

SUMMER 2013

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PICKERING NUCLEAR

Neighbours Newsletter

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Nuclear Safety Commission hosts public hearings for Pickering station re-licensing

The Canadian Nuclear Safety Commission (CNSC), OPG's safety regulator, hosted three days of public hearings in the Pickering community as part of the re-licensing process for Pickering Nuclear. OPG is seeking a five-year licence renewal and CNSC staff have recommended the renewal. The hearings were an opportunity for organizations and individuals to share their views with the regulator and ensure all perspectives were considered. For more information about the hearings, read a message from Glenn Jager on page 2.



Pickering Nuclear Senior Vice President Glenn Jager (middle) and members of the senior management team at the CNSC hearings in May.

Annual Environmental Monitoring Results for 2012

Potential Dose from Nuclear Stations Far Below Regulatory Limit and Natural Background

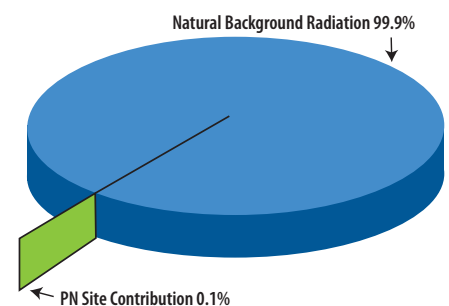
The highest radiation dose to members of the public from the Pickering or Darlington nuclear stations was 0.1 percent of the regulatory limit in 2012, as reported in last year's Radiological Environmental Monitoring Programs (REMP) annual report.

Exposure for most people living in Durham Region is even less. "We practise the ALARA Principle (As Low As Reasonably Achievable) and set our own internal target at less than one percent of the regulatory limit," said Wayne Robbins, OPG's Chief Nuclear Officer. "We're proud to be within our target year after year."

Darlington's annual public dose for 2012 was 0.6 microsieverts and Pickering's was 1.1 microsieverts. The annual regulatory limit set by the Canadian Nuclear Safety Commission is 1,000 microsieverts. By comparison, residents of Durham Region receive an annual dose from natural background radiation of 1,400 microsieverts.

The results are based on routine monitoring of any station emissions and the analysis of thousands of environmental samples taken from a variety of sources including air, lake water, beach sand, fish, vegetables, milk and soil. The REMP report is verified by an independent third-party expert.

OPG staff will continue collecting samples in the community year after year. The report for 2012 is now available at opg.com.





**A message from
Glenn Jager,
Senior Vice President,
Pickering Nuclear**

The Canadian Nuclear Safety Commission (CNSC) recently held three days of public hearings in Pickering as they consider our

relicensing application for Pickering Nuclear. Holding the hearings here allowed local residents to participate so all perspectives could be considered.

The process actually began in February when we presented our application (more than 300 pages) for a five-year licence renewal to commission members in Ottawa. CNSC staff delivered their recommendation of a five-year renewal at the same session.

120 groups and individuals spoke at the three-day hearing. We expect a decision from the commission in June.

Thank you to everyone who invested the time to participate in the hearings through constructive written submissions and oral presentations. Our staff carefully read all submissions. The comments and questions help shape our station activities, including our public communications program.

For example, some interveners questioned the viability of our plans to operate Pickering to 2020. I encourage you to read the page-two article about the extensive safety analysis that provides us the assurance we can safely do this. On page three, you can read about the OPG employee chairing a national committee formed to review Canada's emergency management standards and processes – another area of interest and discussion during the hearings.

We believe our safety and operational performance has earned a five-year licence renewal. If you have questions about the recent hearings or any aspects of our operations, please call our community information line at 905-837-7272.

You have my commitment that we will continue to operate Pickering Nuclear with an unwavering commitment to safety at all times. We have a lot at stake. We work here. We live here with our families. It's our community too.

Pickering Station Performance Continues to Improve

Pickering Nuclear's operating performance continues to improve due to OPG's commitment and investment in performance until the end of station operation.

"Not only is Pickering Nuclear continuing to meet or better all safe operations expectations of our regulators, but we have demonstrated sustainable improvement during the current licensing period," says Mark Elliott, Senior Vice President of Engineering and OPG's Chief Nuclear Engineer.

"We have kept our station equipment in good condition by investing in regular maintenance," says Mark. "And we've replaced a lot of station equipment over time – often to meet newly introduced standards."

The replacement of 216 electrical control centres is the latest example of OPG's commitment to ensuring Pickering Nuclear operates safely and reliably to 2020. That's part of a \$200 million investment in additional inspections, upgrades and maintenance.

"A four-year research project that included 18 specific potential aging issues was completed by industry experts with independent third party reviewers," says Mark. "The results clearly demonstrated our pressure tubes continue to be safe until 2020."

Each year, additional inspections and testing of pressure tubes will be completed during planned reactor maintenance outages.

In addition to the ongoing inspection and maintenance activities, OPG's overall defense-in-depth approach to reactor design and operation includes systems and procedures that allow early detection of potential issues with station equipment.

"OPG will continue to ensure that safety is our overriding priority," says Mark.

- Conventional safety has never been better with Pickering employees working more than 10 million hours without a lost-time injury.
- Station radiation emissions are 99% better than regulatory limits and public dose is 99.9% better than regulatory limits.
- There have been no consequential spills to the environment for about 10 years.
- The station's forced loss rate (unplanned energy losses) has improved by 59% over the past five years, a strong indicator of station reliability.

OPG Receives CNSC Approval for Darlington Re-licensing and Refurbishment

In March, the Canadian Nuclear Safety Commission (CNSC), the nuclear safety regulator, approved Darlington's operating licence renewal to the end of 2014; and the Darlington Waste Management Facility operating licence for used fuel.

The CNSC also issued its decision on the environmental assessment for OPG's Darlington Nuclear Generating Station Refurbishment and Continued Operations Project, deciding that the project would not cause any significant adverse effects, given the identified mitigation.

This announcement follows an extensive public and technical review, including a four-day public hearing held by the CNSC in Clarington last December, where OPG, CNSC and members of the public presented written and verbal positions on the proposed project.

For more information about Darlington Refurbishment, please visit: opg.com/power/nuclear/refurbishment

OPG Employee Chairs National Committee on Emergency Management



OPG's Jim Coles has been named Chair of the Canadian Standards Association's N1600 Technical Committee on Nuclear Emergency Management

An OPG employee has been selected to chair a national standards development committee established to develop a new voluntary standard for nuclear emergency management. Jim Coles, OPG's Director of Emergency Management and Fire Protection, will be chairing the Canadian Standards Association's (CSA) Technical Committee established to review existing documentation and prepare a new CSA standard for General Requirements for Nuclear Emergency Management.

It will outline the requirements of a comprehensive emergency management program, with a focus on the five emergency management pillars - prevention, mitigation, preparedness, response, and recovery - in keeping with international practices. It will establish the elements of a continuous improvement process to develop, implement, maintain, and evaluate the emergency management programs of nuclear power plants and their surrounding communities.

Emergency preparedness was a topic of discussion at the recent Pickering station re-license hearings. "As we heard at the hearing, some members of the public have a keen interest in emergency planning. This standard will not only outline the requirements for the plans themselves but will also identify requirements for integrated nuclear emergency management programs."

"The technical committee includes representation from utilities, industry regulators, and government agencies that have a role in the management of a nuclear emergency. We also have community representation from the municipal fire services (Chief Weir in Clarington and Deputy Chief Hagg from Pickering) as well as John Byard from the Durham Region Emergency Management Office," says Jim.

This voluntary standard will identify emergency management program requirements for stakeholder organizations that choose to adopt it. The committee's plan is to issue a draft standard for public review in August and is working towards publishing the standard in June 2014.



Niagara Tunnel Completion

OPG recently celebrated an historic event in hydro-electric generation with the completion of the Niagara Tunnel.

Serving the Beck generating complex, the tunnel is as tall as a four-story building, and carries millions of litres of water more than 10 kilometres, at a speed of 500 cubic metres per second. The average energy produced is greater than that used per year by cities the size of Niagara Falls.

In March, government leaders, media and OPG officials gathered at OPG's historic Beck Generating Complex to mark the official opening of the tunnel now in service. OPG Chair, Jake Epp said, "The tunnel has claimed the attention of the entire world," and is "...a fitting representative of Canada's, Ontario's and OPG's great legacy of electricity development and operation.

"This project is a source of pride as an engineering feat and as a practical solution for meeting Ontario's energy needs through clean sources," remarked Ontario's Minister of Energy, Bob Chiarelli. "The completion of this project will provide Ontario with a source of clean energy for the next 100 years." For more information on the project, visit opg.com.

Students 'Get to Know' Nature

Darlington and Pickering Nuclear recently began a partnership with the 'Get to Know' program, created by celebrated Canadian wildlife artist Robert Bateman. Launched in British Columbia in 2000, this program has been encouraging youth to get outdoors and explore nature through art by working with partners across Canada and the U.S.

OPG is a proud sponsor of Durham Region's 'Get to Know' Contest, and through our ongoing educational programs OPG and local partners will encourage youth to get outdoors to connect with nature, create art to foster a more personal relationship with nature and to celebrate their commitment to the environment.

On May 22, to coincide with the International Day of Biodiversity, Darlington and Pickering Nuclear hosted a launch event. With experts from Thicksen Woods Land Trust, Grade 5/6 classes from Courtice North PS and Bolton C. Falby PS learned about the importance of habitat and participated in a guided biodiversity hike that included a sighting of great horned owls and a chickadee feeding.

With an eye to their surroundings and the help of artists from local studio "A Gift of Art" in Newcastle, students got their creative juices flowing with photography, drawing and painting and modeling clay. To view some of the artwork and find out how to get involved, please visit the Durham Region's online 'Get to Know' Gallery at: get-to-know.org/gallery/2013-durham



Tuesdays on the Trail



Join Us for Tuesdays on the Trail 2013

Tuesday, July 2, 10 a.m. or 1 p.m.: Art in the Park

Calling all artists! **Connect** with nature, **Create** art and **Celebrate** your commitment to the environment with local artists from **PineRidge Arts** and Robert Bateman's **Get to Know** program.

Tuesday, July 9, 10 a.m. or 1 p.m.: A Science Carnival

It's carnival time for all our future scientists. Explore the world around us, examine precious stones and exoskeletons, build a kite and develop a secret message using food with **Scientists in School**. Discovery is cool!

Tuesday, July 16, 10 a.m. or 1 p.m.: Sun, Shades and Sandcastles

Susan Lindo of **Durham West Arts Centre** joins us on the beach to share amazing sandcastle building techniques. Park at the foot of Liverpool Road and look for the OPG tents on the beach just west of Pickering Nuclear. Be sure to bring the sun block!

Tuesday, July 23, 10 a.m. or 1 p.m.: ACTING Up

Calling all budding actors! Join the **Driftwood Theatre** group for a hands-on opportunity for children to experience live, outdoor summer theatre with a unique blend of kid-friendly workshops and performances.

Tuesday, July 30, 10 a.m. or 1 p.m.: What Goes Around Comes Around!

Learn about our natural world and your contributions to it with Kim Wheatley from **Shawanaga First Nation Reserve**. Make a clay sculpture with native wildflower seeds to take home.

Tuesday, August 6, 10 a.m. or 1 p.m.: Sing, Sing out Loud

Storytelling and song go hand in hand with Heather Whaley, renowned storyteller. Fairy tales, dance, song and crafts make for a very creative and interactive day.

Tuesday, August 13, 10 a.m. or 1 p.m.: Butterflies, Toads, and Other Animals – Oh my!

Join us in the park where we will make toad abodes and butterfly feeders; take an interactive hike with **Toronto & Region Conservation Authority**. As well, meet **Earth Rangers** Animal Ambassadors to learn how you can help protect animals and habitats.

Tuesday, August 20, 10 a.m. or 1 p.m.: Playful Pioneers

What on earth did kids do for fun before TV, Wii, Xbox, and Gameboy?! Imagination was the only limit! Come on out and play the way pioneer kids did with **Pickering Museum Village**. Make a pioneer toy to take home.

Tuesday, August 27, 8 p.m.: Movie Under the Stars

Bring your own lawn chairs or blankets and settle in for this last blast of fun at Alex Robertson Park. Be sure to bring a non-perishable food item to help fill a truck for **St. Paul's on the Hill Community Food Bank**.

All activities (except sandcastle building) start at Sandy Beach Road entrance to Alex Robertson Park. Weather permitting. Children must be accompanied by an adult, programs suitable for ages 6 to 12. Due to the nature of program activities, day care groups and camps cannot be accommodated.



Pickering Nuclear Community Information Line: 905-837-7272

Neighbours



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