presented by Nahil Rahman, VP Major Projects, Pickering Refurbishment, OPG

Highlights of the presentation

- In 2026 Units 5-8 will be removed from service, and pending approval from CNSC, will move to refurbishment
- In 2024 Units 1-4 were shut down and currently undergoing safe storage process
- For the refurbishment of Units 5-8, currently in project definition phase
- Why refurbish Pickering? Independent Electricity System Operator (IESO) Ontario electricity demand forecast discussed, including increase due to growth in various sectors and the population
- Refurbishment will secure 2100 megawatts (MW) of nuclear power for 30+ years
- Refurbishment project is organized into six major scopes of work: retube and feeder replacement, boiler replacement, turbine generator, deep water intake, balance of plant, and facilities and infrastructure; each briefly discussed
- Resilience of station to climate change impacts considered
- OPG will be applying for early renewal of the Pickering power reactor operating license (PROL) and a hearing is expected in spring 2026; this will allow OPG to bring the scope of the refurbishment into the licence
- If approved, refurbishment activities will start in January 2027
- Timeline of refurbishment discussed; refurbished Units 5-8 expected to be back in service by mid-2030s

Questions

No questions received.

5. Communications

5.1. Community Updates at Pickering and Darlington Nuclear Generating Stations (NGS)

Presented by Analiese St. Aubin, Senior Manager, Corporate Relations and Projects, Corporate Affairs, OPG

- Community engagement activities discussed such as the Bring Back the Salmon program and Electrifying Education program
- Neighbors Newsletter will be distributed in early September across homes and businesses in the 10 km radius around the two generating stations in Durham Region; visit <u>opg.com</u> and search for "neighbours newsletter" for access to the newsletter online
- Darlington NGS update:

- Hosted an event with the Clarington Board of Trade called "Energizing Opportunities" which connected local businesses and post-secondary students to learn more about OPG and available opportunities
- Licence renewal: Part 2 of the hearing will be on June 24-26 at the Chestnut Hill Recreation Complex in Pickering; public information sessions and workshops were held in advance of the hearing
- Pickering NGS update:
 - Annual spring tree planting event
 - Worked with the City of Pickering on a "World Environment Day" event
- Tuesdays on the Trail program starts in July; free programming with families at Alex Robertson Park in Pickering and on the Darlington waterfront trail and Darlington lower soccer fields; visit <u>opg.com</u> for registration information

6. Other Business

Dates for the remaining 2025 DNHC meetings are as follows:

- September 26, 2025, 1:00 PM
- November 28, 2025, 1:00 PM

Meetings will continue to be held virtually via the TEAMS platform and available for the general public to observe via livestream at www.durham.video.

Reminders:

 All meeting presentations will be made available on the Regional Council and Committee Meetings Calendar. This can be navigated to via the "DNHC meetings, agendas, presentations and minutes" tab on our webpage <u>durham.ca/dnhc</u>. A video recording of meetings can also be viewed using the webstreaming link in the Regional calendar. The presentation files for this meeting will be made available approximately three weeks after this meeting.

7. Next Meeting

September 26, 2025 at 1:00 PM Virtual via Teams

8. Adjournment

2:50 PM