

Durham Nuclear Health Committee

June 17, 2022

Theresa Dekker, Vice President, Nuclear Decommissioning Program

ONTARIO **POWER**
GENERATION



Centre for
Canadian Nuclear
Sustainability

Welcome

The Future of Pickering Generating Station

End of commercial operations

- The Province of Ontario is supporting a plan to end commercial operations in 2025, pending regulatory approval
- When commercial operations cease, fuel and water will be removed, and the station will be placed in a safe storage state, beginning the decommissioning process.

Decommissioning is a careful, multi-decade process with distinct phases, which include*:

1. Safe storage period starts: 3 years
2. All used fuel moved into dry storage: 10-15 years
3. All used fuel removed from site: 25 years
4. All facilities dismantled and site restored: 40 years

** Each date represented in the timeline is from the date of Pickering's end of commercial operations*



The Centre for Canadian Nuclear Sustainability



Centre for
Canadian Nuclear
Sustainability

**BUILDING
TOMORROW
TOGETHER.**



Building tomorrow together.

What we do:

- We support OPG's mission to achieve a net-zero economy by developing innovative and sustainable plans for the end of the nuclear lifecycle.

How we do it:

- By bringing together industry, community partners, and homegrown talent to create innovative, long-term solutions.

Why we do it:

- To prove that nuclear energy can be an enduring benefit today and for generations to come, far into the future.

OUR PILLARS

Our foundational pillars guide the all of the work that we do.



Focus Areas

Decommissioning



Site Repurposing



Waste Stewardship



Collaboration



Partnership, Industry, and Innovation



CCNS Centre for Canadian Nuclear Sustainability

ENERGYSOLUTIONS CANADA

CCNS AMBASSADOR: ENERGYSOLUTIONS



CCNS Centre for Canadian Nuclear Sustainability

KINECTRICS

CCNS AMBASSADOR: KINECTRICS



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SNC-LAVALIN

CCNS AMBASSADOR: SNC-LAVALIN



Black&McDonald Capgemini PROMATION nuclear framatome FOX NUCLEAR SERVICES ATJ NAC INTERNATIONAL

Canadian Nuclear Laboratories Laboratoires Nucléaires Canadiens

Laurentis Energy Partners nuvia Alithya HATCH Worley ECLIPSE AUTOMATION

Canvish nuclear Westinghouse AECOM FLUOR. BWXT GALIAN CCN AECOM

CCNS INDUSTRY CATALYSTS



WiN CANADA McMaster University BRIGHTER WORLD OntarioTech UNIVERSITY DURHAM COLLEGE SUCCESS MATTERS UNIVERSITY OF WATERLOO

Clarington Board of Trade and Office of Economic Development City of PICKERING Ajax By the Lake AJAX-PICKERING Board of Trade

DURHAM REGION ORGANIZATION OF CANADIAN NUCLEAR INDUSTRIES CCNI Clean Energy for a Low Carbon Economy CANDU Owners Group Inc. COG "Excellence Through Collaboration" SkillsCompétences Canada Ontario NAYGN UNENE University Network of Excellence in Nuclear Engineering

CCNS COMMUNITY PARTNERS



Collaboration

We are collaborating with our partners for decommissioning planning.

- Studying decommissioning workforce demands to identify future skillsets and addressing any gaps.
- Learning from two units already in safe storage at PNGS .
- Exploring international and educational decommissioning opportunities.





Benchmarking/OPEX

San Onofre Nuclear Generating Station



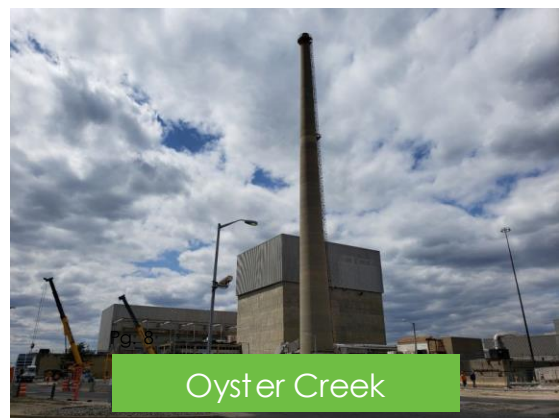
Indian Point



Diablo Canyon Power Plant



Oyster Creek



We're working with our partners and other organization to gain insight on operational experience and valuable lessons learned.



Innovation

- We're bringing the same excellence and spirit of innovation to decommissioning nuclear stations that we brought to building and operating them.
- New innovations will help to
 - ✓ reduce timelines and costs for the decommissioning project,
 - ✓ enhance employee safety,
 - ✓ reduce radiation exposure and waste; and
 - ✓ ensure the safety of the community and environment.
- Innovation studies





Community

Building strong and safe communities

- Open and transparent communications
- We're collaborating with our host communities and Indigenous communities.
- Sponsorship of youth and STEM based initiatives



Discussion – Q&A



Thank You

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