

**Pickering Nuclear Generating Station
Community Advisory Council
Pickering Nuclear Information Centre
Tuesday, January 17, 2023
Highlights**

Emergency Preparedness Highlights

Stan Whatmough reviewed OPG emergency preparedness activities in 2022 and priorities for 2023. CAC members found the OPG approach to emergency preparedness reassuring and asked many questions about the details.

Site Update

Emily Tarle presented an update on the operating status of the Pickering Nuclear units, communication of the 2023 station business plan to employees, recent media(coverage of the Pickering and Darlington plants, and other items.

Pickering Operations to 2026

Ayisha Shah talked about an optimization plan to end Pickering Nuclear operations in 2026. Under the proposed plan, OPG will shut down Units 1 and 4 in 2024 and Units 5 to 8 in 2026. Council members were pleased to hear about the proposed plan and asked questions about the potential redevelopment of nuclear generation at Pickering.

Public/Community Affairs

Carrie-Anne Atkins presented an update on recent and forthcoming OPG activities in the community. Among the items mentioned: a public hearing on Jan. 25 or 26 on a licence renewal application for the Darlington nuclear waste facility; a Christmas care package to long-term care residents; forthcoming station tours for various municipal councils and their staffs; a Bring Back the Salmon hatchery launch.

Results of CAC Member Surveys

Dave Hardy presented the results of recent interviews with members of the Pickering and Darlington Community Advisory Councils. Areas covered included: public awareness of OPG/nuclear; subjects considered important by the CACs; ideas for refreshing the CACs; and topics for a CAC Report to the Community.

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Tuesday, January 17, 2023**

CAC:

John Earley
Mary Gawen
Pat Mattson
Sean McCullough
Cody Morrison
Peter Ottensmeyer
John Simpson

Guests:

Craig Bamford
Richita Peterson
Khaled Turk

Regrets:

Jill Adams
Frank Dempsey
Donna Fabbro
Bill Houston
Tim Kellar
Tracy MacCharles
Tavis Nimmo
Helen Shamsipour
Dan Shire

OPG:

Carrie-Anne Atkins
Kevin Jayawardene
Ayisha Shah
Analiese St. Aubin
Emily Tarle
Stan Whatmough

Hardy Stevenson and Associates:

Francis Gillis
Dave Hardy

Topic #1: Land Acknowledgement;

Emily Tarle, Deputy Site Vice President, presented a Land Acknowledgment.

Topic #2: Review of Minutes

The Joint Pickering and Darlington CAC minutes of Dec. 6, 2022, were approved without changes.

Topic #3: Emergency Preparedness Highlights 2022 and 2023

Stan Whatmough, Enterprise Emergency Management – Section Manager, reviewed EEM activities in 2022 and plans for 2023 (Appendix 1).

Stan noted that the mandate of Enterprise Emergency Management is to ensure that OPG has adequate provisions to mitigate the effects of a nuclear emergency and protect the health and safety of the public, staff and the environment.

Stan discussed 2022 highlights, including: enhanced proficiency of OPG's Emergency Response Organization (ERO); drills and exercises; distribution of over 500,000 potassium iodide (KI) pills; innovation; and a successful Emergency Management Review Visit (EMRV) by the World Association of Nuclear Operators (WANO) at Darlington in June.

Stan presented a summary video of the 2022 Exercise Unified Command, showing how nuclear emergency response is a responsibility of OPG but also of municipal, regional and federal government participants. (Control + Click to follow link: <https://vimeo.com/718360117/3ace682b21>)

Stan also discussed a list of 2023 priorities.

Stan responded to Council questions:

- *You related increased public demand for KI (potassium iodide) pills to such international events as the war in Ukraine. Are you aware of any concerns amongst the public about the potential threat to nuclear facilities due to unrest in the United States?*
I'm not aware of that particular connection in the public mind, but there has been an increased public interest in KI pills in Ontario.
- *You talked about transportation emergencies. Are these related to evacuation?*

The drills are related truck transport of radioactive materials and possible incidents, such as a drum falling out of a truck or response to a fire.

- *Since the construction of Pickering Nuclear in 1970, how many actual emergencies have occurred?*
At OPG, plant and public safety is, and always has been, our number one priority. In almost 50 years of operation, Pickering Nuclear has never had a serious accident that harmed any member of the public.
- *You mentioned 1,300 emergency team members. Does that include both the Pickering and Darlington sites?*
Yes, both sites as well as off-site personnel.
- *Wind direction would be significant in a nuclear emergency. Is wind direction measured in emergency drills?*
We have automated wind direction monitors at the 1-kilometre and 3-kilometre boundaries around the plant. During drills, a team is sent out with dosimeters to monitor radiation in areas around the plant.
- *In the drill shown in the video, how did you do the evacuation?*
Experts were hired to do evacuation time estimates. We are now looking at the effects of population density changes around the plants.
- *Does OPG have partnerships with suppliers regarding emergency preparedness?*
We outsource a lot of systems, for example autodialing of information to the public. We centrally control communications. Information is shared with the province and with municipalities.

Topic #4: Site Update

In a health and safety moment, Deputy Site Vice President Emily Tarle noted that OPG suspended major COVID protocols in December but continues to monitor COVID developments inside and outside the plant. Masks and hand sanitizer continue to be available for anyone who wants to use them.

Emily presented a site update:

- Units 1, 4, 5, 7 and 8 are operating at or near full power. Over the holidays, Unit 1 was taken off line for a short maintenance outage and is now almost at full power. Unit 6 is in a planned winter/spring outage that began on Jan. 12.
- On January 5, Units 7 and 8 were taken off line for 10 minutes as directed by the Independent Electricity System Operator (IESO). This brief outage was related to work being done by Hydro One (Ontario's largest electricity transmission and

distribution service provider, serving predominantly rural customers). This work was causing grid instability.

A Council member asked how the IESO knew the incident was related to Hydro One work. Emily said that the IESO monitors the grid for any instance of instability.

Emily continued:

- Next week there will be a site visit by WANO (the World Association of Nuclear Operators). We always get good insights from these peer reviewers, making a good plant even better.
- The station Business Plan rollout starts next week. The Pickering leadership team will meet with employees across the site to communicate the Business Plan for 2023. Senior Vice President Jon Franke is well prepared to answer any questions staff may have. The purpose of the Business Plan presentation is to get staff motivated for the coming year.
- OPG still plans to end the commercial operation of Units 1 and 4 in 2024, but cannot yet say with certainty what direction the company will take for Units 5 to 8 after 2026. But whether OPG redevelops Pickering or shuts the doors in 2026, the company is working intensely to prepare staff for either possibility. Six teams are working collaboratively on staff development.
- A team has been assembled to assess the feasibility of redeveloping Units 5 – 8. (Carrie-Anne noted that a final report on the viability of redevelopment will probably be completed by November.)
- Emily was interviewed by CTV in September discussing SMRs and new nuclear in Ontario. A CTV team toured the Darlington and Pickering plants to obtain video footage. The story ran on Dec. 14. (Control and Click to follow link: [CTV National News: Future of nuclear power | CTV News](#))
- The CTV feature contrasts with a Globe and Mail story this month on pressure tube integrity, which did not present a full and balanced picture. CANDU pressure tubes have a very robust design. OPG combines rigorous and regular inspections combined with material testing, verification and independent reviews to confirm fitness for service of its pressure tubes.

A Council member asked if the redevelopment team would be presenting to the CAC. Emily indicated there would be such a presentation, probably in April.

Topic #5: Pickering Operations to 2026

Ayisha Shah, Senior Project Manager, talked about an optimization plan to end Pickering Nuclear commercial operations in 2026 (Appendix 2). Under the proposed plan, which is supported by the province of Ontario, OPG will shut down Units 1 and 4 in 2024 and Units 5 to 8 in 2026. OPG's plan requires approval by the Canadian Nuclear Safety Commission (CNSC).

After commercial operations cease, Ayisha noted, the station will be placed in a safe storage state beginning in 2028 and eventually decommissioned after a 30-year storage period with surveillance.

Ayisha detailed Ontario's projected electricity supply needs over the coming years, which Pickering optimization will help to address. She also noted that the safe, sequential shutdown of all Pickering units will maximize the economic benefits of the generation station in the community.

Council members found Ayisha's presentation interesting and reassuring. Their questions, however, focused on Pickering redevelopment:

- *When will the Pickering redevelopment decision be made?*
We plan to reach a decision on the feasibility of redevelopment in November.
- *Can Pickering use its current licence to operate for the redevelopment?*
No, we would need to get a licence renewal.

Dave noted that the potential re-development of Pickering Nuclear was very much on the minds of CAC members who were interviewed by Dave Hardy and Associates in November and December.

Topic #6: Public/Community Affairs

Carrie-Anne Atkins, Manager Corporate Relations Pickering Nuclear, presented an update on recent and forthcoming OPG activities in the community:

- On Dec. 13, OPG and Darlington New Nuclear Project (DNNP) leaders participated in a virtual public information session. They presented a 30-minute project update followed by 90 minutes of Q&A. A second public session will be presented on Jan. 19.
- On Friday, Jan. 27, a DNNP team will announce details around the DNNP Integrated Project Delivery model. Stakeholders and the Minister of Energy will be among those in attendance.

- OPG's licence renewal application for the Darlington nuclear waste facility will be open for a public hearing on either Jan. 25 or 26, hosted by the CNSC.
- On Dec. 21, OPG partnered with the Rotary Club of Pickering to provide Christmas care baskets to residents of Bay Ridges long-term care facility. The baskets included winter essentials, including blankets, robes, slippers, etc.
- The latest Neighbours Newsletter went out over the holidays. OPG is now planning for the Spring 2023 newsletter.
- Site tours and presentations include: new municipal council and staff station tours during the first quarter of this year; virtual tours and presentations for local Probus Clubs (clubs for retired or semi-retired people) in February and March; on Jan. 10, the Durham Trailblazers Pathfinders Club (ages 12 – 13) visited the Darlington Information Centre.
- The Bring Back the Salmon hatchery launch will take place at the Darlington Nuclear Information Centre on Jan. 30. With its community partners, OPG will deliver an educational program over the coming months to students at the Bowmanville Central Public School. The program will focus on the lifecycle of Atlantic salmon.
- This March Break, OPG will be offering two free public skates per day across Durham Region.

Carrie-Anne took the opportunity to note that the refurbishment of two units at Darlington continues to progress well. The refurbishment of Unit 3 is now over 90 percent complete; Unit 1 is over 30 percent complete.

Topic #7: Results of CAC Member Surveys

CAC Facilitator Dave Hardy presented the results of recent interviews with members of the Pickering and Darlington CACs. The purpose of the interviews was: to touch base with the CACs; to gain information on refreshing the Councils; to find out what members are hearing from community contacts regarding OPG; and to get a list of topics that should frame future community dialogue.

Interviews were conducted by the CAC support team of Dave, Francis Gillis and Eileen Clark. A series of questions was sent to CAC members in advance. Most responded in telephone interviews, but there were also some written responses. Eighteen of 25 members responded.

The interviews covered four areas:

- OPG/Nuclear awareness and understanding

- Important CAC subjects
- Ideas for refreshing the CACs
- Topics for the Report to the Community

OPG Nuclear Awareness and Understanding

CAC responses indicated that OPG does not come up as an issue for the general public in Durham Region. Among engaged groups, there is good knowledge of OPG and the Pickering and Darlington plants. There is, however, a lack of awareness and understanding within the general public about most issues, not just nuclear. There is some confusion about the future of nuclear operations. Active anti-nuclear advocacy is influencing some groups in society.

Important CAC Subjects

The following topics were cited as important for future dialogue with the community:

- Current and future plant status
- Information about new technologies such as SMR
- Future of Pickering plant
- Socio-economic implications of future changes affecting Pickering, Clarington and other Durham Region communities
- Safety and emergency preparedness – particularly the preparedness of local hospitals and institutions
- Groundwater, health, and storage of used fuel

Ideas for refreshing the CACs

Members appreciate the effectiveness of the current CAC process, but provided a number of suggestions to enhance the CACs:

- Members to prepare before the meetings by noting questions about OPG they were hearing
- Addition of new members representing greater diversity
- OPG asking CAC members specific questions
- OPG to tell story and then explain with technical details
- Occasional workshop
- In-person meetings and an earlier start
- Orientation of new members

Topics for the Report to the Community

Regarding a CAC Report to the Community, which will be distributed to the public in Fall 2023, members developed a short list of topics:

- Darlington new nuclear SMR status
- OPG, Durham College, Ontario Tech University partnership
- Isotope production launch
- Darlington Refurbishment
- Emergency preparedness and environmental monitoring

- Pickering operations to 2026

Dave, Emily and Carrie-Anne responded to Council questions:

- *Regarding the OPG, Durham College, Ontario Tech partnership, how do you define “partnership”?*

Carrie-Anne: The three institutions cooperate on mutually beneficial initiatives. The partnership was established 15 years ago and is assessed every five years. The Ontario Power Generation Engineering Building was constructed at Ontario Tech fifteen years ago. OPG works with Durham College and Ontario Tech to develop employment-related skills in their students.

- *I heard there was a hiring freeze at OPG in 2017.*

Emily: Hiring patterns fluctuate over time.

- *You mentioned a “Nuclear 101” presentation to orient new CAC members. What kind of presentation did you have in mind?*

Dave: The CAC is working with OPG to develop that. It’s a blank slate right now. Onboarding of new members could include CANDU 101 and a station tour.

Emily: A virtual tour of Darlington is available on the OPG website:

<https://www.opg.com/powering-ontario/our-generation/nuclear/darlington-nuclear/>

- *I particularly like the suggestion that at meetings OPG tell the story and then explain with technical details.*

- *What did you mean by “OPG asking CAC members specific questions”?*

Dave: The suggestion is that OPG ask members at the beginning of each meeting what they are hearing about OPG in the community or at work?

- *What would the “occasional workshop” entail?*

Dave: Specific topics might lend themselves to a workshop format, which could include an introductory briefing and questions for discussion, followed by breaking up into small discussion groups and then a plenary session to share outcomes from the groups.

- *The CNSC takes much too long to make licensing decisions, significantly delaying the building of reactors.*

Emily: In my experience, the Commission has been very open with us and recognizes the importance of timelines.

Topic #8: Closing Remarks

Emily said she likes the kind of open forum that the CAC represents. She enjoyed this evening’s meeting and really appreciated the time that Council members devoted to the meeting.

Forthcoming Meetings

Dave noted that there will be an onboarding session for new CAC members, and interested current members, in March. This session will include a CANDU 101 presentation and a station tour. The next meeting of the full CAC will be in April.

Onboard New CAC Members

Pickering Nuclear Information Centre
Tuesday, March 21, 2023
4 pm – 7 pm

PNGS Community Advisory Council

Pickering Nuclear Information Centre
Tuesday, April 18, 2023
4 pm – 7 pm