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 second quarter of 2020.

Safety

Total Reportable Injury Frequency (TRIF)

TRIF is a measure of the number of injuries involving OPG employees that result in a fatality, a lost time, requiring restricted work or requiring medical treatment per 200,000 hours worked. An injury in Q1 placed the TRIF at 1.95. With corrective actions in place, the second quarter TRIF improved to 0.93. The year-end target is set at 0.20.



Transportation Safety

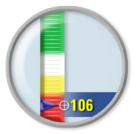
The transportation of waste to our Western facility from Darlington, Pickering and Bruce Power is managed by experienced and skilled drivers. In this quarter, all shipments were made safely and accident-free and the fleet safely travelled 84,500 additional kilometres. At the end of June 2020 over five million kilometres were safely travelled.





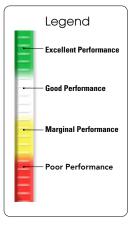
Environment - Spills to the Environment

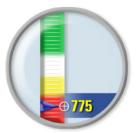
This quarter our waste facilities continued to experience no spills to the environment that were reportable to a regulatory authority. For detailed environmental information, please refer to the environmental data reports available on www.opg.com under Reporting.



Operational Performance

A total of 106 Used Fuel Dry Storage Containers (DSC) were processed up to the end of Q2. This was 18 below the second quarter goal of 124. After temporary shut-downs were implemented, as a result of COVID-19, recovery schedules are now in place to meet the year-end projections to process and store 217 DSCs.





Incinerator Performance

The compactor and incinerator processed a total of 775 cubic metres of low-level waste up to the end of Q2. This was above the year-to-date target of 729. The 2020 year-end projection is to process 1,791 cubic metres of nuclear waste.



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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 the 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 facilities located at Pickering, Darlington and WWMF.







Outage replaces key incinerator components shown above is the Incinerator Baghouse

Tree planting along Pine River

Food banks receive food box donations

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

Nuclear Waste Operation

- Closing of the Deep Geologic Repository (DGR) project progressed. The facility was to be built at the Bruce site for safe and permanent disposal of low- and intermediate-level waste. Project closure includes: notifying federal regulators to cancel the Environmental Assessment, withdrawing an application to the Canadian Nuclear Safety Commission for a construction licence and making final payments, under the DGR Hosting Agreement, to Kincardine and four adjacent municipalities, as recognition for their 15 years of support for the project. The project was discontinued following a First Nations January vote not to support it. OPG remains committed to finding lasting solutions for the waste, and is moving forward to develop alternate solutions.
- OPG's NWM team continued to manage the safe acceptance, transportation, processing and storage of radioactive waste, for the Darlington, Pickering and Bruce sites. At the WWMF within the Bruce nuclear site, work started on a three-month outage of the incinerator. Replacement of key components will enable the machine's continued operation.
- OPG's X-Lab innovation team at the Bruce site used a 3-D printer to make ear savers for face masks, reducing strain on the ears; some of these devices were donated to local pharmacies, while others are being used by OPG staff.

OPG News

- On May 13, power from Darlington's newly-refurbished Unit 2 started making its way to Ontario's electricity grid - reflecting on the project's many successes and achievements since it began in October 2016. Next steps in the Darlington Refurbishment project include preparation to refurbish Unit 3, with defueling of the reactor this fall.
- Atura Power, a new subsidiary of OPG, finalized its acquisition of a portfolio of combined-cycle natural gas-fired plants in Ontario.
 Atura Power was established to operate and manage this portfolio.

- Natural gas will play a key role in helping to secure a low carbon future for our province. The acquisition includes: Napanee Generating Station (900 MW), Halton Hills Generating Station (683 MW) and Toronto's Portlands Energy Centre (550 MW). In addition, the 2019 acquired 560 MW combined-cycle natural gas-fired Brighton Beach Generating Station, will operate under Atura Power.
- OPG joined a venture with Global First Power Ltd. and Ultra Safe Nuclear Corporation to build, own, and operate a Micro Modular Reactor at the Chalk River Laboratories site. The advancement of low-carbon, small modular reactors in Canada is an innovative growth opportunity for OPG and fits well with our existing cleanenergy portfolio.
- In response to Covid-19, OPG donated one million surgical masks 75,000 N95 masks and 17,500 Tyvek suits to support frontline health care workers in the province for health-care use. In advance of National Indigenous Peoples Day. 10,000 3D-printed face shields were distributed to Indigenous communities and organizations throughout the province.
- OPG provided \$500,000 to Feed Ontario's Emergency Food Box Program to help assist food banks in OPG's host communities.
 The donation provided \$1.4 million worth of food (300,000 meals plus snacks) to feed 225,000 people a month. OPG, with the Regional Food Distribution Association of Northwestern Ontario, provided \$250,000 towards emergency food support to its First Nation neighbours to buy and distribute food.

In the Community

During this quarter, due to COVID-19 restrictions, NWM was not able to provide tours to community groups. Information-sharing meetings with Bruce County's First Nations, Métis, and Community Representatives continued through conference calls and virtual options. Although most fairs and events OPG supported were cancelled, OPG managed to help out at a tree-planting project in support of the Pine River Watershed Initiative Network.

