

Performance Report for Nuclear Waste Management

Performance Update

As part of our commitment to keep you informed, this report tracks performance for Ontario Power Generation's Nuclear Waste Management facilities in the areas of safety, operations, and the environment. It also summarizes significant accomplishments achieved during 2019.

Safety

Total Reportable Injury Frequency (TRIF)

TRIF is a measure of the number of injuries involving employees that result in a fatality, or a lost-time, requiring restricted work or requiring medical treatment per 200,000 hours worked. During the fourth quarter, the Nuclear Waste Management (NWM) TRIF was zero. At the end of December, NWM achieved eight and a half years without a lost-time incident.



Transportation Safety

The transportation of waste to our Western facility from Darlington, Pickering and Bruce Power is managed by experienced and skilled drivers. In this quarter, all shipments were made safely and event-free. In Q4, the fleet safely traveled 85,869 additional kilometres, culminating to a total of 4.9 million kilometres travelled safely.



Environment - Spills to the Environment

NWM recorded one spill to the environment this quarter that was reportable to a regulatory authority, bringing the 2019 total to two spills. For detailed environmental information, please refer to the environmental data reports available on www.opg.com under Reporting.



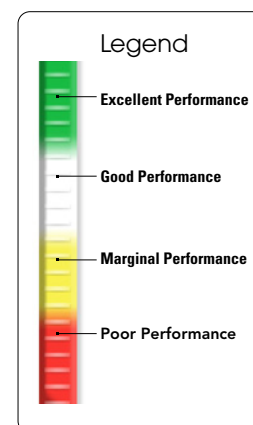
Operational Performance

A total of 227 used fuel Dry Storage Containers (DSC) were loaded/transferred, processed and stored by the end of Q4. This was 15 above the year-end target of 212 DSCs across the three facilities.



Incinerator Performance

The incinerator processed 551 cubic metres of solid waste up to the end of Q4, below the 2019 year-end production target to burn 1,398 cubic metres of nuclear waste.



About OPG's Nuclear Waste Management

OPG's Nuclear Waste Management (NWM) division manages three sites; Western, Pickering and Darlington. The Western Waste Management Facility (WWMF) in Bruce County receives and manages the low- and intermediate-level waste for Darlington, Pickering and Bruce Power nuclear stations. Low-level waste is volume reduced through incineration or compaction. Used-fuel Dry Storage Containers are managed at the facilities where the waste was generated; Pickering, Darlington or the WWMF.



Pumpkinfest



Take Our Kids to Work Day



NWMO Youth Tour

The following summarizes items of interest or milestones achieved by Nuclear Waste Management and across OPG:

Nuclear Waste Operation

- NWM reached eight years without a Lost-Time Incident (LTI) and the Pickering Waste Management Facility (PWMF) celebrated 25 years without an LTI. Both represent a major accomplishment and a testament to the team's strong safety culture.
- The PWMF safely transferred and loaded their 1,000th Dry Storage Container (DSC) and also surpassed their year-end target by 20 DSCs, reaching 60 DSCs loaded at year-end.
- The WWMF completed the 2019 Incinerator Upgrade project. Upgrades and planned outages are a vital element of the preventative maintenance program and strategy to ensure the incinerator is ready and reliable for the future to support station operations. Focusing on waste minimization sets the entire fleet up for future success and demonstrates our commitment to excellence and environmental stewardship to the community in which we operate.

OPG News

- OPG finished loading the last of the 6,240 new fuel bundles into Darlington Unit 2 as part of the refurbishment project. Safe, quality completion of this work was a direct result of teamwork and detailed planning. Loading fuel marked the beginning of the final segment of work for Unit 2's return to service in 2020.
- OPG and Nordion Canada Inc. signed an agreement to expand production of Cobalt-60 to Darlington Nuclear Station. Cobalt-60 is a life-saving isotope responsible for sterilizing approximately 40 per cent of the world's single-use medical devices. OPG has been producing Cobalt-60 at Pickering Nuclear Generating Station since the 1970s, Ontario's first generating station to produce the isotope. With the station's end of commercial

operations in the mid-2020s, expanding Cobalt-60 production to Darlington will help OPG continue to meet the global demand. Close to 50 per cent of the world's Cobalt-60 is supplied by Ontario's nuclear reactors.

- The World Association of Nuclear Operators (WANO) 2019 Peer Review awarded the Pickering Nuclear station an exemplary performance rating. This marks the first time the station has received this recognition – placing them among the top performing nuclear plants in the world.
- Canadian Nuclear Partners (CNP), a subsidiary of OPG, is now Laurentis Energy Partners. The name change reflects the capability we have across hydro, nuclear and many other energy technologies. Laurentis leverages the skills, capabilities and knowledge of OPG to provide inspection, engineering, asset management and other services to external utilities and companies around the world.

In the Community

During 2019, NWM provided tours to 53 groups reaching 423 people, held 45 information-sharing meetings with Bruce County's municipal and provincial elected representatives, U.S. political organizations, and the general public, 25 meetings with indigenous groups and 22 DGR consultation sessions with Saugeen Ojibway Nation members. The Western site supported 80 community initiatives in Bruce County including: 8 environmental initiatives, 7 educational initiatives, 24 events, festivals and fairs including: 2 Pow Wows, Historic Saugeen Métis Rendezvous, Port Elgin Pumpkinfest, Kincardine Scottish Festival and Highland Games, Kincardine Blues Festival, Bruce County Museum & Cultural Centre Summer Exhibit, Kincardine and Southampton Santa Claus parades, and SVCA Christmas in the Country.