

SVP Update

ONTARIO **POWER**
GENERATION

Where a brighter
tomorrow begins.

DARLINGTON 2022 YEAR IN REVIEW

Sixth consecutive excellence recognition from WANO



Unit 1 breaker open – made OPG history with two units in parallel refurbishment



Largest Life Extension Capital Program in station history

- \$278 million

TDS installed and commissioned to deliver Mo-99

+100 Human Performance Station Advocates

Unit 3 Fuel Load complete



2022 Focus Areas

Our People



Our Plant



Our Project



Our Future



First-of-a-kind 2-trolley defuel

Environmental index at 100% since July



Lowest backlog ever – live zero targets achieved

Supported our RAP by donating our EPG to the Millright Regional Council of Ontario



RFR team achieved a record 12 Calandria Tube installations in one day

Submitted SMR licence to construct application to the CNSC

Unit 2 record run – 529 days of continuous service

Our nuclear fleet raised \$40,000 for local charities

Highest weld success rate achieved on Unit 3 lower feeder installation

Bulkhead install completed ahead of schedule – maintaining Unit 2 at operational power

Nuclear Professionals working as OneTeam at Darlington



CANATOM POWER GROUP



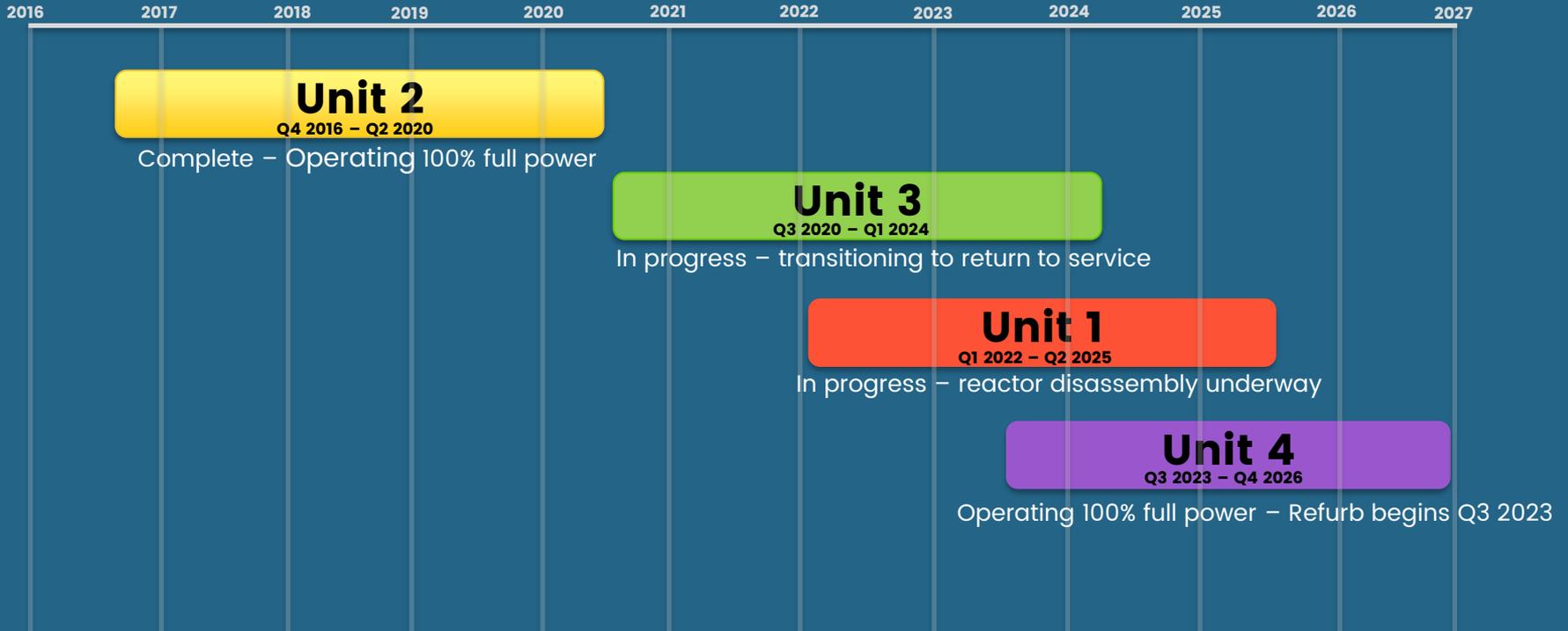
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Darlington for the future

ONTARIO POWER GENERATION



Refurbishment Outage Schedule



**Total duration 120 months*

Unit 2 – Status Update

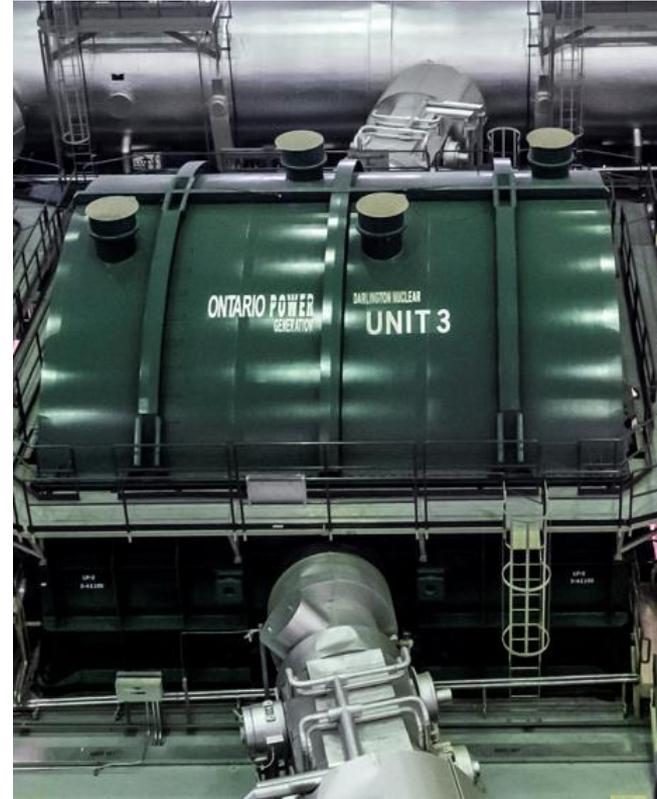
On June 4, 2020, Unit 2 was reconnected to Ontario's electricity grid, after a 3.5-year refurbishment.

- More than 4,000 lessons learned from the knowledge and experience gained on Unit 2 during planning and execution were built into plans for Units 3, 1 & 4.
- Installation and testing of delivery system for medical isotope Molybdenum-99 (Dec. 2022)
- U2 operating 24/7 providing 5% of the electricity Ontario uses every day!



Unit 3 Status Update

- Refurbishment execution 92% complete (Dec. 31).
- Reactor reassembly complete and now in “as new” condition
- Transitioning to Return-to-Service preparations (pending CNSC regulatory approval)
- 6,240 bundles of new fuel loaded into reactor (Dec. 27)
- On track to complete March 2024



Unit 1 Status Update

- Breaker opened on Unit 1 (Feb. 2022) marked the halfway point in the Darlington Refurbishment Project.
- For the first time ever at Darlington, the refurbishment of two different units at the same time.
- Fuel bundles removed (April 2022) enabling reactor disassembly (underway).
- **Key lesson learned:** Defuel of Unit 1 successfully implemented a first-of-a-kind evolution consisting of two-trolley systems alternating on the unit to improve efficiency.



Darlington New Nuclear Project



January 2023 Update

- On Dec. 2, OPG and **Premier Ford** officially announced commencement of **site preparation activities** at the DNNP site
- On Dec. 13 and Jan. 19, the DNNP team held virtual **Public Information Sessions** to engage the community and answer questions
 - Recordings and Q&A to be posted to opg.com/newnuclear
- In early February, a portion of the **Waterfront Trail** will be diverted to avoid site preparation construction activities, and rerouted along Energy Drive
 - Rerouted trail will remain accessible to the public
- Upcoming:
 - Jan. 27 – public announcement re: the DNNP **Integrated Project Delivery** Model
 - Progress **site preparation** work
 - Continued **community engagement** on Licence to Construct application