

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 the third quarter of 2017.

Safety

Employee All Injury Rate

The All Injury Rate (AIR) measures the number of workplace injuries per 200,000 hours worked. During the third quarter, the AIR was changed to 0.73, above the year-end target of 0.22. This was due to a medically treated event occurring in August. The employee returned to work the same day with no restrictions. Our employees have continued to work over six years without a lost-time accident.



Transportation Safety

The transportation of radioactive waste to our Western facility from Darlington, Pickering and Bruce Power is managed by experienced and skilled drivers. In Q3, all shipments were made safely and accident-free and the fleet safely traveled just over 16,000 additional kilometres. At the end of September 2017 just over four million kilometres were safely travelled.



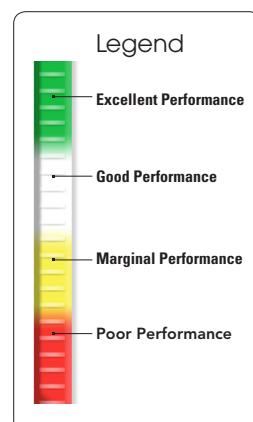
Environment - Spills to the Environment

Our nuclear waste facilities experienced no spills to the environment this quarter that were reportable to a regulatory authority. For detailed environmental information, please refer to the environmental data reports available on www.opg.com under News and Media.



Operational Performance

A total of 173 used fuel Dry Storage Containers were processed up to the end of September, which is below the goal of 178 for the third quarter. With a recovery plan in place production remains on track to meet the year-end target of 228 at all three of our used fuel facilities.



Incinerator Performance

Incinerator production targets for this quarter were below projection due to extension of a planned outage as part of a project to upgrade system components and equipment. It processed 872 cubic metres of solid waste, below the goal of 928 cubic metres for this point in the year. The year-end waste volume reduction target of solid waste is 1,416 cubic metres.

About OPG's Nuclear Waste Management

OPG's Nuclear Waste Management (NWM) manages three sites. 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. The volume of low-level waste is reduced through incineration or compaction. Used-fuel Dry Storage Containers are managed at facilities located at Pickering, Darlington and WWMF.



Southampton Rotary Splash Pad opening



Port Elgin Pumpkinfest



OPG Way Trail in Kincardine

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

Supporting Darlington Refurbishment

In support of the Darlington Refurbishment, considerable logistical planning and work has taken place in NWM to ensure OPG met regulatory, ministry and social licence requirements while safely completing time-sensitive work.

Nuclear Waste Management safely completed the one month Refurb Feeder Campaign. This involved transporting a large volume of feeder tubes to interim storage, while meeting the critical path timelines. To achieve this: new software, used by shippers and couriers, ran simulations to determine and optimize the feeder tubes transport schedule. As a result, an additional six trailers were purchased, to carry four new Type A packages, and delivered shipments every six to eight hours. A command and control centre, set up in Darlington, used GPS tracking during the 24/7 schedule, to provide oversight and receive early warnings to avoid or react to any potential problems. In addition Nuclear Waste commissioned a new Retube Waste Storage Building (RWSB) to receive end fittings once they are removed from the Darlington station, processed and loaded into radioactive waste containers.

Pickering Accident free for 23 years

July 17 marked 23 years without a lost-time accident at the Pickering Waste Management Facility (PWMF). This was achieved by all the men and women who day after day, year after year, have put safety first – by following

procedures and reporting risks and hazards and using all of the tools that keep them safe. Across the entire division, it has been six years since we have had a lost-time accident.

OPG Stations receive top ratings

The performance of our nuclear and hydroelectric assets is all built around a strong safety culture. OPG has worked tremendously hard to ensure this culture remains the highest priority. As a result of these efforts, the Canadian Nuclear Safety Commission has once again awarded Pickering and Darlington the highest possible safety ratings. Darlington has now achieved this rating for eight consecutive years and Pickering has achieved the top safety rating for the second year in a row.

In the Community

During the third quarter of 2017, NWM provided tours to nine groups, held three information-sharing meetings and sent out seven emails to First Nations, Métis, municipal, federal and provincial officials, and replied to 17 public inquiries. The Western site supported 20 community initiatives in Bruce County such as: Historic Saugeen Metis Rendezvous, Kincardine Lighthouse Blues Festival, the Teeswater, Paisley, Tiverton and Kincardine fall fairs, Canada 150 celebrations in Kincardine, Saugeen Shores, and Brockton, All Abilities Beach side run, Southampton Summer Music Camp and Port Elgin Pumpkinfest.