

## **DURHAM NUCLEAR HEALTH COMMITTEE (DNHC) MINUTES**

**Location** Durham Regional Headquarters  
605 Rossland Road East  
Town of Whitby

**Meeting** In an effort to help mitigate the spread of COVID-19, this DNHC meeting was a virtual meeting so that Presenters and Members could present and participate without meeting together in the Regional Council Chambers.

**Date** November 19, 2021

**Time** 1:00 PM

### **Members that Participated**

Dr. Robert Kyle, Durham Region Health Department (DRHD), (Chair)  
Mary-Ann Pietrusiak, DRHD  
Lisa Fortuna, DRHD  
Dr. Kirk Atkinson, Ontario Tech University  
Phil Dunn, Ministry of the Environment, Conservation and Parks  
Kristina Bramma, Ontario Power Generation (OPG)  
Veena Lalman, Public Member  
Susan Ebata, Public Member  
Dr. David Gorman, Public Member  
Dr. Lubna Nazneen, Alternate Public Member  
Alan Shaddick, Alternate Public Member

### **Presenters & Assistants**

Brian Devitt, (Secretary)  
Kimberley Campbell, Canadian Nuclear Safety Commission (CNSC) (Presenter)  
John Burta, CNSC (Presenter)  
Carrie-Anne Atkins, OPG (Presenter)  
Ajit Ghuman, Canadian Nuclear Laboratories (Presenter)  
Christine Drimmie, Office of the Regional Chair and CAO (Presenter)  
Caitlin Rochon, Office of the Regional Chair and CAO (Presenter)  
Helen Tanevski, DRHD  
James Kilgour, Durham Emergency Management

## **Regrets**

Hardev Bains, Public Member  
Deborah Kryhul, Public Member  
Jane Snyder, Public Member  
Dr. Barry Neil, Public Member  
Raphael McCalla, Member representing OPG  
Loc Nguyen, Member representing OPG

Dr. Robert Kyle opened the virtual meeting and welcomed everyone.

Dr. Robert Kyle mentioned Observers who have questions concerning the presentations today, should email or discuss their requests with James Kilgour, Director, Durham Emergency Management, at [james.kilgour@durham.ca](mailto:james.kilgour@durham.ca) or 905-668-7711 extension 6260.

James 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. James will report back to Dr. Robert Kyle the outcomes of the questions he received.

### **1. Approval of Agenda**

The Revised Agenda was adopted.

### **2. Approval of Minutes**

The Minutes of September 17, 2021 were adopted as written.

### **3. Correspondence**

**3.1** Dr. Robert Kyle received a report from James Kilgour, Director, Durham Emergency Management, concerning questions asked by Theresa McClenaghan, Executive Director and Counsel, Canadian Environmental Law Association (CELA). As an Observer of the September 17 DNHC virtual meeting, Theresa requested clarification about drinking water standards for tritium that was related to the OPG presentation on its 2020 Environmental Monitoring Program (EMP).

**3.2** Dr. Robert Kyle received a report from James Kilgour that included a reply from Raphael McCalla, Director, Environmental Health and Safety, that provided detailed information to the questions raised by CELA and he referenced Provincial and Canadian Nuclear Safety Commission (CNSC) drinking water standards. Raphael also included OPG's commitment that concentrations of tritium in drinking water at local water supply plants would be less than 100 Bq/l on average. The DNHC has received presentations of the annual EMP results for several years, and the concentration of tritium in drinking water at local water

supply plants has been on average less than 20Bq/l. James' report was dated September 27, 2021.

**3.3** Dr. Robert Kyle received a report from James Kilgour concerning several detailed questions and comments raised by A.J. Kehoe, Observer of the September 17 DNHC virtual meeting. James circulated the questions to the appropriate OPG presenter for follow-up and he will report back to Dr. Robert Kyle before the January 21 DNHC meeting with answers and comments received. James' report was dated October 29, 2021.

## **4. Presentations**

### **4.1 Progress report by the CNSC concerning its Regulatory Oversight During 2020 and COVID-19**

Kimberley Campbell, Director, Pickering Regulatory Program and John Burta, Director, Darlington Regulatory Program, Directorate-Power Reactor Regulations, CNSC, provided a joint presentation on the CNSC's regulatory oversight in 2020 with COVID-19 restrictions limiting some of its activities.

Kim explained the highlights of the CNSC's regulatory oversight during COVID-19 that included:

- Continued to verify that measures to protect health, safety, security and the environment were in place.
- Continued to provide oversight of the Unit 3 Darlington refurbishment activities including defueling, draining and currently major component removals.
- Maintained ongoing communications with OPG to ensure the COVID-19 licensees' plans were being implemented.
- Responded to requests for regulatory flexibility.
- The Darlington full-scale emergency exercise that was planned for February 2021 was deferred to February 2022.

John provided the general highlights of inspections at Darlington NGS and Pickering NGS that included:

- In May 2020, CNSC resident inspectors resumed regular on-site inspection activities at Darlington and Pickering NGSs to conduct in-field activities.
- Support from Headquarters staff that includes specialists and program officers continues to be provided from Ottawa.
- Resource challenges have led to a number of inspections being cancelled but CNSC remains on track to complete the plan for this fiscal year.

John provided the CNSC Oversight Highlights for the Darlington NGS.

CNSC Power Reactor Operating Licence for Darlington update:

- January 2016 to November 2025, 10-year licence
- Units 1 to 4 were operational in 2020

- In June 2020, Unit 2 completed refurbishment and returned to service
- In September 2020, Unit 3 entered refurbishment activities
- Units 1, 2 and 4 are operational in 2021
- January 2021, CNSC accepted the OPG's Basis Document for the next Periodic Safety Review (PSR) that will lead to next Integrated Implementation Plan (IIP)
- No Licence Conditions Handbook (LCH) revision in 2020 but a substantial revision was issued in 2021

#### CNSC Oversight of the current IIP at Darlington

- Overall, there were 622 IIP commitments planned in the IIP.
- In 2020, OPG completed 41 commitments, 19 were under review for closure and 59 closed by CNSC.

#### CNSC Oversight of the Darlington Refurbishment Project:

- Staff continued with its oversight on the Darlington Unit 3 Refurbishment activities following the Unit 3 shutdown in September 2020.
- Staff completed the oversight with focused inspections as OPG removed the fuel and moderator from Unit 3 between September and November 2020.
- Staff from Ottawa headquarters worked closely with Darlington site staff to conduct inspections, technical reviews and other compliance monitoring activities.
- Staff oversaw Unit 2 refurbishment activities that confirmed the regulatory requirements were met and Unit 2 was returned to service in June 2020.
- Overall, CNSC staff are satisfied that the refurbishment activities conducted on Unit 3 are performed safely and in compliance with regulatory requirements.

#### CNSC Staff noted several oversight areas that were highlighted:

- OPG made considerable effort to improve its performance with radiological hazard control compared to 2019.
- Chemistry control was strong and compared favourably with industry averages.
- Preventive maintenance deferrals and backlogs for corrective and deficient maintenance remained low and were better than industry averages.
- CNSC staff approved a request for regulatory flexibility to defer OPG's planned full-scale emergency preparedness exercise to February 2022.
- CNSC considers Darlington to have sufficient provisions for preparedness and response capability to mitigate effects of accidental releases of nuclear hazardous substances on the environment and to maintain health and safety of persons.
- CNSC considers Darlington has made satisfactory progress on its Integrated Implementation Plan.

#### CNSC Staff Oversight of Hazardous Environmental Releases from Darlington:

- Environmental releases were below Derived Release Limits.
- No radiological or hazardous substances releases approached or exceeded Action Levels or regulatory limits.
- Staff reviewed OPG's annual environmental protection reports and determined the dose to members of the public was less than 0.1% of the CNSC Radiation Protection Regulations.
- Radiation doses to the workers at Darlington were below regulatory dose limits of the Radiation Protection Regulations, as well as below OPG's Action Levels from its radiation protection program.
- Overall, CNSC staff are satisfied that the radiological doses to workers are monitored and maintained ALARA, and that members of the public are protected from radiological and hazardous substances released from Darlington NGS.

Kim provided the CNSC oversight highlights for the Pickering NGS.

#### CNSC Power Reactor Operating Licence for Pickering NGS update:

- Authorization from the Commission is required to operate beyond 2024
- Units 1, 4, 5, 6, 7 and 8 were operational in 2020
- Units 2 and 3 are not operational and were defueled in 2008
- CNSC staff revised the LCH in April 2020

#### CNSC oversight of the current IIP:

- Overall, there were 98 IIP commitments planned in the IIP and 20 were to be completed in 2021.
- In 2020, OPG completed 17 commitments, and all 17 were under CNSC review for closure.
- In 2021, only 7 commitments remain; 5 were completed and 2 were removed from the scope.
- As of June 2021, CNSC staff have closed all Pickering IIP commitments and the IIP is now closed.
- The current CNSC Operating Licence requires OPG to undertake a PSR and produce a subsequent IIP to support continued operation of any reactors beyond 2024.
- OPG must make its intent known, to either shutdown or continue to operate, to the Commission no later than December 31, 2022.

#### CNSC oversight of fish impingement and Fisheries Act authorization (FFA):

- Fish impinged in 2020 was the lowest monitored since 2016.
- No observed impingement in 2020 of Schedule 1 fish species for the species at risk category
- Fisheries and Oceans Canada is reviewing OPG request to amend the FAA.

CNSC oversight of the thermal plume monitoring:

- OPG submitted its thermal plume monitoring report “Potential Effects of Pickering NGS Thermal Plume on the Survival of Round Whitefish Embryos, 2018-2020”.
- CNSC staff and ECCC are currently reviewing OPG’s submission.

CNSC Oversight of Hazardous Environmental Releases from Pickering NGS:

- Environmental releases were below OPG’s Derived Release Limits in the LCH.
- There was one hazardous substance limit exceedance in 2020 but review of OPG’s actions taken concluded that the public remained protected.
- CNSC staff reviewed OPG’s annual environmental protection reports and determined that the dose to members of the public from the Pickering NGS was less than 0.1% of the CNSC Radiation Protection Regulations.
- Radiation doses to workers at Pickering NGS were well below regulatory dose limits from the Radiation Protection Regulations, as well as below OPG’s Action Levels from its radiation protection program.
- OPG self-identified a trend of unplanned tritium exposures to workers and Unit 2 had a minor heat transport leak resulting in localised spread of contamination.
- Overall, CNSC staff are satisfied that radiological doses to workers at Pickering NGS are monitored and maintained ALARA, and that members of the public are protected from radiological and hazardous substances released from Pickering NGS.

CNSC oversight of nuclear emergency preparedness at Pickering NGS:

- Pickering has sufficient provisions for the preparedness and response capability to mitigate effects of accidental releases of nuclear and hazardous substances on the environment and maintain health and safety of persons.
- CNSC staff conducted an on-site inspection during a Pickering NGS full-scale emergency exercise.
- During the inspection, CNSC staff identified numerous complaint findings and several non-compliant findings.
- Non-compliant findings were negligible or of low safety significance.
- OPG has addressed the low and negligible findings to CNSC staff satisfaction.

Kim explained that the 2020 annual report concerning Nuclear Power Plant Safety Oversight will be presented to the Commission on December 15, 2021. The report will have no have “Fully Satisfactory” ratings in 2020. The report is available on the CNSC website at <http://www.nuclearsafety.gc.ca/eng/the-commission/meetings/cmd/pdf/CMD21/CMD21-M36.pdf>.

In conclusion, Kim mentioned the Darlington and Pickering NGSs met regulatory requirements in 2020 and there were no negative trends in their safety performance.

The CNSC continues to maintain oversight and successfully carried out its modified compliance program, ensuring on-site verification and remote methods of oversight are adequate with COVID-19 restrictions.

Incorporating the lessons learned from COVID-19 allows the CNSC to remain a flexible and agile regulator for the future. CNSC staff determined that its NPP operations in 2020 and 2021 met regulatory requirements and there were no negative trends in safety performance.

Kim Campbell and John Burta or their associates will update the DNHC next year on the Staff Safety Oversight for 2021 for the Darlington and Pickering Nuclear Power Plants. More information is available on the CNSC website at [nuclearsafety.gc.ca](https://nuclearsafety.gc.ca).

#### **4.2 Progress Report by the Office of the Regional Chair and Chief Administrative Officer concerning the development of the *Durham Nuclear Sector Strategy***

Christine Drimmie, Manager, Corporate Initiatives, and Caitlin Rochon, Emergency Management Coordinator, Office of the Regional Chair and CAO, provided a detailed presentation on the development of the proposed Durham Nuclear Sector Strategy. The highlights of Christine and Caitlin's presentation were:

The purpose of the Strategy is to empower the community by:

- Building understanding of the nuclear sector.
- Increasing our capacity to respond and participate.
- Working with partners to seize opportunities.
- Being prepared for evolving future.
- Taking a community-centred leadership role.

The guiding principles for developing the Strategy are:

- Aligned
- Future-focused
- Community-Centred
- Connected
- Respecting Indigenous rights and treaties.

There were three phases of strategy development:

- Phase 1: Awareness
- Phase 2: Listening
- Phase 3: Integrating input and Lessons Learned.

Christine explained that staff of the nuclear sector working group developed four proposed strategy goals:

1. Grow understanding of the nuclear sector among Regional Council, staff and the community.
2. Protect and sustain the community by addressing impacts and opportunities of being a nuclear host community.
3. Build prosperity by maximizing the benefits of being a nuclear host community and Canada's premier centre of the nuclear industry and innovation.
4. Lead and develop partnerships within the nuclear sector to build leadership capacity and influence decision-making.

Christine explained how community, partner, rights holder and stakeholder engagement was aimed at gathering feedback on the four proposed strategy goals and to gain insight into how the Region might establish itself as an active, engaged leader in the nuclear sector with the capacity to influence decisions that affect the well being, economic development and sustainability of the community.

This included:

- Community Engagement – An online engagement platform, had 202 site visitors, 32 participants who answered the poll questions and most respondents indicated that the four proposed strategy goals are either “very” or “extremely important”.
- Partner, Rights Holder and Stakeholder Engagement – A targeted survey received 33 responses, 88% of respondents reported having a moderate or high level of awareness of nuclear issues in Durham Region and 90% supported the four proposed strategy goals.
- Seven small virtual focus group sessions were held with 24 participants for more in-depth discussion.
- Information gained from the focus groups included:
  - High support for development of the nuclear strategy and the four proposed goals
  - Potential roles identified for the Region included education, advocacy supporting economic development, recognizing Indigenous history, rights and partnership opportunities, and aligning and partnering more with OPG.
- A full summary report is available at <https://yourvoice.durham.ca/nuclear-strategy>.

Caitlin outlined the sections of the draft strategy beginning with an introduction to Durham Region, Canada's premier nuclear community:

- The Region is proud to be an experienced nuclear host community.
- There is a concentration of nuclear facilities, supply chain and academia.
- The Region has existing strong partnerships with the nuclear sector.



- The introduction also describes “who we are, where we are, and what is here”.

The Context for the Region’s Nuclear Strategy includes:

- Region’s Strategic Plan, Community Energy Plan and emissions targets.
- Ontario’s coal phase-out for electricity production.
- Strong record of nuclear safety.
- GHG emissions and energy density of nuclear in comparison to other energy sources.
- Significant provincial and federal initiatives that are underway.
- Valuable medical isotopes are harvested at Pickering and Darlington NGSs.
- Existing management of used nuclear fuel at NGSs and the Nuclear Waste Management Organization’s (NWMO) long-term plans for a Deep Geological Repository (DGR) for used nuclear fuel.

Key Milestones for Durham Region:

- 2021, OPG selects its technology for Canada’s first small modular reactor (SMR) at the Darlington NGS.
- 2022, the Port Granby Project is completed.
- 2022, OPG will install technology for isotope harvesting at Darlington NGS.
- 2024, OPG plans to begin engineering and construction of the SMR at Darlington NGS.
- 2024, Pickering NGS reactors begin to sequentially shut down.
- 2025, Durham Region’s corporate GHG emissions to be reduced by 20% from 2019 levels.
- 2028, Darlington SMR is planned to be operational.
- 2030s, NWMO plans to begin construction on its DGR for the long-term management of used nuclear fuel in Canada.
- 2040s, by 2040 OPG will be at a net-zero carbon company.
- 2040s, NWMO plans to complete the DGR and will start receiving used nuclear fuel from the Pickering and Darlington NGSs.
- 2050s, by 2050 Durham Region’s community carbon emissions will be 100% below 2019 levels.

Caitlin explained the Region’s draft Nuclear Sector Strategy includes the following desired goals and outcomes:

Grow Understanding

- Increased understanding by Regional Council, staff and community.
- Improved intergenerational knowledge transfer.
- Improved alignment and consistency among Durham Region staff communications.
- Increased community engagement and participation.

### Maximize Prosperity

- Increased investment, research and job creation.
- Develop a strong, diverse talent pipeline.
- Increased local manufacturing to support Canada's SMR technology development.
- Develop a reputation as a respected, innovative source of medical isotopes, the global centre of nuclear expertise.

### Sustain and Protect

- Financial arrangements that recognize the responsibilities associated with being a nuclear host community.
- Increase the Region's ability to anticipate and prepare for changes related to large nuclear projects in Durham Region.
- Minimize any adverse impacts of large nuclear projects and optimize benefits to the community.

### Develop Partnerships

- Increased knowledge sharing on the experience of being a host community.
- Improved capacity to influence policy and decision making at the provincial and federal levels.
- Increased collaboration concerning environmental stewardship.
- Improved communications, cooperation and alignment.

### Supports for Strategy Delivery

- Governance by establishing a Nuclear Sector Working Group (staff).
- Implementation and financial plans
  - Communication plan development to support strategy roll out
  - Advance actions via annual business planning and budget process
- Monitoring and Evaluation Plan
  - Develop metrics and indicators related to each action
  - Report annually beginning in 2023 with a review in 2026
- Open, Accountable and Evolving
  - Public reporting of plans, results and evaluation
  - Learn from experience and refocus as needed
- Conclusion
  - Strategy allows us to be prepared and proactive, extend our reach through partnerships, to influence change, manage uncertainty and to seize opportunities.

### Caitlin provided a list of next steps:

- Providing briefings on the strategy and seeking comments.
- Refining the document based on feedback.
- Seeking approval of the strategy by:
  - Report and presentation at Committee of the Whole on December 15, 2021

- Report to Regional Council on December 22, 2021.
- Working on the strategy design so that it will be suitable for posting on [durham.ca](http://durham.ca).
- Launch Durham's Nuclear Sector Strategy in early 2022.

Christine Drimmie and Caitlin Rochon or their associates will continue to update the DNHC on the progress of the Durham Nuclear Sector Strategy. For more information, Christine can be contacted at [christine.drimmie@durham.ca](mailto:christine.drimmie@durham.ca) and Caitlin at [caitlin.rochon@durham.ca](mailto:caitlin.rochon@durham.ca).

#### **4.3 Progress report by the Canadian Nuclear Laboratories (CNL) concerning the Port Granby Project**

Ajit Ghuman, Manager, Long-Term Waste Management Facilities for the Port Granby and Port Hope Projects, provided a detailed progress report with excellent photos of the site. The last progress report to the DNHC concerning the Port Granby Project was on September 18, 2020, by Dave Smith.

Ajit mentioned Canada's commitment to cleanup and to safely manage the historic low-level radioactive waste (LLRW) is nearing completion and the highlights of his presentation were:

- In November 2020, completion of relocating approximately 1.3 million tonnes of LLRW to the above ground storage mound at the Port Granby Long-Term Management Facility.
- In September 2021, capping and closing of the above ground storage mound with topsoil and grass was completed.
- The engineered above ground storage mound has 3 major layers:
  - Base liner system of 1.35 metres
  - Waste layer of up to 10 metres
  - Cover system of 2.5 metres.

Ajit explained that the on-site, Port Granby Project Long-Term Waste Water Treatment Plant, will continue to be used for the treatment of liquid waste. Liquid waste includes impacted groundwater, surface water, mound leachate and marginally impacted groundwater from the former site.

The CNSC licenses and regulates the Port Granby Project and determines how waste water is handled and discharged from the site.

- The storage mound diverts clean water (rain and snow) to perimeter ditches, into storm water ponds before discharge off-site.
- The monitoring of waste water confirms the removal of a broad based list of nuclear/hazardous substances to meet the requirements for safe discharge to Lake Ontario.
- To date, the processed waste includes approximately 768,000 cubic metres of clean water and 2,855,000 kilograms of solids that were removed to a safe long-term storage facility.

- With the mound now closed, solids resulting from the water treatment process are being transported by trucks to the Port Hope Long-Term Waste Management Facility.
- The East Gorge Groundwater Treatment system at the former waste management facility collects and pumps marginally impacted water to the plant for treatment before discharge to Lake Ontario.

Ajit mentioned that the realignment of Lakeshore Road is complete and the former road restored and several site infrastructure changes are currently underway to be completed in 2022 including:

- Removal of temporary internal roads
- Removal of the Lakeshore Road underpass
- Demobilization of equipment used by contractors.

Ajit explained the Phase 3 - Long-Term Monitoring of the Port Granby Project will include:

- East Gorge groundwater collection
- Treatment of leachate from the above ground mound
- Solids from the waste water treatment plant is safely transported to a licensed off-site storage site
- The site will remain fenced
- The mound has internal sensors and is monitored
- The grounds are monitored
- Continued environmental monitoring of air, water, groundwater, soil plants and wildlife
- Continued safety oversight to minimize risk to people and the environment.

In summary, Ajit mentioned that Port Granby Project includes a robust Public Information Program that outlines ongoing communication with the community with newsletters, tours, meetings with key stakeholders and an Indigenous engagement program.

Ajit Ghuman or his associates will provide the DNHC with further progress reports on Port Granby Project next year. More information on the Project can be accessed at [info@phai.ca](mailto:info@phai.ca) or 905-885-0291.

The Historic Waste Program Management Office is located at 25 Henderson Street, Port Hope, ON L1A 0C6.

## **5.1 Community Issues at Pickering Nuclear**

Carrie-Anne Atkins, Manager, Stakeholders and Corporate Affairs, Pickering Nuclear, provided an update on Community Issues at Pickering Nuclear and the highlights were:

- Pickering Units 1, 4, 6 and 8 are operating at or close to full power.
- Pickering Units 5 and 7 are in a planned maintenance outage.

- The Fall Issue of the OPG newsletter *Neighbours* will be distributed by mid-December concerning several significant community issues at Pickering and Darlington NGSs.

Carrie-Anne Atkins, Manager, Stakeholders and Corporate Affairs, Pickering Nuclear, can be reached at 416-528-7766 or by e-mail at [carrie-anne.atkins@opg.com](mailto:carrie-anne.atkins@opg.com) for more information.

## 5.2 Community Issues at Darlington Nuclear

Carrie-Anne Atkins, Manager, Stakeholders and Corporate Affairs, Pickering Nuclear, provided an update on the Community Issues at Darlington Nuclear and the highlights were:

- Darlington Units 1 and 2 are operating at close to full power.
- Darlington Unit 3 is undergoing refurbishment and Unit 4 is in a planned maintenance outage.
- Darlington Refurbishment Project for Unit 3 has surpassed the halfway mark and will enter the reassembly phase while Unit 1 is being prepared for its refurbishment to begin in February 2022.
- In October, OPG received approval of the licence renewal for the Site Preparation of the Darlington New Nuclear Project from the CNSC. The licence allows OPG to carry-out activities to prepare the site for future infrastructure construction that is being planned for the Spring 2022.
- OPG continues to work with three SMR developers on their potential technologies for future deployment of a SMR at the Darlington site. OPG expects to make a technology decision by year end 2021, pending government review and concurrence.
- The Darlington New Nuclear Project team will provide the DNHC with a progress report in 2022 when more details of the Project are finalized.

Lindsay Hamilton, Manager, Stakeholders and Corporate Affairs, Darlington Nuclear, can be reached at 905-914-2457 or by e-mail at [lindsay.hamilton@opg.com](mailto:lindsay.hamilton@opg.com) for more information.

## 5.3 Corporate Community Issues

Carrie-Anne Atkins Manager, Stakeholder and Corporate Affairs, Pickering Nuclear, provided an update on several OPG corporate community issues and activities that included:

- COVID-19 - Employees were asked to submit their vaccination status through an internal program and testing of unvaccinated employees began on October 18. Employees are returning to their offices and will soon reach full occupancy and they will continue to follow COVID safety protocols.
- Reconciliation Action Plan – On October 14, OPG launched its Action Plan to provide a road map of how they intend to work in partnership with Indigenous communities, businesses and organizations to advance

reconciliation. The Action Plan is a living document that will continuously evolve as new initiatives and opportunities emerge.

- Ontario Tech University and Durham College Partnership Renewal – On October 20, OPG announced it is continuing its decade-long collaboration with Ontario Tech University and Durham College with a further \$5 million investment. The new funding will be support capital expenditures, equipment, scholarships and bursaries for both institutions.
- Whitby Chamber of Commerce Business Award – On November 10, OPG Nuclear was awarded a Whitby Chamber of Commerce Business Achievement Award and Steve Gregoris, Senior VP, Darlington Nuclear, accepted the award on behalf of OPG.
- GridEx Emergency Preparedness Drill – On November 16, OPG participated in the North America Electricity Reliability Corporation (NERC) Grid Ex V1 exercise to demonstrate how they would respond to and recover from simulated coordinated cyber security and physical security threats and incidents. The exercise will help OPG strengthen their crisis communications relationships and provide input for lessons learned.
- Exercise Unified Command (ExUC) – On February 23-25, 2022, Darlington NGS will host the national emergency and preparedness response exercise known as ExUC. It has been conducted in previous years at Pickering and Darlington NGSs. This nuclear emergency preparedness exercise will provide an opportunity to validate the interoperability of emergency response plans and processes currently in place for OPG and its participating organizations at all levels of Government.
- Nuclear Waste Management Division Name Change – Over next few weeks, OPG's Nuclear Waste Management Division will change to Nuclear Sustainability Services. The name change reflects the division's good stewardship of nuclear materials, by-products of nuclear energy with a focus on the three Rs – reduce, reuse and recycle aligned with OPG's Climate Change Plan. The DNHC will arrange for a presentation with the Nuclear Sustainability Team in 2022.
- Other OPG Corporate Community Activities and Partnerships:
  - November 3, Take Our Kids to Work Day
  - October 29 to November 11, Poppy Campaign
  - October and November – Several First Nations OPG Information Sharing Sessions
  - November 25, White Ribbon Campaign to recognize the increase in domestic violence across Canada due to COVID-19
  - City of Pickering's "Winter Nights, City Lights: Walk-Thru Experience" partnership from November 19 to February 28, 2022
  - Durham Region Police Services Food and Toy Drive with OPG employee partnership
  - Windreach Farm Holiday Festival of Lights Drive-Thru Event with OPG sponsorship from December 10 to 14
  - Youth Engagement Campaign to advance the discussion around nuclear energy as part of the solution to climate change.

## **6. Other Business**

### **6.1 Topics Inventory Update**

Robert Kyle indicated the Topics Inventory will be revised to include the presentations made today.

### **6.2 Future Topics for the DNHC to Consider**

Dr. Robert Kyle indicated the next DNHC meeting scheduled for January 21, 2022, will be a virtual meeting and the theme will be *Progress reports concerning Nuclear Emergency Preparedness in Durham Region* that will likely include:

- Progress report by Emergency Management Ontario, Office of the Fire Marshal and Emergency Management (OFMEM), concerning its Nuclear Emergency Preparedness highlights in 2021 and plans for 2022.
- Progress report by OPG concerning its Nuclear Emergency Preparedness highlights in 2021 and plans for 2022 at the Darlington and Pickering NGSs.
- Progress report by DEM concerning its Nuclear Emergency Preparedness highlights in 2021 and plans for 2022.
- Progress report by the CNSC concerning an update of its Working Group preparing the report “Emergency Distribution of Potassium Iodide Pills within the Ingestion Zone of the Pickering NGS”.

### **6.3 Scheduled DNHC Meetings in 2022**

- January 21
- April 22
- June 17
- September 16
- November 18

### **6.4 Review of the DNHC Terms of Reference**

Dr. Robert Kyle mentioned the Terms of Reference are being revised with three name changes of participant organizations that regularly report to the DNHC.

A copy of the current Terms of Reference with the proposed changes will be included with the draft minutes of the meeting today. The public members will be invited to provide other suggested changes to Brian Devitt, Secretary to the DNHC, by January 7, 2022. A progress report of the proposed revisions to the Terms of Reference will be made at the next meeting on January 21, 2022.

**7. Next Meeting - Will be a Virtual Meeting**

<b>Location</b>	Durham Region Headquarters 605 Rossland Road East, Town of Whitby
<b>Time</b>	1:00 pm Meeting from the Regional Council Chambers
<b>Date</b>	January 21, 2022

**8. Adjournment** 3:00 PM



**TERMS OF REFERENCE**

**SCOPE**

The DNHC shall act as a scientific and technical orientated committee primarily focused on nuclear emissions, nuclear wastes and other related topics by providing a forum for discussing and addressing potential radiation and environmental human health impacts with nuclear industry representatives who will connect directly with environmental human health experts and members of the public from the nuclear host communities and elsewhere in Durham Region.

**MANDATE**

1. To review, discuss, and improve DNHC's understanding of the radiological environmental performance of nuclear facilities and nuclear waste management facilities in Durham Region and the issues which govern them.
2. To collect, monitor, analyze, discuss, summarize and/or form opinions about available information, including that pertaining to environmental assessments, regarding the possible environmental human health impacts of the radiological emissions from the local nuclear facilities, nuclear waste management facilities and transportation of nuclear waste and to disseminate the results of this work to the public.
3. To identify deficiencies in information about environmental human health impacts of radiological emissions and to recommend directly to the nuclear industry and/or federal and/or provincial governmental representatives that appropriate research be conducted in order to effectively address these deficiencies.
4. To review and discuss unusual incidents at local nuclear facilities and related activities or other facilities using, generating or storing radioactive material that may have adverse environmental and human health consequences.
5. To address and resolve specific issues and concerns which may be related to, be associated with, or caused by radiological emissions from the nuclear facilities and nuclear waste disposal sites that are referred to the DNHC by the public, including local governments, health professionals, etc. or otherwise comes to the DNHC's attention.
6. To maintain an awareness of new or refurbished nuclear facilities in Durham Region and their potential environmental and health effects.
7. To review, discuss, and, if necessary, advise about emerging issues that may be associated with environmental and human health.

8. To receive a progress report on nuclear emergency activities in Durham Region at least annually.
9. The following subjects shall not be components of the DNHC's mandate:
  - a) Occupational health and safety
  - b) Nuclear power as an energy option

## **ACCOUNTABILITY**

1. The DNHC shall report through the Commissioner & Medical Officer of Health to the Health & Social Services Committee and the Regional Council.
2. If an environmental human health impact deficiency needs to be escalated, the DNHC may make recommendations, through the Commissioner & Medical Officer of Health, to the Health & Social Services Committee and the Regional Council, which can endorse DNHC's recommendation and ensure that the nuclear industry and/or federal and/or provincial government and/or other stakeholders are informed of Council's decision regarding such matter.

## **COMPOSITION**

The DNHC shall be composed of the following Members (or designates):

1. From the Regional Municipality of Durham:
  - a) Commissioner & Medical Officer of Health
  - b) Director, Health Protection
  - c) Epidemiologist
2. From Ontario Power Generation:

Two representatives familiar with environmental and health issues at Darlington and Pickering Nuclear Generating Stations
3. From the public:
  - a) Nine Public Members who reside in either Ajax, Clarington, Oshawa, Pickering, or Whitby, and, if possible, three of whom reside in Ajax/Pickering and three of whom reside in Clarington;
  - b) Up to three Alternate Public Members who will represent absent Public Members; and
  - c) Public Members and Alternative Members shall be appointed by Regional Council as recommended by the Commissioner & Medical Officer of Health in accordance with such factors as residence, availability, knowledge of and interest in nuclear science, fit with the DNHC's scope, and ability to function in a group setting.

4. From the Government of Ontario:

One representative from the Ontario Ministry of the Environment, Conservation and Parks

5. From ~~the Ontario Institute of Technology~~ Ontario Tech University:

One representative from the Faculty of Energy Systems and Nuclear Science

6. The DNHC shall also invite presenters and observers to attend and/or participate in its meetings, including representatives from:

- a) Canadian Environmental Law Association
- b) Canadian Nuclear Safety Commission
- c) City of Oshawa
- d) City of Pickering
- e) City of Toronto
- f) Durham Nuclear Awareness
- g) ~~Durham Emergency Management Office~~ Durham Emergency Management
- h) Durham Region Planning and Economic Development Department
- i) Independent Electricity System Operator
- j) Greenpeace Canada
- k) Health Canada
- l) Nuclear Waste Management Organization
- m) Municipality of Clarington
- n) Office of the Fire Marshal and Emergency Management
- o) Ontario Power Generation
- p) Ontario Ministry of Energy, Northern Development and Mines
- q) Ontario Ministry of Health and Long-Term Care
- r) ~~Port Hope Area Initiative Management Office~~ Canadian Nuclear Laboratories
- s) Public Health Agency of Canada
- t) Town of Ajax
- u) Town of Whitby

## MEETINGS

- 1. Meetings shall be chaired by the Commissioner & Medical Officer of Health or designate.
- 2. A quorum shall consist of nine Members as listed under Composition clauses 1 to 5.
- 3. The DNHC shall reach decisions normally by consensus.
- 4. The DNHC shall establish the dates, times, and places of subsequent meetings, normally at the conclusion of each meeting. Meetings shall normally be held at least five times per year. The meeting times and places for a calendar year shall be posted on the Region's website, on Health's DNHC webpages.

5. The Commissioner & Medical Officer of Health shall appoint a Secretary to the DNHC to be responsible for ensuring that agendas are prepared, correspondence and minutes are recorded, distributed, posted and a suitable meeting place is secured and presenters are confirmed. The Secretary shall respond to requests for correspondence, presentations, reports, etc. to be placed before the DNHC and shall ensure that such requests are appropriate and properly aligned with the DNHC's scope and theme of future meetings. The Secretary shall make minor wording changes to the Terms of Reference as needed such as the names of organizations of presenters. The Secretary shall advise the DNHC at its next meeting of any changes made.
6. The unapproved minutes of DNHC meetings shall be added to a subsequent Council Information Package. DNHC approved minutes and agendas are posted on the Region's website on Health's DNHC webpage.
7. Questions and answers at DNHC meetings should be limited in scope and focus on the content of the respective presentation and/or report.
8. All participants are expected to be courteous and respectful throughout the meeting.

#### **TECHNICAL SUPPORT**

1. When appropriate, the representatives of Ontario Power Generation and governmental/regulatory bodies shall ensure that all studies and other information relevant to the DNHC's mandate are made available to the DNHC.
2. When appropriate, the representatives of Ontario Power Generation shall ensure that all relevant technical reference material (e.g., nuclear and environmental performance and radiological emission data) is presented to the DNHC using a readily understandable format.

#### **REVIEW of the TERMS OF REFERENCE**

The DNHC shall review its terms of reference at least every 3 years. This frequency does not preclude substantive changes being presented to the Health & Social Services Committee and the Regional Council sooner if the need arises.

**November 2021**