



*Electrifying  
life*

# Darlington SMR Unit 1: Building on Nuclear Project Success

**Big** Things Start **Small**.

Ryan Howard, Vice President Major Projects - Ontario Power Generation

10JUN2026 / Nuclear Innovation Conference 2026

# Who is OPG?

**18,096**

megawatts (MW) generating capacity

**\$7.2**

billion in net income to the Province over past five years

**\$74.7**

billion in assets



**2**

Nuclear Generating Stations



**66**

Hydroelectric Generating Stations



**2**

Thermal Stations



**4**

Atura Power Combined-Cycle Generating Stations



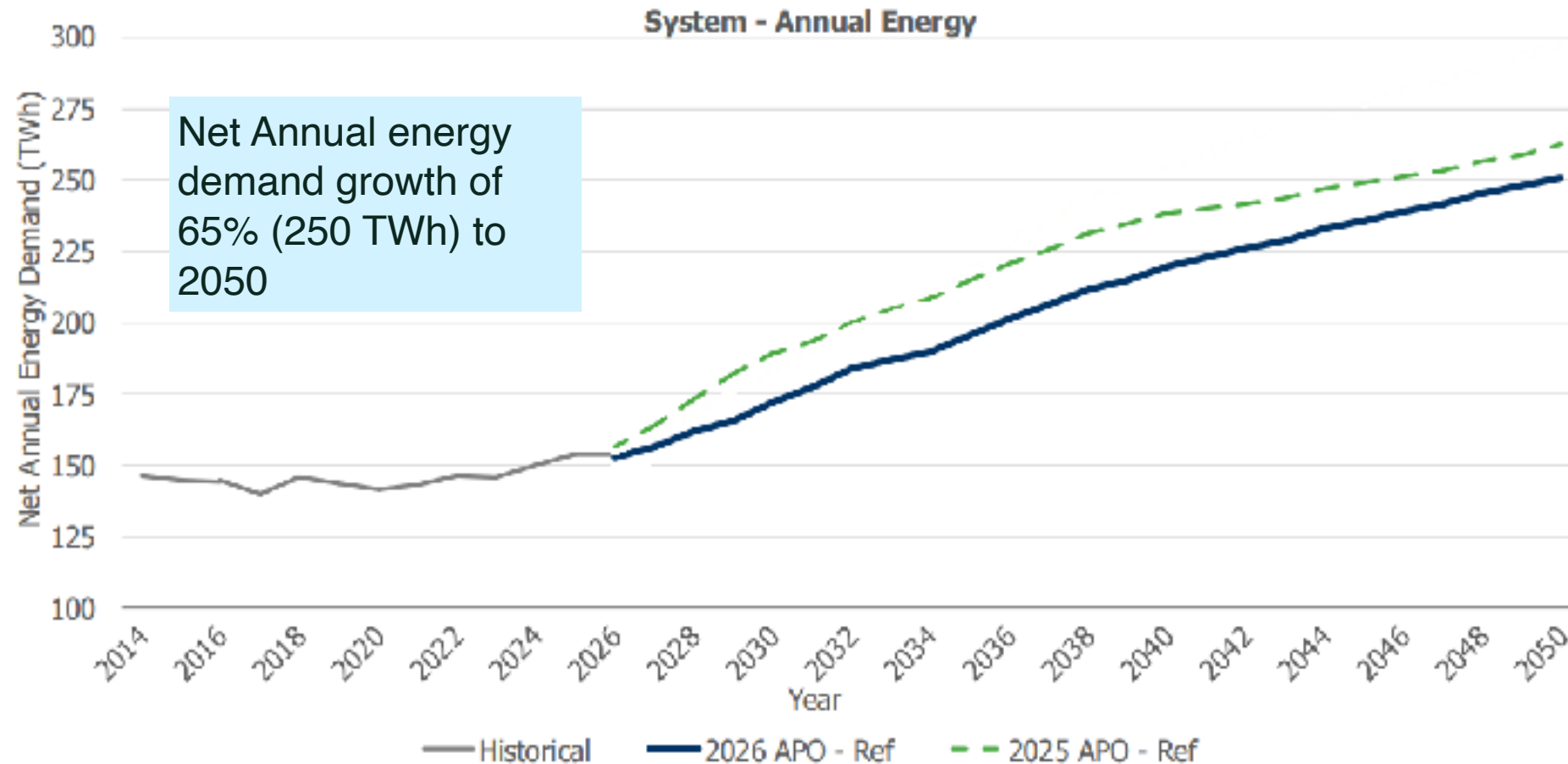
**1**

Solar Facility



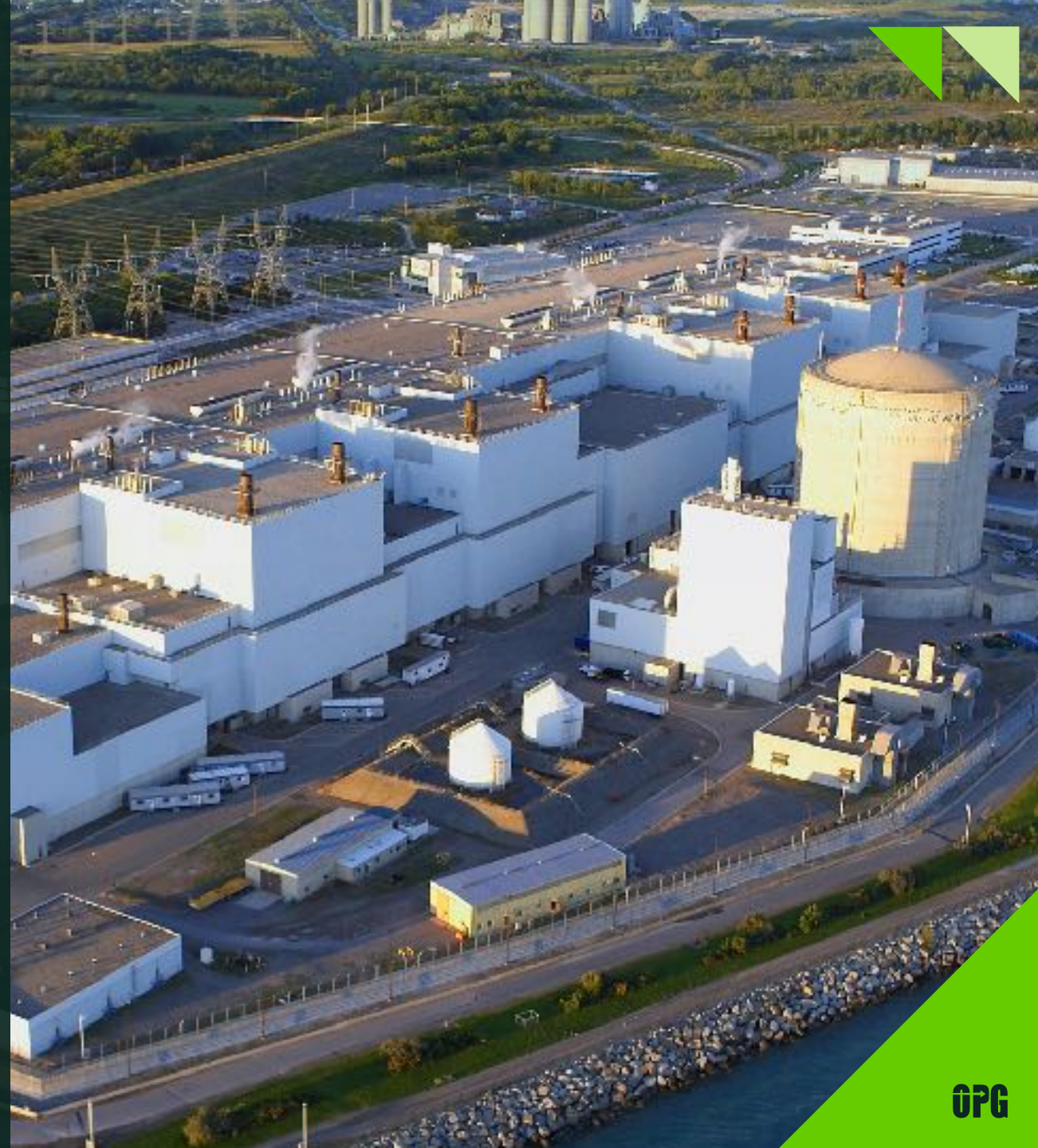
# IESO's Updated Annual Planning Outlook

## 2026 APO: Energy Forecast



# Darlington Nuclear

- One of the world's top-performing nuclear stations (CANDU) - 3,512 megawatts
- Nearly 20% of Ontario's electricity
- Recently completed 4-unit refurbishment:
  - 4 months early, \$150 million under budget (\$12.8B CAD)
  - Extends Darlington's lifespan by another 30 years
  - Created 14,200 jobs per year, while contributing \$89 billion to the economy
  - ~8,780 lessons learned ready to be applied to Pickering Refurbishment and the Darlington New Nuclear Project





# Refurbishment **Lessons Learned**

1. Nuclear construction safety and quality culture
2. Extensive Front-end Planning and Regulatory Engagement
3. Owner-led Project Management Program with universal tools in a common data environment
4. Owner led collaborative contracting – One Team
5. Project wide development and succession planning
6. Aggressive but achievable schedules
7. Replication with unit over unit learnings – Innovation where clear ROI

# Small Modular Reactors In Canada

OPG is planning for four SMRs at the Darlington site.

- Enhances Canada's **energy security** in nuclear energy.
- Multiple units will allow common infrastructure to be shared across units, further **reducing cost**.
- Fortifies our nation's **nuclear supply chain**.
- **Positions Canada to lead nuclear development (large & small)**
- Diversifies Canada's energy mix by **complementing** and **enabling** other forms of generation.
- U234 are pending regulatory and provincial approval.

# Darlington SMR Roadmap

BIG things start small.

2024

2025

2028

2030

2034

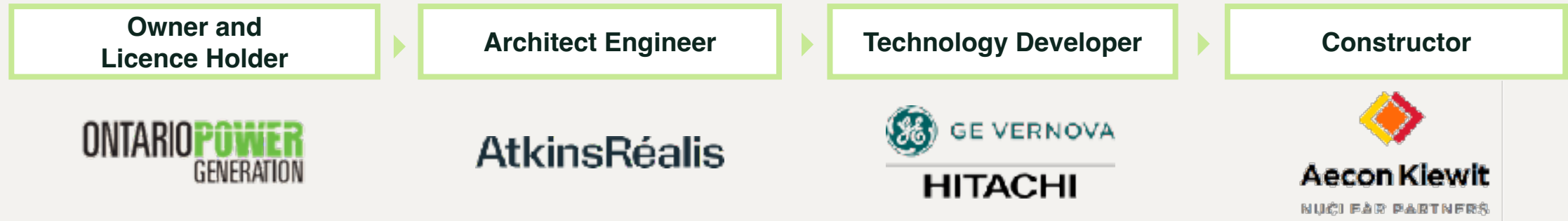
2035



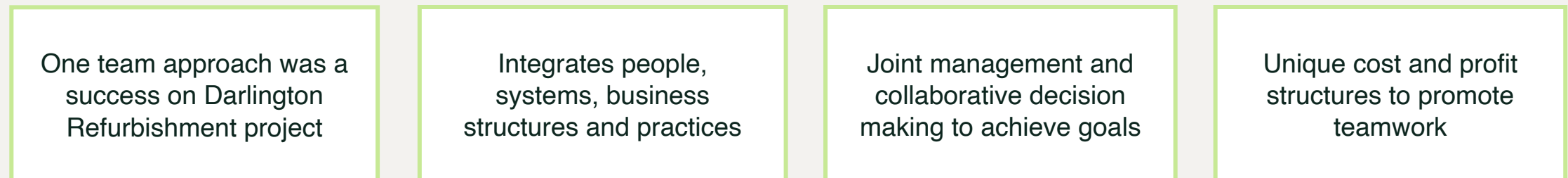
\*All dates are estimated based on current project schedules\*

# Integrated Project Delivery Model

## Darlington SMR Project



## Why the Integrated Project Delivery (IPD) model?





# Government Investment in *Darlington SMRs*

- Canada Growth Fund (CGF) and Building Ontario Fund (BOF) **announce innovative equity investment** of up to \$3 billion in OPG's Darlington SMR project
- CGF and BOF will become **equity partners**; OPG to remain majority owner and operator
- Funding **de-risks construction and operation** of the G7's first SMRs

## Impact of the Investment:

- Demonstrates and strengthens Canada's clean energy leadership
- Paves the way to spur private sector and Indigenous investment in the project over time
- Aims to foster a new generation of Canadian nuclear expertise

## Strategic Benefits:

- Supports job creation, supply chain growth, and economic development in Ontario and across Canada
- Establishes the project as a platform for further growth

# Darlington SMR Site Status

Admin Building

Warehousing

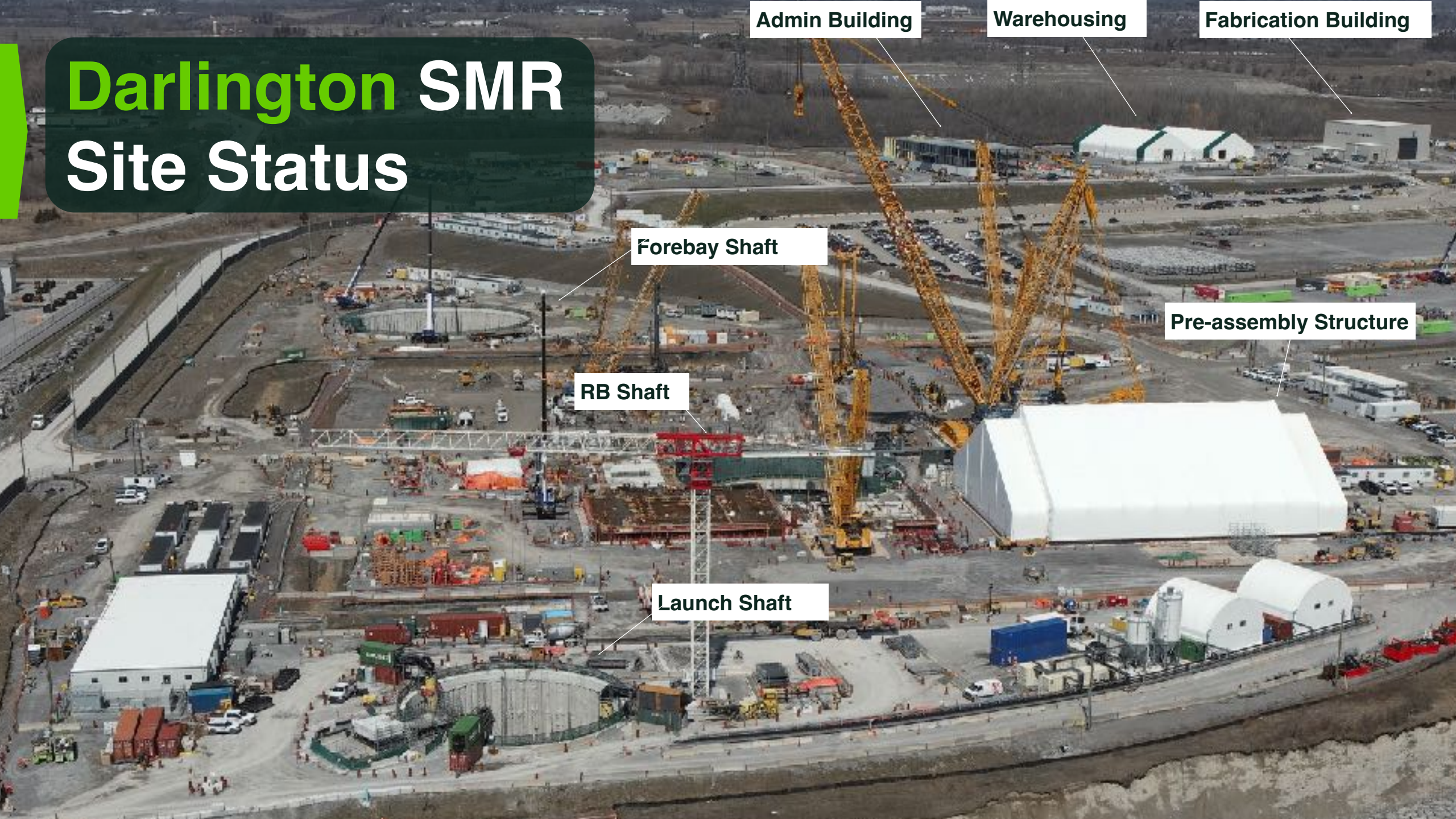
Fabrication Building

Forebay Shaft

RB Shaft

Pre-assembly Structure

Launch Shaft





# Basemat Video

Long Video

[OPG EP01 BASEMAT LIFT - MASTER -  
2026-05-29.mp4 \(WEB\)](#)

Short Video

[OPG EP01 BASEMAT LIFT - SOCIAL CUTDOWN -  
2026-05-29.mp4 \(WEB\)](#)

Password: OPG2026

# Questions?

