

**Pickering Nuclear Generating Station
Community Advisory Council
Pickering Nuclear Information Centre
Meeting Minutes, October 17, 2017
Highlights**

Site Update

Randy Lockwood presented an update on the productivity of the plant, the safety performance of employees and other topics. He noted that the equipment reliability index at the plant is the highest it has ever been.

Public Affairs

Analiene St. Aubin presented an update on recent and forthcoming OPG activities in the community. OPG sponsorship of the Children's Watershed Festival, the Community Information Sessions scheduled for late October, Take our Kids to Work Day at OPG on Nov. 1, and the Unified Drill Launch Event planned for Nov. 14 were among the items mentioned.

Operation Clean Sweep

Nadia Temacini and Elise Legace talked about Operation Clean Sweep, in which employees at Darlington and Pickering Nuclear volunteer to do yard work at the homes of seniors living in Ajax and Pickering. The Council was very impressed with the work of this group.

Security at the Pickering Site

Chris Gouveia presented an overview of security at the Pickering site. Council members were very reassured by what they heard. They asked many questions.

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Pickering CAC:

John Earley
Donna Fabbro
Natalie Harder
Greg Lymer
Pat Mattson
Cody Morrison (for Deborah Wylie)
Zachary Moshonas
Ralph Sutton

OPG:

Scott Burns
Ken Costello
Chris Gouveia
Elise Legacé
Randy Lockwood
Glenn Pringle
Analiese St. Aubin
Nadia Temacini

Regrets:

Jim Dike
Keith Falconer
Bill Houston
Donald Hudson
Tim Kellar
Dinesh Kumar
Sean McCullough
Moe Perera
Helen Shamsipour
Kira Shan
Dan Shire

PDA:

Francis Gillis
John Vincett

Topic #1: Announcements and Correspondence

Facilitator John Vincett noted that the Nuclear Waste Management Organization has released Implementing Adaptive Phased Management 2018 to 2022, which outlines the NWMO's five year strategic plan. To see the document ctrl-click on: <https://www.nwmo.ca/en/More-information/News-and-Activities/2017/09/28/16/57/Public-Invited-to-Comment-on-Latest-Strategic-Plan>.

John remarked that the Canadian Nuclear Safety Commission (CNSC) also has a very good website. He drew attention to a one-page article on the site regarding the financial provisions that nuclear plants have to make for the eventual decommissioning and termination of licensed activities: <http://nuclearsafety.gc.ca/eng/resources/educational-resources/feature-articles/financial-guarantees.cfm>

John read a note from former CAC member Kevin Heritage, saying how much he enjoyed discussing issues with other members of the Council and expressing appreciation to John and the staff at Public Dialogue Alternatives. He also expressed appreciation for the duck decoy that was presented to him following his retirement from the CAC.

Topic #2: Review of Minutes

In the minutes of the September meeting, there was a call for a word change in the last bullet on page 3, which should read: “Stephanie Smith (Director of Operations and Maintenance) and Randy recently attended a WANO ... meeting in the U.S.”

With this change, the CAC minutes for September 19, 2017 were approved.

John noted from the minutes that CAC members Bill Houston and Zachary Moshonas had volunteered to participate as observers in the Pickering Nuclear Unified Drill coming up on December 6 and 7. He asked that any other members interested in volunteering to please let him know (email: jvincett@pdalternatives.com; tel: 416-961-4006).

Topic #3: Site Update

Site Vice President Randy Lockwood presented a site update;

- Four out of the six active units at Pickering Nuclear are operating at full power. Two units are in a planned outage.
- This is algae time in the lake. Since Pickering Nuclear draws its cooling water off the top of the lake, the algae represent a seasonal challenge by getting caught at the plant intake.
- Pickering Nuclear has gone over a year without a lost time accident, and the site has enjoyed almost three quarters of a year with an all-injury rate of zero. However, there have been several recent accidents and injuries: one person hurt their fingers; another injured their back; a third rolled an ankle in a fall. OPG takes every injury very seriously, and each one is investigated fully and the learning from that exercise is included in future safety briefings and, where warranted, results in changes in protocols or equipment. The site is still doing well across the board.
- Unit 1 is now in a planned outage that began on August 20 and will be completed in December. Work is progressing well. Unit 8 is also in a planned outage. This outage was brought forward to inspect for cracks in the steam turbine as part of the conservative approach to equipment inspection and management.
- The site is rapidly winnowing down a backlog of corrective maintenance. It should be

noted that these items are not critical, but need to be addressed at the next opportunity. Last year there were 116 outstanding work orders. There are now 30 work orders, so the site has almost reached this year's target of 28.

- The equipment reliability index is the highest it's ever been for the plant and is on a par with Darlington. Generally, outages have been completed on schedule, the forced loss rate is on target and the global assessment report is on track.
- Pickering Nuclear hosted the WANO (World Association of Nuclear Operators) Director from Atlanta, Georgia, their head office. Randy had a good discussion with him. He was not familiar with the CANDU technology, so this was a useful opportunity for him to gain a full understanding of this particular nuclear technology, first hand.
- A WANO evaluation of the site is scheduled for December 4 and will go to mid-December.

Randy responded to Council questions:

- *Assuming cracks are found in the Unit 8 steam turbine, what causes these cracks?*
We expected the turbine to be cracked. Cracking takes place at the bolt. This is due to the lubricant used in the 1980s. We decided that the outage of Unit 8 planned for next fall was too far out. So we brought it forward. We found a couple of cracks.
- *What sort of factors does the equipment reliability index measure?*
Many things go into this index. It paints a picture of how you are maintaining the reliability of the plant.
- *Has the algae problem been going on since day one of plant operations?*
We should have dug a tunnel and run the intake pipe under the bottom of the lake. It would not be economical to do so now. The barrier net now in use is inspected by boat, and the algae collected.
- *How is the collected algae disposed of?*
I will have to check on that.
- *Is the WANO inspection nerve wracking for staff?*
No, it's part of the way we do business. Industry peers inspect us and focus on what we could do better. People expect that, and they see these kinds of inspections as a way to learn more from the examiners and improve their performance.

Topic #4: Public Affairs

Analiene St. Aubin, Manager of Corporate Relations and Communications at Pickering Nuclear, presented an update on recent and forthcoming OPG activities in the community:

- This year over 4,100 Grade 4 students from Durham Region attended the 20th Children's Watershed Festival, held at Camp Samac from Sept. 25 to 29. OPG is a major financial supporter of the festival, sits on the organizing committee and provides staffing support during the five-day event.
- Pickering Community Information Sessions will take place on Oct. 24 in Scarborough, Oct. 25 at the Pickering Recreation Complex and Oct.26 at the Information Centre. The sessions run from 5:30 – 8:30 p.m. These sessions are being promoted through local media and social media.
- Wednesday, Nov. 1 is the annual Take our Kids to Work Day. OPG will welcome Grade 9 students at stations and sites across the province to interact with employees and learn what it is like to work at OPG.
- On Nov. 14, a Unified Drill Launch Event will take place at the Information Centre. The aim of the event is to demonstrate the station's readiness for the Dec. 6 – 7 exercise and to begin the process of advising the media and other local organizations about the objectives of the Exercise so that there is no confusion in the public that the event is for training purposes.
- On Saturday, Nov. 18, a Refurbishment Open House will take place at the Darlington Energy Complex. The event includes a virtual reality view inside a nuclear building airlock, a viewing of the first ever full-scale reactor mock-up, a bus tour around the station, and meeting with experts. The previous day, Nov. 17, Darlington will host the first ever "Student Day" for local secondary schools.
- The Pickering and Darlington Neighbours Newsletter will be distributed during the last two weeks of November.

Topic #5: Operation Clean Sweep

Nadia Temacini is Community Outreach Chair and Elise Legacé is Professional Development Chair of North American Young Generation in Nuclear (NAYGN) in Durham Region. Nadia and Elise are engineers in training at OPG. They pointed out that, despite its name, NAYGN is open to all employees at OPG nuclear facilities.

They noted that Operation Clean Sweep (Appendix 1), in which employees at Darlington and Pickering Nuclear volunteer to do yard work at the homes of seniors living in the area, was founded by Joe Amantea, a shift supervisor in training at Darlington. The program is now part of NAYGN. It includes a Spring Clean Up (which took place on June 10 in 2017) and a Fall Clean Up (which will take place on Oct. 21 this year). The June event was very successful. Groups of Volunteers spend one to two hours at each home.

Nadia and Elise presented photos of volunteers from the Spring Clean Up. It was noted that volunteer teams are not limited to OPG employees.

They said that seniors whose yards and eavestroughs were attended to were very appreciative. They remarked that the program strengthened OPG's social licence, engendered a feeling of pride and community in NAGYN members, and made the nuclear stations more approachable. Opportunities for the program to get better include:

- Expanding into the Clarington region
- Increasing the number of seniors' visits
- Participating in local park clean-ups
- Getting local landscape companies involved

A Council member asked whether the home owner faces any liability if a volunteer is injured. Nadia said that there is no liability for the home owner. NAYGN relies on people not to take on a task if they don't have the relevant experience. Elise noted that a first aid kit is taken to the location.

Randy remarked that he is very impressed with the young people involved in Operation Clean Sweep. They indicate that the future of OPG is in very good hands, he said.

Council members were also very impressed with what they learned about the group.

Topic #6: CAC Report to the Community

A second draft of the Report to the Community, based on feedback received to date, had been sent to Council members in advance of the meeting. John asked for further feedback on the draft's wording and emphasis. Members can email their comments to: fgillis@pdalternatives.com; Tel: 416-970-1633.

The next stage will be a mock-up of the layout for the Report.

A Council member suggested that the content be compared to and built upon the previous Report to the Community (2014).

Topic #7: Security at the Pickering Site

Scott Burns, Vice President of Security and Emergency Services at OPG, introduced the topic and his colleagues, Chris Gouveia (Section Manager, Security Support) and Ken Costella (Security, First Line Manager). He noted that Chris and Ken work at the Pickering site. Ken leads the armed contingent.

Scott was Deputy Chief of the Durham Region Police Service and was involved in police security at the plant several years ago.

Chris presented an overview of security at the Pickering site, talking about fire protection,

emergency management and security (Appendix 2). He noted that site security is regulated by the CNSC. Physical protection is based on Canada's current evaluation of threats to the nuclear station and the community. A Design Basis Threat (DBT) is derived from this assessment. The DBT is the basis on which plant security is tested by the CNSC and by the plant itself.

The Defense in Depth starts with plant employees. They are the first line of defense. Additional lines of defense include physical barriers and intelligence. The armed security personnel uniform looks aggressive by design. They are trained for a worst case scenario. Armed security and physical barriers are visible deterrents to anyone who would threaten the security of the site.

From the security monitoring room the whole site can be kept under surveillance. Security measures include:

- Physical security screening
- Access control and clearance; an employee's identification card is linked to a hand print
- Vehicle search; the site's physical barrier can stop a vehicle
- Exit screening (search for nuclear materials, including searching an individual for excessive radiation)

Regarding intelligence, OPG is in touch with, and has a good relationship with, police and other players involved in security.

There are community partnerships between plant security and, for example, the Durham Region Police Service. Annual integrated exercises involving police, emergency management services and fire departments alternate between Pickering and Darlington.

Chris, Scott and Ken responded to Council questions:

- *How many people are involved in security?*
Chris: Lots. For security reasons, I cannot give you a precise number.
- *What about internal threats?*
Scott: We observe employees and actively train our managers regarding mental health issues. Employee Assistance Programs are in place.
- *Are all employees trained to recognize mental health issues?*
Scott: We foster a questioning attitude. Any unusual behaviour will be challenged in that kind of environment.
Chris [or was this Ken?]: I am very cognizant of behavioural issues; it's my skill set. I determine the fitness for duty of each employee, as does the shift supervisor. We will take an employee home if we determine that they are not fit for work on a given day. We are a team here. The attitude is: if you see a sign of trouble in a fellow worker, act on it.

- *What is the power source for the security monitoring room?*
Chris: We have a backup system that kicks in right away if there is a power outage.
- *Do you consider the possibility of threats from drones?*
Chris: Yes, we do take that possibility into consideration.
- *What types of background do you look for in hiring security personnel?*
Chris: Some of the people we hire are fresh out of school with the right courses; others have considerable police experience.
- *Does the WANO inspection include security?*
Scott: Generally, no. U.S. security programs are slightly different. Internationally, Canada ranks second or third in the world in terms of the effectiveness of its nuclear security programs.
- *What if someone with ill intent tries to drive a truck on to the site?*
Chris: They would not be able to get through the physical barrier.
Ken: We are aware of each and every vehicle entering the site, but we don't rush or panic.
- *Are you an independent security firm?*
Chris: No, we're OPG employees.
Scott: We have specially trained nuclear security officers at our nuclear sites. Security officers at our non-nuclear sites don't have this specialized training.
- *Plant security here used to be handled by the Durham Region Police Service. How is an internal service better?*
Scott: Our staff have a particular appreciation for the rules and principles around nuclear safety.

Randy remarked that the WANO representative who recently toured the Pickering site was suitably impressed when going through station security. "We are quite proud of these guys," he said of the security team. He noted that security recently revived an employee who suffered a heart attack at the station and saved a life.

- *Do you ever have a false positive reading through your control centre? For example, a small flock of geese along the fenceline at night might look like a potential intruder on the screen.*
Chris: Yes, that kind of thing can happen; but we always check it out to make sure.

A Council member commended security for keeping a very low profile at the station: "They are not in your face."

Topic #8: CNSC News

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

**Next Meeting of the Pickering CAC
Tuesday, November 28, 2017, 6 pm
Joint Meeting with Darlington CAC
Darlington Nuclear Information Centre**