2022 WiN Global Annual Conference
Panel Session May 25, 2022
Innovation in Decommissioning

May 25, 2022
Carla Carmichael, VP Nuclear Decommissioning Strategy
Welcome
Ontario Power Generation’s Nuclear Assets

Darlington NGS (4 Reactors)

Bruce NGS (8 Reactors)

Pickering NGS (8 Reactors)

Western Waste Site

THREE Nuclear Stations ➤ 20 Reactors, Waste Facilities and Future Repositories
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
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.

- Environment
- Community
- Innovation
- Economy

**Focus Areas**

- Decommissioning
- Site Repurposing
- Waste Stewardship
- Collaboration
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.

• OPG’s goal is to be a net-zero company by 2040 and lead the way to a net-zero economy by 2050.
Together with our CCNS partners we are:

• Gaining insight on operational experience and valuable lessons learned.

• Exploring international decommissioning opportunities.

• Studying decommissioning workforce demands to identify future skillsets and addressing any gaps.

• Learning from two units already in safe storage at PNGS.
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
Thank You

Follow us on
LinkedIn & Twitter

Visit our website
theccns.com