

DURHAM NUCLEAR HEALTH COMMITTEE (DNHC) MINUTES

Location

Virtual

Date & Time

September 26, 2025 at 1:00 PM

A regular meeting of the Durham Nuclear Health Committee was held on Friday, September 26, 2025 at 1:00 PM via Microsoft Teams.

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

Attendance

Members

Dr. Robert Kyle, Durham Region Health Department (DRHD) (Chair)
Anthony DiPietro, DRHD
Anjali Pandya, for Caitlyn Paget, DRHD
Raphael McCalla, Ontario Power Generation (OPG)
Loc Nguyen, OPG
Dr. Kirk Atkinson, Ontario Tech University (OTU)
Veena Lalman, Public Member
Jane Snyder, Public Member
Hardev Bains, Public Member
Susan Ebata, Public Member
Deborah Kryhul, Public Member
Alan Shaddick, Alternate Public Member
Bill Rattan, Alternate Public Member

Presenters & Staff

Dianne San Juan, DRHD (Secretary)
Helen Tanevski, DRHD
Roger Inacio, Region of Durham, IT- Service Delivery
Adrian Nalasco, Ministry of Energy and Mines
Lindsay Parks, OPG
Ali Esmaeily, OPG
Lindsay Hamilton, OPG

Regrets

Philip Dunn, Ministry of the Environment, Conservation and Parks (MECP)
Dr. Lubna Nazneen, Public Member
Dr. Seewoosunkur Gopaul, 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 and statement regarding National Day for Truth and Reconciliation on September 30th.

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

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.

Youth member Madisen Wood has advised of her resignation from the DNHC on Sept 22nd, as she has taken on an exciting opportunity outside of Durham Region. We thank her for her participation on the DNHC and wish her all the best.

Committee Membership review to be initiated following this meeting. If needed, a recruitment process for new DNHC committee members for 2026 will commence in the coming weeks. More information will be available on the webpage durham.ca/DNHC and social media channels.

1. Approval of Agenda

The Agenda was adopted.

2. Approval of Minutes

The Minutes of the June 20, 2025 meeting were adopted as written.

3. Correspondence

3.1 Darlington Nuclear Relicensing Update - July 2025

- Updates included a brief overview of the hearing process, recent public engagement activities, and key upcoming dates. Updates emailed to DNHC committee members on July 3, 2025. More information available on opg.com.
- On September 26, 2025, OPG provided the following update:
- The Canadian Nuclear Safety Commission (CNSC) announced its decision to renew OPG's licence for the Darlington NGS for a 20-year term following a 2-part public hearing held earlier this year. This decision authorizes OPG to operate the Darlington station from December 1, 2025 to November 30, 2045, making it the longest nuclear operating licence granted in Canada.

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 Role of Nuclear Energy in Powering Ontario's Future

Presented by Adrian Nalasco, Director, Nuclear Supply, Ministry of Energy and Mines

Highlights of the presentation

- Overview of Ontario's nuclear energy policy, highlighting the province's Integrated Energy Plan, the role of nuclear in meeting future electricity demand, ongoing and planned nuclear projects, and the regulatory framework provided
 - Policy priorities and rationale: Ontario's nuclear policy is centred on maintaining and expanding nuclear energy due to its clean, reliable, and affordable nature, providing about 50% of the province's electricity and supporting economic activity and employment through a robust supply chain
 - Integrated Energy Plan and demand forecasts: The 2025 Integrated Energy Plan, which forecasts a 75% increase in electricity demand by 2050, driven by industrial growth, electrification of transportation, and population increases, necessitates early planning and investment in generation, storage, and transmission, as these projects have a long lead time before they can be in service
 - Affordable Energy Act (AEA): Enshrines in legislation the planning objectives of the Integrated Energy Plan and future integrated energy plans
 - One of the key principles of the AEA was putting a priority on nuclear power. It recognizes that to meet base load energy needs, sources of energy such as hydroelectric is not enough and nuclear can provide the continuity of power that's needed
 - The goal is to get to almost zero emissions. There still may be a need on very peak electricity demand days that other sources of power will be used as a backup.
 - Nuclear project pipeline: Ongoing and planned nuclear projects, including refurbishments at Darlington, Bruce, and Pickering, construction of small modular reactors (SMRs) at Darlington, and pre-development work for large-scale nuclear at Bruce and Wesleyville, with a multi-phased approval process involving both government and regulatory bodies
 - Regulatory and oversight structure: Layered regulatory framework, with the Ministry of Energy and Mines providing policy and economic oversight, the Canadian Nuclear Safety Commission (CNSC) handling safety and environmental regulation, and additional federal and provincial permits required for various aspects of nuclear projects

Questions

- Alan Shaddick: With SMRs, we are dependent on enriched uranium from other countries. What is the possibility of uranium enrichment in our country?

- Adrian Nalasco: While Canada lacks domestic uranium enrichment facilities, OPG has secured a consortium-based fuel supply agreement for the Darlington SMR project, with enrichment currently planned in the US but with contingency options in the UK and France; establishing a Canadian enrichment facility is considered economically challenging due to required scale and investment.

4.2 Progress report by OPG concerning the results of the 2024 Environmental Monitoring Program (EMP) for Darlington and Pickering Nuclear Generating Stations (NGSs)

Presented by Lindsay Parks, Environmental Advisor, OPG

Highlights of the presentation

- Overview of the Environmental Monitoring Program (EMP) and objectives provided
 - The EMP is a licensing requirement designed to protect the public and environment from nuclear and hazardous substances, involving extensive sampling of air, water, food, and other media around the sites
 - It demonstrates compliance with limits on contaminants and the data can be used to confirm any predictions that have been made in environmental risk assessments
 - Critical groups: a group of people with similar habits and diets, and the annual radiation dose to each of these groups is calculated; the highest dose to a critical group would be the reported dose for the site for that given year
 - Environmental samples: collected at multiple locations around Darlington and Pickering, in air, fruit and vegetables, poultry, eggs, animal feed and milk, beach sand, lake water, well water and municipal water samples
 - 2024 dose results and trends: In 2024, the annual public dose from Pickering was 1.4 microsieverts and from Darlington 0.85 microsieverts, both significantly below the 1 millisievert regulatory limit, with dose trends remaining stable over the past decade
 - The dose calculation and the annual report for 2024 were performed by an independent third party and reviewed and verified by OPG; the report is submitted to the CNSC every year in April and it is available on [opg.com](https://www.opg.com)
 - Derived release limit (DRL): A calculated release rate of a given radionuclei during normal operation of a nuclear facility that would cause an individual of the most highly exposed group around the station to receive a dose equal to the annual regulatory dose limit. If 100% of the DRL is reached, you are at risk of exceeding the public dose limit. By keeping emissions below the derived release limit, it is ensured that the annual dose limit is never reached. Most of the percent DRLs are fairly low, less than 1%.
 - Radiological and non-radiological emissions: Radiological emissions remained small fractions of DRLs, with one higher-than-normal gross beta gamma value at Pickering attributed to lake sediment; non-radiological emissions for 2023 showed no significant releases or regulatory non-compliances
 - Tritium in water: Results from samples taken at water supply plants in near Pickering and Darlington show tritium in water below the Ontario drinking

- water quality standard of 7000 Becquerels per litre (Bq/L); the results are similar to concentrations seen at background sites throughout Ontario
- Program Audits and Inspections: The EMP underwent successful audits and inspections by CNSC, MECP and internal OPG oversight, with no major findings
 - Darlington New Nuclear Project (DNNP) Environmental Monitoring and Environmental Assessment follow-up activities will continue in 2025 as project-specific studies will meet relevant requirements identified under EMP governance
 - Environmental Risk Assessment (ERA) updates for Darlington and Pickering are already underway
 - Site Specific Surveys for those living or working near Darlington and Pickering nuclear generating stations promoted, to ensure that the EMP accurately reflects receptors around these stations
 - Visit opg.com for more information

There were no questions received from committee members.

4.3 Progress report by OPG concerning the results of the 2024 Groundwater Monitoring Program (GWMP) at Darlington and Pickering NGSs

Presented by Ali Esmaily, Senior Manager Environment, OPG

Highlights of the presentation

- 2024 Groundwater Monitoring Program (GWMP) at Pickering and Darlington discussed, confirming stable groundwater flow patterns, declining or stable tritium concentrations, and no offsite impacts, with results submitted to the CNSC and made publicly available.
 - GWMP objectives include verifying groundwater flow patterns, monitoring on-site groundwater quality (including identification of new and historical issues), and ensuring no offsite impacts, with annual reviews of program design; tritium in groundwater is the main parameter of focus
 - Pickering site results: There were 124 sampling locations and 330 samples, with most wells showing downward or stable tritium trends since 1999; there were no off-site impacts from tritium in 2024
 - Darlington Site Results: There were 75 sampling locations and 220 samples; boundary samples showed very low tritium, indicating no offsite impacts
 - For both Pickering and Darlington, the groundwater flow patterns remain consistent with original interpretations
 - Groundwater data collected from the key areas remained stable, which indicate consistent environmental performance
 - Annual groundwater monitoring reports for both sites are submitted to the CNSC and posted online, with GIS maps available for visualizing data in selected areas
 - Visit opg.com for more information

There were no questions received from committee members.

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 Tuesdays on the Trail, local festivals, food drives, and educational sessions, reaching thousands of residents and families
- Summer edition of the Neighbors Newsletter was released in early September. The newsletter reaches over 270,000 residents and businesses within the areas of both Darlington and Pickering
- Community Power Expo held at both Pickering and Darlington sites
- CNSC announced its decision to renew OPG's license for the Darlington Nuclear Generating Station for a 20-year term, the longest of its kind in Canada
- Visit opg.com for more information

6. Other Business

1) Dates for the remaining 2025 DNHC meetings are as follows:

- November 28, 2025, 1:00 pm

2) 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.

3) 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 durham.ca/dnhc. 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

Date & Time

November 28, 2025 at 1:00 PM

Virtual via Teams

8. Adjournment

2:36 PM