

DURHAM NUCLEAR HEALTH COMMITTEE (DNHC) MINUTES

Location

Virtual

Date & Time

November 28, 2025 at 1:00 PM

A regular meeting of the Durham Nuclear Health Committee was held on Friday, November 28, 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)
David Keene, Ministry of the Environment, Conservation and Parks (MECP)
Veena Lalman, Public Member
Jane Snyder, Public Member
Hardev Bains, Public Member
Susan Ebata, Public Member
Dr. Lubna Nazneen, Public Member
Dr. Seewoosunkur Gopaul, Public Member
Alan Shaddick, Public Member
Bill Rattan, Public Member

Presenters & Staff

Dianne San Juan, DRHD (Secretary)
Helen Tanevski, DRHD
Roger Inacio, Region of Durham, IT- Service Delivery
Barbara Stavropoulos, OPG
Analiese St. Aubin, OPG
Susan Olesen, Canadian Nuclear Safety Commission (CNSC)
Dean Hipson, CNSC
Nicholas Chan, CNSC
Bartek Rzentkowski, CNSC
Shernette Muccuth Henry, Canadian Nuclear Laboratories (CNL)
Susan Bailie, CNL
Jennifer Turner, CNL

Regrets

Hardev Bains, Public Member
Deborah Kryhul, 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 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 Madison Kidd, has advised of her resignation from the DNHC after 2025, 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.

1. Approval of Agenda

The Agenda was adopted.

2. Approval of Minutes

The Minutes of the September 26, 2025 meeting were adopted as written.

3. Correspondence

3.1. Update on the Darlington New Nuclear Project (DNNP)

The updates were emailed to DNHC members on November 25, 2025, which included:

- DNNP referred to Canada's Major Projects Office (MPO) which works to identify projects that are in Canada's national interest and accelerate their development by streamlining assessment and approvals
- Construction updates
- Community engagement events

For questions about the project, contact the project phone line (1-800-461-0034), email or by having a conversation at our public information centre (1855 Energy Drive, Courtice, open Monday-Friday 9 a.m. – 3:30 p.m.).

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 Pickering Relicensing Update

Presented by Barbara Stavropoulos, Section Manager Licensing, Regulatory Affairs, Ontario Power Generation (OPG)

Highlights of the presentation

License Renewal Application

- Overview of OPG's application for a 10-year license renewal for the Pickering Nuclear Generating Station (PNGS) and the Pickering Waste Management Facility (PWMF) provided.
- OPG is seeking a 10-year license renewal from January 1, 2027, to December 31, 2036, consolidating the Power Reactor Operating License (PROL) and the Waste Facility Operating License (WFOL). This consolidation is administrative only; it does not change operating commitments or regulatory obligations.
- The application was submitted to the CNSC in June 2025, with a public hearing scheduled for 2026.
- OPG has scheduled virtual and in-person public information sessions in March and April 2026, with opportunities for public and stakeholder interventions. In addition, members of the public can visit the Pickering Public Information Center Monday to Friday (9:00 am – 3:30 pm), or you may visit at various community events across the Durham Region, and those dates will be posted on <https://www.opg.com/durham>.
- To learn more about the Pickering's application, visit <https://www.opg.com/pickering>.

Refurbishment Project

- The refurbishment of Pickering units 5 to 8 involves extensive replacement and upgrading of key systems and components, including fuel channel pressure tubes, calandria tubes, feeder pipes, and steam generators, aiming to ensure long-term safety and reliability.

- In the fourth quarter of 2026, units 5 to 8 will be taken offline and CNSC decision on the license renewal is expected by the end of that year.
- Refurbishment will provide clean, reliable electricity for two million homes annually for an additional 30 years, maintain thousands of skilled jobs, and contribute over \$19 billion in economic value to the Durham Region and Ontario.
- Pending regulatory approvals, the refurbishment project is expected to run from 2027 through the mid-2030s.

Questions

- Dr. Kyle: Has a venue been confirmed for the in-person Public Information Session?
- Analiese St. Aubin: It will be at the Pickering Nuclear Information Centre.

4.2 Canadian Nuclear Safety Commission (CNSC) Regulatory Oversight Report for Darlington and Pickering Nuclear Generating Sites: 2024

Presented by:

Susan Olesen, Power Reactor Site Inspector, Pickering Site Office, Pickering Regulatory Program Division, Directorate of Power Reactor Regulation, CNSC

Dean Hipson, Senior Power Reactor Site Inspector, Darlington Site Office, Darlington Regulatory Program Division, Directorate of Power Reactor Regulation, CNSC

Nicholas Chan, Senior Project Officer, Wastes and Decommissioning Division, Directorate of Nuclear Cycle and Facilities Regulation, CNSC

Highlights of the presentation

- Each year, the CNSC publishes regulatory oversight reports, which provide information on CNSC oversight activities and the safety performance of Canadian licensees. These sites include nuclear power plants and their associated waste management facilities.
- Overview of the 2024 Regulatory Oversight Report provided; both Pickering and Darlington nuclear power plants and their associated waste management facilities operated safely in 2024, radiation doses to the public and workers were below regulatory limits, and releases to the environment were protective of health and the environment.
- This conclusion was based on the CNSC staff's assessment of findings from compliance verification activities for each facility in the 14 CNSC safety and control areas (SCA), and safety performance was rated as satisfactory in each SCA.
- The verification activities include surveillance by on-site inspectors, compliance assessments and follow-up activities.

Pickering Nuclear Generating Station (PNGS)

- Status of Pickering's operating licenses discussed, including the amendment to operate units 5 to 8 until December 31, 2026, and OPG's intent to apply for early renewal to support refurbishment.
- OPG applied for a renewal of the Power Reactor Operating Licence (PROL) and the Waste Management Facility Operating Licence (WFOL) in June 2025 and the application requests consolidation of the PROL and WFOL into the renewed Pickering PROL.
- This application requests a 10-year license term; CNSC hearings are scheduled to occur in 2026.
- In December 2024, OPG submitted a detailed decommissioning plan and storage with surveillance plan for PNGS units 1-4.

Darlington Nuclear Generating Station (DNGS)

- Darlington was granted a 20-year PROL effective December 1, 2025. The refurbishment project is on track, with units 2, 3, and 1 completed and unit 4 scheduled for completion in February 2026. CNSC staff confirmed compliance with regulatory requirements and no significant safety findings during refurbishment.
- Throughout the various refurbishment projects, CNSC staff conducted compliance verification activities as established in the Darlington Refurbishment Project Multi Unit Compliance Plan and confirmed that OPG was in compliance with regulatory requirements. The Darlington refurbishment project is on target to be completed by February 8th, 2026, with unit 4 returning to service. This will return all four units to commercial service.
- The CNSC approved amending OPG's license in spring 2024 to allow for Cobalt-60 production in all four reactors. Cobalt-60 rods are currently installed in units 1,3 and 4, and they will be installed in unit 2 during a planned maintenance outage.
- Other medical isotope projects include additional target delivery systems on additional units for Molybdenum-99 production, as well as Y-90 and Lu-177.

Pickering and Darlington Waste Management Facilities (PWMF and DWMF)

- PWMF operating license is valid from April 2018 to August 2028 and the DWMF Operating license is valid from May 2023 to April 2033.
- At the PWMF and DWMF, OPG processes dry storage containers (DSCs), containing used nuclear fuel generated at the Pickering and Darlington nuclear generating stations respectively, and stores the DSCs.
- The PWMF and DWMF also manages and stores intermediate level radioactive waste generated from the refurbishment activities at the Pickering and Darlington nuclear generating stations.
- OPG met their target of transferring 57 DSCs from PNGS to PWMF and 89 DSCs from DNGS to DWMF.

- Releases to environment from the PWMF and DWMF were below regulatory limits and action levels.

PWMF

- In 2024, OPG submitted a license amendment application requesting authorization to construct and operate the Pickering Component Storage Structure (PCSS) at the PWMF, to store low and intermediate level waste from future Pickering decommissioning activities and proposed refurbishment activities of Pickering units 5-8.
- In July 2025, the CNSC amended the PWMF license accordingly.
- In 2025, OPG submitted a construction notification for DSC Storage Building 5. As per the PWMF license, construction of Storage Building #5 may begin upon submission of the notification to CNSC staff, which includes an environmental management plan, construction verification plan and project design requirements. CNSC staff are continuing with their technical review of the submission.

DWMF

- In 2023 OPG submitted construction notification for storage structure #3 (SS3). In 2025, OPG submitted commissioning reports for storage structure 3 and in October 2025, CNSC staff provided written acceptance of OPG's commissioning reports. This acceptance authorizes OPG to commence operations of SS3
- Visit <https://www.cnscccsn.gc.ca/eng/> for more information

Questions:

Susan Ebata: Where can a member of the public find information on environmental and human health impacts? If emissions are below regulatory limits, can you conclude that there are no environmental and human health impacts?

Dean Hipson: Emissions and doses are monitored and kept below regulatory limits. This is reported on in the regulatory oversight report throughout the applicable safety control areas and includes the results of the CNSC independent environmental monitoring program. This information is available on the website.

Kirk Atkinson: From the context of the public, the limits are set to ensure minimal risk to human health (like finding 1 in a million). If significant releases happen, epidemiological studies can be considered to determine what can those impacts be.

4.3 Darlington New Nuclear Project (DNNP): Update on Licence to Construct

Presented by: Bartek Rzentkowski, Senior Project Officer, Advanced Reactor Licensing Division, Directorate of Advanced Reactor Technologies, CNSC

Highlights of the presentation

- Overview of the DNNP provided, detailing the issuance of a 10-year construction license for a BWRX300 small modular reactor, regulatory processes, international collaboration, and challenges encountered.
- The DNNP involves constructing up to four new reactors, with a 10-year construction license issued in April 2025 for one BWRX300 reactor.
- Brief timeline of the project discussed:
 - 2011: joint review panel hearing which was a public hearing that included submissions and presentations from Indigenous Nations and communities, federal and provincial and local governments, environmental groups, and individuals. The panel ultimately concluded that the DNNP is not likely to cause significant adverse environmental effects.
 - 2012: the CNSC issued a 10-year site preparation license, which was renewed in 2021 for another 10 years.
 - The chosen technology, the BWRX300, was not part of the original environmental assessment; following a public hearing in 2024, the CNSC issued its decision where they deemed that the environmental assessment remains valid for the BWRX300.
- Regulatory hold points are established at key project milestones, requiring CNSC approval before proceeding to subsequent construction phases. These ensure all prerequisites are met before moving toward operation and fuel loading.
- Challenges of the DNNP project discussed, as this project is the first of its kind in Canada. An example included internal cultural mindset (staff are used to well-established existing nuclear reactors and Canadian codes and standards, and there are currently no boiler water type reactors in Canada).
- CNSC has invested in transparency and public communication via their website, e-mail subscription lists, social media channels and engagement of Indigenous Nations and communities.
- Visit <https://www.cnsccsn.gc.ca/eng/> for more information

There were no questions received from committee members.

4.4 Port Hope Area Initiative (PHAI) Update

Presented by:

Shernette Muccuth Henry, Manager, Public Communications, Canadian Nuclear Laboratories (CNL)

Susan Bailie, Manager, Project Transition, CNL

Jennifer Turner, Manager, HWP Environmental Management, Historic Waste Program, CNL

Highlights of the presentation

- Updates provided on the PHAI, including remediation progress, environmental monitoring, and long-term maintenance at Port Hope and Port Granby sites.
- Progress in remediating contaminated sites in Port Hope and Port Granby discussed, with 2.6 million tons of waste safely stored and major sites expected to be restored by 2026. Private property remediation is ongoing, with project completion targeted for 2030 and final capping by 2031-2032.
- For the Port Hope and Port Granby projects, each had an Environmental Assessment which focuses on 6 areas of interest: Indigenous Rights and Interest, atmospheric (air quality and noise), terrestrial (plants and wildlife habitat), socioeconomic, geology/groundwater, and aquatic. The outcome of these assessments was the Environmental Assessment Follow-up Program, which dictate ongoing environmental monitoring. Monitoring includes surface water, groundwater, air quality, and soil, with adjustments made as sites transition to long-term maintenance.
- Port Granby is in phase three of long-term maintenance, with minimal operational activity, ongoing environmental monitoring, and regular inspections. Some monitoring sensors have failed earlier than expected, prompting an engineering assessment to determine alternative monitoring solutions.
- Radon monitoring of the mound is ongoing.
- A water treatment plant collects, monitors, and treats leachate from the storage mound containment line and groundwater from the East Gorge collection system.
- There is a preliminary decommissioning plan in place for the water treatment site and able to decommission the plant when treatment of groundwater from the East Gorge is no longer needed.
- Current environmental monitoring includes surface water monitoring of some of the Creek systems in the area, groundwater monitoring, and plant and wildlife monitoring (air, noise, and soil monitoring is no longer conducted); this program is aligned with EA commitments and reported to the CNSC.
- Upcoming Environmental Assessment Follow-up Program work includes an ecological land classification program, a hydrogeological and geotechnical study follow up, and an invasive species management plan (in collaboration with Williams Treaties First Nation communities).
- Restoration plan developed in collaboration with the Municipality of Clarington and First Nation communities, with future plans of establishment of a nature reserve for some surplus lands.
- The Port Granby site achieved ISO 14001 environmental management system certification, reflecting robust management of environmental data and systems

Questions:

Dr. Lubna Nazneen: What is an invasive species management?

Jennifer Turner: Invasive species are species that come into an area, but they are not natural to the area. They are extremely aggressive and would take over large areas and suffocate natural species out of those areas. The Port Granby site is being reviewed to see if any of

those species are establishing. The invasive species management plan looks at what species are becoming problematic on the site and how to manage these, to return some balance between native and non-native species on the site.

Dr. Kyle: Regarding the ISO certification, does this apply to the facility as a whole or was it more focused on the environmental monitoring or management system?

Jennifer Turner: ISO 14001 is an environmental management system certification, but it applies equally to both the data and the environmental systems and are also recorded and managed by the wastewater treatment plant staff.

Dr. Kyle: Was the environmental monitoring equipment at Port Granby underperforming?

Susan Bailie: This was to do with the sensors in the base liner and the cap liner of the engineered containment mound. These were intended as a short-term monitoring solution, though they did not last as long as expected. Engineering assessment of the monitors that are not working is underway. Monitoring is being assessed.

Dr. Kyle: Regarding the mound at Port Hope, when will it be covered?

Shernette: 2031 is the target date for larger or major sites. Anticipate restoration of sites like Port Hope Harbour and Centre Pier to be complete by 2026 . Smaller properties will take until 2030 for remediation (over 1200 properties anticipating some type of remediation) and capping and closing beginning in 2031-32.

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 Durham Children’s Watershed Festival, Take Your Kids to Work Day, hosting local veterans and a poppy fundraising campaign, and Electrifying Education for elementary and high school students.
- PM Carney and Premier Ford visited the nuclear generating station and announced funding to advance the SMR project.
- OPG is participating in the establishment of a Center for Fusion Energy, in partnership with other organizations and government agencies.
- The Minister of Energy and Mines, Minister of Finance, Pickering MPP and Pickering Mayor visited PNGS and reaffirmed support for Pickering refurbishment, units 5-8, which will secure 21 MW of power for decades to come; currently in project definition phase until 2026; return to service by mid 2030s; seeking license renewal from CNSC.
- Neighbours Newsletter will be released early February 2026. The newsletter reaches over 270,000 residents and businesses within the areas of both Darlington and Pickering

- Visit opg.com for more information
- Dr. Kyle inquired about the announcement of funding for the Centre for Fusion Energy and whether OPG be participating in the establishment of the Centre. OPG will be involved, along with Stellarex and other stakeholders.

6. Other Business

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

- February 13, 2026 1:00 pm
- April 24, 2026 1:00 pm
- June 19, 2026 1:00 pm
- September 25, 2026 1:00 pm
- November 27, 2026 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 <https://www.durham.video/>.

2) 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

February 13, 2026 at 1:00 PM
Virtual via Teams

8. Adjournment

2:45 PM