

# SVP Update

ONTARIO **POWER**  
GENERATION

Where a brighter  
tomorrow begins.



# DARLINGTON 2022 YEAR IN REVIEW

**Sixth consecutive  
excellence  
recognition from  
WANO**



**First-of-a-kind  
2-trolley defuel  
Environmental  
index at 100%  
since July**



**Lowest  
backlog  
ever – live  
zero  
targets  
achieved**

**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**



**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**

## 2022 Focus Areas

**Our People**



**Our Plant**



**Our Project**



**Our Future**



Nuclear Professionals working as OneTeam at Darlington

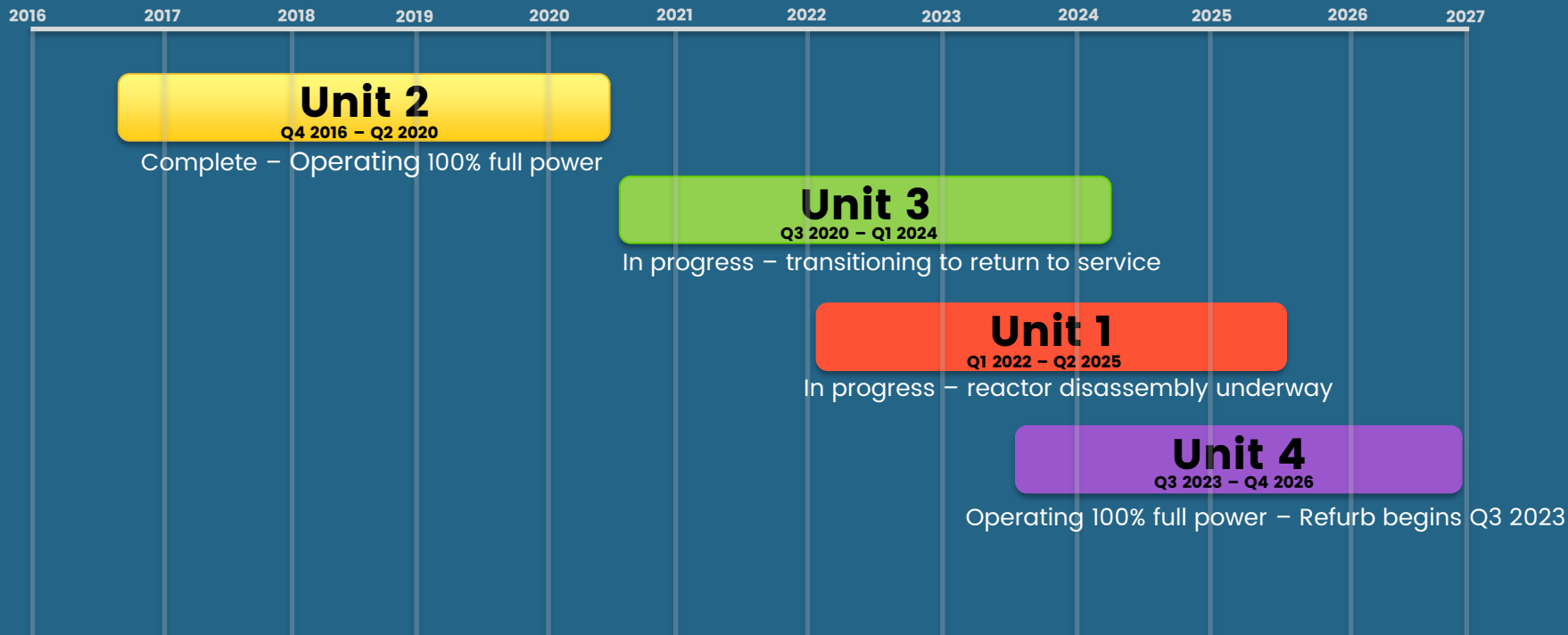


**Darlington**  
for the future

**ONTARIOPOWER**  
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](https://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