Pickering Nuclear Generating Station Community Advisory Council Pickering Nuclear Information Centre Meeting Minutes, September 19, 2017 <u>Highlights</u>

Site Update

Randy Lockwood presented an update on worker safety performance and on the productivity of the plant. He also presented a progress report on Pickering Station operations and steps being taken to ensure safe and reliable operations through to 2024. The station continues its strong safety performance and, operationally, has achieved its best performance ever during the last three years, putting it on a par with the industry best.

Pickering Nuclear Unified Drill

Steve Gregoris talked about the 2017 Exercise Unified Control, a nuclear emergency drill that will take place on December 6 and 7. The challenging scenario will be a severe accident at Pickering Nuclear, along the lines of the Fukushima event. 34+ agencies from the municipal, provincial and federal authorities will be involved in the exercise. CAC members asked many questions.

Communications Around the Drill

Neal Kelly talked about the extensive internal and public communications that will take place before, during and after the drill coming up in December.

Emergency Planning Information Tools

Kevin Powers presented an update on OPG public communications around emergency preparedness. He talked about the "flashlight" package distributed several years ago, which got a very good response from the public. The large scale distribution of KI tablets in 2015 was also very successful. In late November, OPG will distribute a binder kit to households for use in an emergency. CAC reaction to the binder concept was very positive.

Public Affairs

Carrie-Anne Atkins presented an update on recent and forthcoming OPG activities in the community. Among the items mentioned: Tuesdays on the Trail events well attended this summer; record attendance at the Thickson Woods Fall Festival; Pickering Nuclear Community Information Sessions planned for October.

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Pickering CAC:

John Earley
Keith Falconer
Mary Gawen
Bill Houston
Tim Kellar
Greg Lymer
Sean McCullough
Cody Morrison (for Deborah Wylie)

Cody Morrison (for Deboran W

Zachary Moshonas

Dan Shire Ralph Sutton

Regrets:

Kira Shan

Jim Dike
Donna Fabbro
Donald Hudson
Dinesh Kumar
Pat Mattson
Moe Perera
Helen Shamsipour

OPG:

Carrie-Anne Atkins Ian Azevedo Steve Gregoris Neal Kelly Randy Lockwood Kevin Powers Analiese St. Aubin

PDA:

Francis Gillis John Vincett

Topic #1: Announcements and Correspondence

Facilitator John Vincett announced an OPG staffing change affecting the CAC. This is Carrie-Anne Atkins' last meeting with the Council as she is moving to a new position in communications at Darlington. John introduced Analiese St. Aubin, who is the new Manager of Corporate Relations and Communications at Pickering Nuclear. On behalf of the Council, he thanked Carrie-Anne for her work with the group over the past several years and welcomed Analiese.

John noted that Volume 15, Issue 2, 2017 of NWMO News is now available on the Nuclear Waste Management Organization website (press Ctrl and click on link): https://www.nwmo.ca/~/media/Site/Files/PDFs/2017/07/06/16/55/NewsletterV1522017EN.ashx?la=en.

Topic #2: Review of Minutes

The CAC minutes for June 20, 2017 were approved without changes.

Topic #3: Site Update / Pickering 2024 and Site Licence Submission

Site Vice President Randy Lockwood presented a site update:

- The site has gone 367 days without a lost time accident. The all injury rate year- todate is zero. Worker radiation exposure is considerably below target, and the station is expected to do quite well by year end. OPG is very proud of these records.
- The performance of four of the Pickering units, including Unit 1, are in the second quartile worldwide.
- Year-to-date the forced outage rate is 3.83%, well below the business plan target of 5%.
- On August 24, a motorized valve in Unit 1 closed, which reduced the flow of cooling water. This valve was reopened and improvements were made so that such a closure will not happen again.
- Unit 1 is now in a planned maintenance outage until December. The unit is undergoing
 inspections, An old water heater, a large and heavy structure, has been removed and
 will be replaced with a more energy efficient model.
- In August, the CNSC released its annual report card on Pickering Nuclear. For the second year in a row, the plant received an overall rating of fully satisfactory. We plan to work with the CNSC to improve performance even further.
- In OPG's performance Report Card on Pickering Nuclear for 2016, the station received a Grade of A in all categories.
- Stephanie Smith (Director of Operations and Maintenance) and Randy recently attended a WANO (World Association of Nuclear Operators) meeting in the U.S.

Progress Report

Randy then presented a progress report on Pickering Station operations through to 2024 (Appendix 1). He noted that, on August 28, OPG submitted its licence renewal application to the CNSC, requesting a 10-year licence term (to 2028). The licence would cover plant operations to the end of 2024 and, between 2024 and 2028, safe storage activities such as removal of fuel and water.

The application was prepared by the end of June, but Randy delayed submission until he made sure the application was as good as it could be. The licence application is now posted on the OPG website (http://www.opg.com/generating-power/nuclear/stations/pickering-nuclear-licence-renewal.aspx).

The station continues its strong safety performance, rated in the industry's top quartile. Operationally, Pickering has achieved its best performance ever during the last three years, putting it on a par with the industry best. The plant has significantly reduced the maintenance backlog, with Unit 5 and Unit 1 achieving the second and third longest runs in the station's history.

Randy presented the Pickering relicensing schedule for the Initiation Phase (Q4-2015), Development & Definition Phase (Q1-2016 to Q3-2018), and Execution Phase (Q3-2018 through Q4-2020) (see Slide 5 in Appendix 1). He noted that OPG had to compare programs at Pickering against modern codes and standards. Fifteen safety and control areas have been mapped out by the CNSC. OPG has identified gaps and priorities in these areas. Actions for addressing these are captured in the station's Integrated Improvement Plan (IIP), which is due at the CNSC with a timeline by the end of October.

To date, the Development & Definition Phase is well under budget and on schedule.

Randy presented a short video on the steps OPG is taking to ensure safe and reliable operations to 2024.

Randy remarked that Pickering Nuclear staff are engaged and have turned in their best performance ever. "We plan to drive improvements year over year," he said, "until our last day is our best day."

Randy responded to Council questions:

- What happens to all of the equipment that you are now putting in at high cost?
 The benefits of investment in the plant come between now and the close of operations; the investment will pay for itself during the life extension project. The new equipment will shorten outages and improve reliability significantly, which means higher revenues. Much of the equipment is saleable, though a lot of miles will have been put on it over 10 years.
- Is the December 2024 closing date cast in stone?
 No, but our mandate is to deliver power to the end of 2024. That is all we were asked to do, and that is the licence that we have applied for to the CNSC. Although we expect the fuel channels to run to the end of 2024 with some added margin, it is OPG's intention to close down the generating operations in 2024 and put the units in safe storage.
- It's ironic that the plant is now fixing everything. It would have been nice if that had

been done a lot sooner.

Point taken. That is the value of hindsight. But we are making sure that staff are engaged to improve to 2024. The elephant in the room is staff concerns about what happens after 2024. But we are not offering any false hope. We have to retire the asset at some point, and most employees have accepted that.

Topic #4: Pickering Nuclear Unified Drill

Steve Gregoris, Deputy Vice President at Pickering Nuclear, talked about the 2017 Exercise Unified Control, a nuclear emergency drill that will take place on December 6 and 7 (Appendix 2).

Steve noted that this exercise will be two days long as opposed to the usual exercise of four to six hours. Day 1 will be focused on the station itself; Day 2 will be focused on a number of different outside parties. The challenging scenario will be a severe accident at Pickering Nuclear, along the lines of the Fukushima event. 34+ agencies from the municipal, provincial and federal authorities will be involved in the exercise. Steve remarked that it was a challenge to get this number of agencies to agree on a scenario.

He noted that lessons learned from previous drills will be incorporated into the exercise in December. As well, some pretty significant technological improvements will be in place, including new dose projection software and a P-25 radio system for interagency communications on and off the site (police, fire department, local municipalities).

In talking about emergency mitigating equipment at Pickering, Steve presented a picture (Slide 3 in Appendix 2) of portable pumps and generators in a tent hanger structure, which is designed for easy removal when subjected to extreme weather. He noted that each of Pickering Nuclear and Darlington Nuclear has equipment that can be made available to each other during an emergency. Steve also presented a diagram of emergency mitigating equipment at Pickering, including newer generators for backup (Slide 4). Even though redundancies are in place in the equipment now operating at the site, if they don't work, other backup equipment is in place.

Steve noted that notifications to all those involved will start the exercise at the local, provincial and federal levels. Subsequent notifications will be issued at least hourly but can be more frequent, particularly if the situation degrades. After the initial notification, all information goes to the province, which directs it from there. WANO gets informed from the OPG corporate office; WANO then informs other parties worldwide.

Steve responded to Council questions:

• Are additional groups involved or will it be the same groups as the last exercise? Generally the same, but with the addition of Health Canada. There are lots of planning sessions. Everyone improves their emergency response skills just by participating.

 How do you avoid members of the public thinking the emergency is real and panicking?
 We notify the public that it is just a drill, both during and after the exercise.

• I know from my experience on the Go Train that cellular service is not dependable. How are you addressing that challenge?

There is a recent move to include cellular communication as part of emergency response along with telephone calls to land lines and radio announcements. We are looking at multiple channels.

- How long is each day? Twelve hours.
- Will the exercise go ahead, regardless of weather?
 If it is really inclement, we have protocols for dealing with that. (Neal Kelly added that, if there were an ice storm, OPG would not put people at actual risk.)
- Is there a federal coordinating group?
 (Neal said that a number of groups are involved in coordination, one of which is the Federal Coordination Group.)

Steve continued to respond to questions:

- Can you give an example of how the public is notified?
 There is frequent repetition of the message that this is a drill. In a real emergency, based on weather conditions, decisions are made as to what protection steps members of the public should take; for example, shelter-in-place.
- How is the effectiveness of the exercise assessed?
 There are regulatory observers and OPG assessors. The outside firm that we have engaged to run the exercise for us has an evaluation process built in to the exercise. There is a debriefing after the exercise and, from the regulators and from OPG, a followup drill report, with suggestions for improvement. (Ian Azevedo, Senior Manager, Emergency Preparedness, noted that the exercise is evaluated at multiple levels. If changes need to be made, they are identified. There is a report on steps taken to address the gaps and on lessons learned.)
- It's like a military training exercise.
- Do you measure such factors as response times?
 Yes. A number of metrics have been established in the emergency response community over time through these types of drills. The co-ordinating groups have also had input into the kind of information that is captured to provide data for the measures of success.
- Are participants other than OPG evaluated?

An independent party organizes the drill. There are key measures for different organizations and each organization does its own evaluation.

- Do you report to participants and the public regarding best practices and opportunities for improvement?
 (lan said yes, these elements will be included in the report issued in the first quarter of 2018. Steve added that OPG wants the implementation of key learnings to be in progress by April.)
- Is there a role for public schools in the exercise?
 There are safety measures for school children, though most won't be enacted during the exercise. Basically, just staff are involved. (lan added that all school boards are involved.)
- To facilitate evacuation in an actual emergency, is any consideration being given to turning all highway lanes in one direction (out of the city)?
 Time studies do not recommend that option. Highway capacity and timing are now well understood. Shifts of different parts of the community would be staggered over time.

Topic #5: Communications Around Exercise Unified Control

Director of Media Neal Kelly helped to lead communications during the Unified Response Exercise at Darlington. He talked about communications around the exercise coming up in December.

Neal said that there is a communications subcommittee of participants now in place to manage risks up to, during and after Exercise Unified Control. There will be an opportunity to inform the public. OPG corporate communications will lead dissemination of information and will share messages that have been approved by participants. All participants have agreed that they will each communicate through their own corporate communications departments.

Media and government offices will be targeted in Pickering, Ajax, Toronto and surrounding communities.

The Pickering Nuclear Emergency Response Plan (PNERP) is now being updated.

There could be freedom of information requests.

On November 14 there will be a public launch of the exercise with key speakers.

There will be external communications with stakeholders, including Pickering Nuclear employees. OPG will coordinate communications strategies with outside agencies.

A post exercise document and video will be available to the public and posted on the OPG website. There will also be an OPG news release, emails to employees and inclusion in the

intranet service of Power News.

News about the exercise will be part of OPG operational updates.

During the exercise, OPG corporate communications will coordinate and manage any media who turn up on the site. Following the exercise, OPG will publish a news release and also communicate through social media.

Neal remarked that the exercise and communications around it involves a lot of work but also a lot of fun.

Neal requested a little of the CAC's time on December 6 and 7 to look at OPG's communications during the exercise and to give feedback.

Council members Bill Houston and Zachary Moshonas volunteered to play an observer role during the exercise.

John Vincett said that the CAC will be provided with further details regarding how and when to participate.

Neal said that he would be happy to update the Council before and after the exercise.

Topic #6: 2017 Emergency Planning Brochure

Kevin Powers, Director, Nuclear Public Affairs, presented an update on OPG public communications around emergency preparedness.

Kevin remarked that, with the demise of the Yellow Pages, an always accessible information vehicle for emergency preparedness disappeared.

Durham Emergency Management Office (DEMO) sent out brochures but, by 2011, saw that the public's comprehension was declining rapidly. The flyers were being treated as junk mail. OPG's task was to partner with Durham Region and the City of Toronto to design an information item that people would keep. They came up with the "flashlight" package, which got a very good response from the public.

In 2015, the CNSC requested OPG to send out potassium iodide (KI) tablets to all homes and businesses within a 10 km radius of the Pickering and Darlington nuclear plants. A large scale distribution campaign was very successful.

A direct mail survey indicated that:

- 50% of respondents remembered the flashlight package.
- 80% have kept the KI pills and know where they are.
- 70% felt prepared for an emergency and felt this information was very important.
- 88% wanted another piece of information on emergency planning.

In deciding on a new information package, OPG did some focus group consultations. Several concepts were put before the groups:

- The slogan Preparedness = Power in a Minecraft game type of image on a package containing a little radio for use during an emergency. The response was that people already have a radio, and they doubted the battery would be working when needed.
- The second idea was a package with a battery charger. It was suggested that a charger was such a good idea that people would say: "I'm going to use it now."
- The idea they liked best was a binder kit to help them get started in building their own package to have on hand in case of an emergency.

OPG aims to have the binder kit on doorsteps during the last week in November. "We are working hard on the project," Kevin said. "We are quite excited about it."

Kevin responded to Council questions and comments:

- Distributing such a binder is a great idea, particularly in light of the recent flooding in Florida.
- How much will the package cost?
 I don't have that information at my fingertips but, given economies of scale, the unit cost will be very low, perhaps a dollar.
- I would suggest a vinyl page with pockets in the binder, to slip a spare credit card and cash into.
- And a slot for important documents—marriage certificates, etc.
- And a pencil and notepad.
- Cases of water would be good to have on hand.
- There should be step-by-step instructions in large type, something easy to read in a panicky time.
 Yes.
- Are there instructions in other languages?
 A French translation will be available on line.

John noted that the CAC reaction to the binder concept was very positive.

Topic #7: CAC Report to the Community

Council members had been sent a first draft of the report in advance. John asked members to send feedback to PDA. He suggested using the Track Changes function in Microsoft Word.

There was a suggestion that references to "the Council" be replaced by "the CAC" to avoid confusion with Pickering Council.

It was noted that the next opportunity for enclosure of the CAC Report with the Neighbours Newsletter would be for the issue coming out in January/February 2018, meaning the CAC Report would need to be ready for December.

Topic #8: Public Affairs

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

- Families from across Durham Region once again enjoyed OPG's Tuesdays on the Trail program, with over 2,000 attending the educational and environmental programs held in conjunction with community partners, such as:
 - Clarington Public Library
 - A Gift of Arts
 - Driftwood Theatre Group
 - Scientists in School
 - Central Lake Ontario Conservation Authority (CLOCA)
 - Toronto & Region Conservation
 - Toronto Wildlife
 - Kim Wheatley Ojibway Grandmother
 - WindReach Farm
 - All Our Relations Métis Drum Circle Métis Nation of Ontario
- On Saturday, Sept. 16, OPG hosted a booth at the Thickson Woods Fall Festival, which enjoyed a record attendance of 800 community members.
- The next edition of the Neighbours Newsletter will be delivered to the communities around the Darlington and Pickering plants just after Thanksgiving.
- The Durham Children's Watershed Festival (of which OPG is a founding partner) will take place Sept. 25 29. The goal is to increase awareness of Grade Four students concerning water issues.
- Pickering Nuclear will again be hosting Community Information Sessions: Oct. 24 at Toronto Pan Am Sports Centre; Oct. 25 at Pickering Recreation Complex; and Oct. 26 at Pickering Nuclear Information Centre. OPG and CNSC representatives as well as municipal and provincial emergency managers will be on hand. The CNSC will be

presenting its report card on OPG.

- There will be an Open House at Darlington Nuclear on their refurbishment project on Saturday, Nov. 18.
- Fall testing of the Nuclear Public Alerting System will take place on Oct. 25 and Oct. 26.

Carrie-Anne concluded her presentation by thanking the CAC, saying she really enjoyed working with the group.

John congratulated both Carrie-Anne and Analiese on their new positions.

Topic #9: CNSC News

For selected news items from the CNSC, please see Appendix 3.

Next Meeting of the Pickering CAC Tuesday, October 17, 2017, 6 pm Pickering Nuclear Information Centre (supper available at 5:30 pm)