

DURHAM NUCLEAR HEALTH COMMITTEE (DNHC) MINUTES

Location

Virtual

Date & Time

November 17, 2023 at 1:00 PM

A regular meeting of the Durham Nuclear Health Committee was held on Friday, November 17, 2023 at 1:00 PM via Microsoft Teams. This meeting was also livestreamed on <https://www.eventstream.ca/events/durham-region>.

Attendance

Members

Dr. Robert Kyle, Durham Region Health Department (DRHD) (Chair)
Lisa Fortuna, DRHD
Caitlyn Paget, DRHD
Phil Dunn, Ministry of the Environment, Conservation and Parks (MECP)
Raphael McCalla, Ontario Power Generation (OPG)
Loc Nguyen, OPG
Dr. Kirk Atkinson, Ontario Tech University (OTU)
Jane Snyder, Public Member
Veena Lalman, Public Member
Susan Ebata, Public Member
Janice Dusek, Public Member
Dr. Seewoosunkur Gopaul, Public Member
Alan Shaddick, Alternate Public Member
Bill Rattan, Alternate Public Member
Adam de Grosbois, Alternate Public Member
Madison Kidd, Youth Public Member
Madisen Wood, Youth Public Member

Presenters & Staff

Dianne San Juan, DRHD (Secretary)
Sendi Struna, DRHD
Helen Tanevski, DRHD
Lindsay Hamilton, OPG
Ali Esmaeily, OPG
Paul McDonald, Canadian Nuclear Safety Commission (CNSC)
Cody Krasnaj, CNSC
Tanya Johnston, CNSC
Taline Kalindjian, CNSC
Nicole Simon, CNSC
Jessica Way, CNSC

Adrian Nalasco, Ministry of Energy
Anjali Pandya, DRHD
Adrian Chung, Region of Durham, IT- Service Delivery

Regrets

Deborah Kryhul, Public Member
Hardev Bains, Public Member
Dr. Lubna Nazneen, 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 off-line to prevent any duplication of emails and responses. 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 September 22, 2023 meeting were adopted as written.

3. Correspondence

3.1 Conference Board of Canada (CBOC) report: "Ontario Power Generation Economic Impact Analysis of Small Modular Reactors (SMRs) Received from Ontario Power Generation (OPG) on October 20, 2023: The Conference Board of Canada (CBOC) report highlights the construction of four Small Modular Reactors (SMRs) by OPG at its Darlington Nuclear site and its economic impact on Ontario and Canadian economies. More information can be found at <https://www.opg.com/release/opgs-smrs-will-generate-jobs-and-lasting-economicbenefits-for-ontario/>

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 after December 13, 2023.

4.1 Environmental Action Levels

Presented by Ali Esmaily, Section Manager Environment, OPG

Highlights of the presentation included:

- What Are Action Levels
- Historical Methodology Used
- Reason For Changing Methodology
- New Methodology
- Application At OPG Facilities
- Meaning Of Action Level Exceedances

New Action Levels (and planned Licence Release Limits) are based on the control technology in place and are not exposure (dose) based.

Action Levels are set below levels protecting human health and the environment. For this reason, exceeding a limit does NOT necessarily imply that either the health of the public or of an ecosystem is at risk.

There were no questions following the presentation.

4.2 Darlington New Nuclear Project (DNNP): Update on the Regulatory Review and January 2024 Public Hearing

Presented by Nicole Simon, Senior Project Officer, Advanced Reactors Licensing Division (ARLD) and Jessica Way, Environmental Assessment Officer, Environmental Review Division (ERD), CNSC

Highlights of the presentation included:

- DNNP Overview and Licence Application
- Licensing and Hearing Process
- Upcoming events

Commission Member Documents (CMD) are documents that will provide the results of CNSC staff's technical reviews and recommendations.

Presenters provided an overview of CMD #1, which includes a review of the Plant Parameter Envelope, Environmental Impact Statement, and their conclusions and recommendations.

CNSC staff conclude that OPG's selection of the BWRX-300 reactor technology is bounded by the Environmental Assessment (EA), and that the conclusions of the EA remain applicable for this reactor technology.

Public Hearing #1 is scheduled for the week of January 22, 2024, to decide on the applicability of the DNNP EA with respect to OPG's selected BWRX-300 small modular reactor technology.

For CMD#2, CNSC staff will complete a review of OPG's License to Construct application and supporting documentation.

Public Hearing #2 is tentatively scheduled for October 2024, pending the outcome of Hearing #1. Public Hearing #2 is a consideration of a licensing decision under the *Nuclear Safety and Control Act*.

DNNP Website:

<https://www.nuclearsafety.gc.ca/eng/resources/status-of-new-nuclear-projects/darlington/index.cfm>

DNNP Open Government Portal:

<https://open.canada.ca/data/en/dataset/0968ddc5-710e-4388-b379-184764df6f4c>

Questions:

dnnp-npnd@cnsccsn.gc.ca

Question received from Susan Ebata: Is there any information in the Environmental Assessment related to Whitby?

Answer: The original EA included site study, local study, and a regional study for the effects on the Darlington site specifically. This includes the Municipality of Clarington, and the regional study area would have included up to the Town of Whitby. The presenter was unsure of the exact boundaries, however did confirm that the regional study did include a broader geographical area. The original EA is archived on the Canadian Environmental Assessment Agency website. It can also be found through the last slide of this presentation on the Open Government Portal website for the DNNP.

Question received from Madison Kidd: It was said that during construction ground water will be disturbed but will cease after construction. How long will it take after construction is done for the ground water to return to its original state?

Answer: If left alone, with no mitigation measures in place to restore the flow back to its original state, it would take 2-3 years (as per OPG). Additional modelling studies predicted higher than normal recharge rates to groundwater. It is anticipated that the length of time it would take for groundwater to restore to its original state following construction will be shortened because of this enhanced recharge rate.

4.3 Ministry of Energy - Update on Nuclear Projects and Initiatives in Ontario

Presented by Adrian Nalasco, Director, Nuclear Supply, Energy Supply Policy Division – Ministry of Energy

Highlights of the presentation included:

- Where our system stands today
- The Future: electrification and growth
- Powering Ontario's growth: New nuclear at Bruce Power, SMRs, Pickering refurbishment
- Other nuclear initiatives

Nuclear remains the single largest source of electricity generation in Ontario. Growth in Ontario is predicted from industrial and residential sectors. It is important to start to take actions today to prepare for this growth. *Powering Ontario's Growth* (July 2023) announced actions the government is taking to invest in the energy system, including specific nuclear-related initiatives.

Question received from Adam de Grosbois: Was the bar chart on slide 3 that showed an increase in natural gas utilization over 20 years inclusive of the new SMRs that are predicted to come online or should we expect a potential reduction in natural gas utilization when the SMRs come online.

Answer: The bar chart represents business as usual; it does not provide information on future supply decisions. It represents the state of the system as it is today. The reason for pursuing nuclear initiatives is to reduce reliance on natural gas. The pathway to decarbonization, where we have a doubling of the size of the electricity system, is to have a fully clean electricity system. Mr. Nalasco provided the example of having gas on the system, then using that electricity to power electric vehicles – we should not burn gas to make electricity for electric vehicles.

The nuclear initiatives discussed are all ways of getting new clean power to eventually get rid of natural gas.

4.4 Canadian Nuclear Safety Commission (CNSC) Regulatory Oversight Report for Darlington and Pickering Nuclear Generating Sites: 2022

Presented by Cody Krasnaj, Senior Power Reactor Site Inspector, Darlington Regulatory Program Division, Tanya Johnston, Power Reactor Site Office Supervisor, Pickering Regulatory Program Division, and Taline Kalindjian, Project Officer, Wastes and Decommissioning Division, CNSC

Highlights of the presentation included:

- Indigenous consultation and engagement

- General safety observations and performance
- CNSC compliance verification program
- Security performance and observations
- Darlington and Pickering Nuclear Generating Stations updates
- Potassium iodide pill working group updates
- Darlington and Pickering waste management facility updates

Indigenous Nations and communities, the public and the environment were protected.

Reported doses to workers and public were below regulatory limits.

All nuclear material in Canada remained in peaceful activities and Canada's international obligations were fulfilled.

Issues identified during compliance verification activities and events were either addressed or are being addressed by licensees.

Safety and Control Areas (SCAs) rated Satisfactory for all Nuclear Power Plants (NPPs) and Waste Management Facilities (WMFs) with the exception of the Security SCA for Darlington NGS and Pickering NGS.

The following questions were received during the meeting:

Question received from Bernie Mayer (Haliburton, Kawartha, Pine Ridge District Health Unit): Are there potassium iodide (KI) pill distribution plans for each plant? If so, could they be shared with health units?

Answer: The distribution of KI pills is stipulated in REGDOC-2.10.1 which requires licensees (OPG) to support the province and municipality to pre-distribute KI within 10 km, and make it available to anyone within 50 km. The Provincial Nuclear Emergency Response Plan (PNERP) applies across the province and includes responsibilities for designated municipalities related to the distribution of KI pills. A KI working group was established to provide clarity on KI distribution plans. The second phase of the KI working group is being led by Emergency Management Ontario and will establish detailed plans of the distribution of KI pills in the Ingestion Planning Zone (IPZ). REGDOC-2.10.1 is available at: <https://nuclearsafety.gc.ca/eng/acts-and-regulations/regulatory-documents/published/html/regdoc2-10-1/index.cfm>

5. Communications

5.1 Community Issues at Pickering Nuclear and Darlington Nuclear

Lindsay Hamilton, Manager, Corporate Relations, Pickering Nuclear provided an update on Community Issues at Pickering and Darlington:

- Operational performance updates

- DNNP updates; site preparation work continues
- 2 public hearings on the DNNP; Jan 22, 2024 and fall 2024
- Engagement of stakeholders, public information sessions
- Electrifying Community Information Sessions - provides an opportunity for local community groups to sign-up for a one-hour virtual information session; more information at <https://www.opg.com/events/electrifying-community-information-sessions/>
- Community activities – Scientists at School, poppy donations campaign, corporate citizenship program
- Updates are available online at OPG.com

There were no questions received during the meeting.

6. Other Business

Dr. Kyle discussed the following Committee updates:

- 1) Our new committee members have been approved by Regional Council.

Dr. Lubna Nazneen: Public Member – Ajax (previously alternate member)

Dr. Seewoosunkur Gopaul: Public Member – Pickering

Madison Kidd: Public Member (youth) – Oshawa

Madisen Wood: Public Member (youth) – Whitby

Adam de Grosbois: Alternate Member – Clarington

Bill Rattan: Alternate Member – Whitby

- 2) Dates for 2024 DNHC meetings are as follows:

February 2, 2024

April 19, 2024

June 21, 2024

September 13, 2024

November 29, 2024

- 3) Other updates

- Going forward, 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 be viewed using the webstreaming link provided approximately two weeks after each meeting.

7. Next Meeting

Date & Time

February 2, 2024 at 1:00 PM

Virtual

8. Adjournment
3:00 PM