

Bruce Power Update

Kincardine Council

April 10, 2024

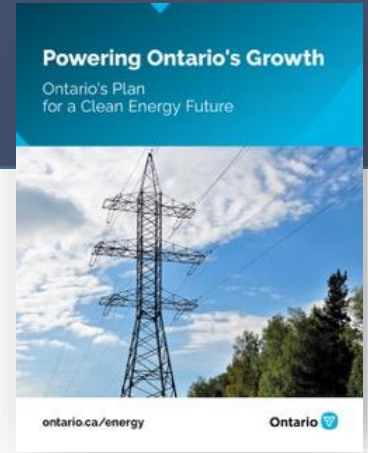
BrucePower™
Innovation at work




Our Five Guiding Principles

The company's approach to supporting the role of the Bruce Power site in *Powering Ontario's Growth* plan will be based on the following five guiding principles:


1. Extend the operation of the eight Bruce Power operating units to continue producing clean energy and cancer-fighting isotopes through 2064 and beyond.
2. Through Life-Extension Program and Project 2030 investments, increase net peak output of the existing units to 7,000 MW for the 2030s – equivalent to adding a large-scale reactor with current infrastructure.
3. Pursue an Impact Assessment (IA) as a planning tool to evaluate the potential for an additional 4,800 MW at the Bruce Power site and commit to open and transparent engagement with Indigenous communities, the tri-county region and the public prior to any decision-making.
4. Undertake a robust technology review process to provide sound guidance for potential future decisions and milestones.
5. Position economic development/partnerships, localization, supply chain and workforce development as key priorities in development, especially in rural communities.





MAJOR COMPONENT REPLACEMENT

U6



- Commercially operational, September 14 - **on budget and ahead of schedule**
- **12 million** hours worked
- **0.26** All Injury Rate
- Approximately **\$50M** returned to the IESO, consumers through strong performance



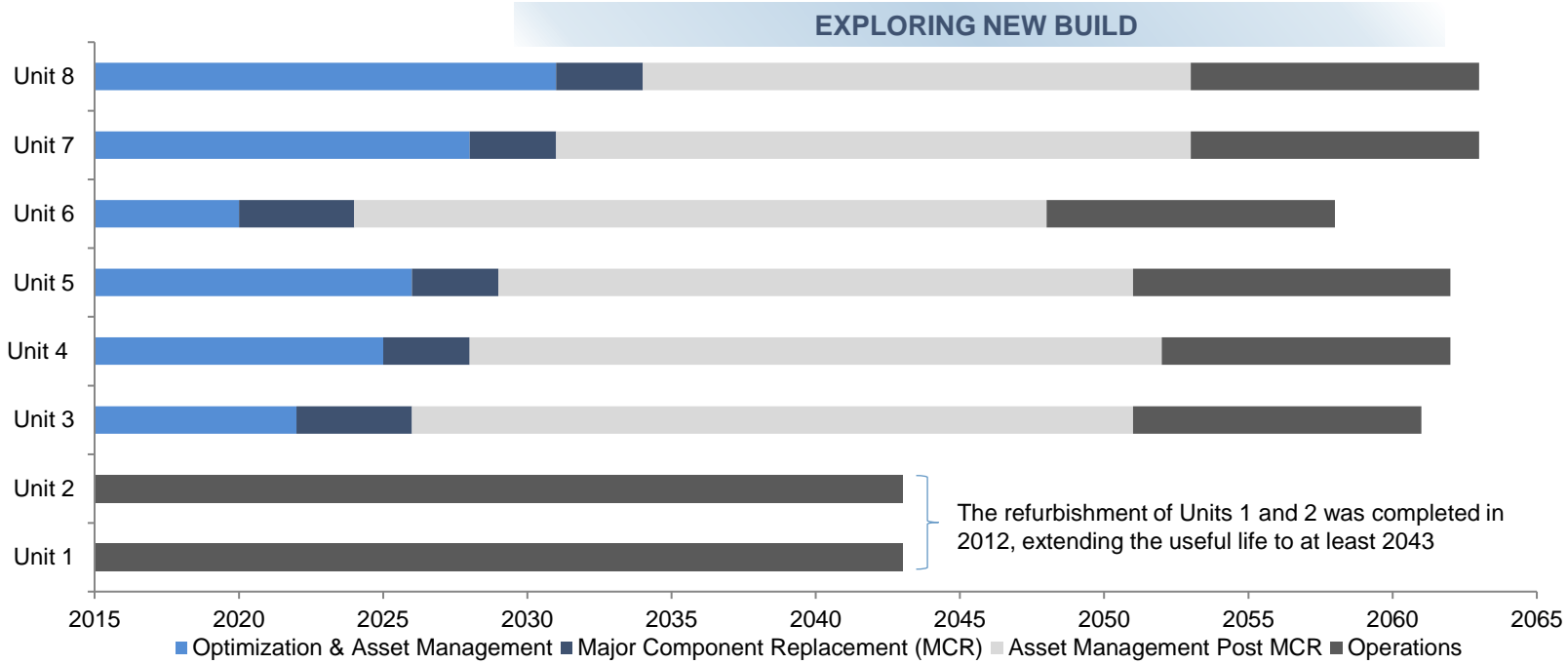
MAJOR COMPONENT REPLACEMENT

U3



- Breaker open: **March 1, 2023**
- Incorporating **lessons learned** from U6 – time and cost savings
- Innovations include tooling and inspection automation and robotics, and advanced modelling and training

Life-Extension Program & Potential Nuclear Expansion



More Power Output - Project 2030



Helping meet
future energy
demand

2016

6,300 MW
SITE NET PEAK

2018

6,430 MW
SITE NET PEAK
(Project 2030 start)

2022

6,550 MW
SITE NET PEAK

Early 2030s

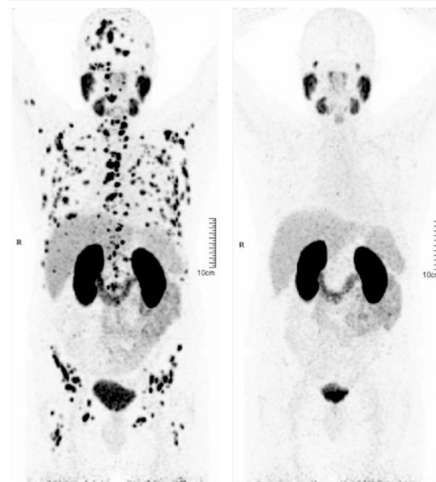
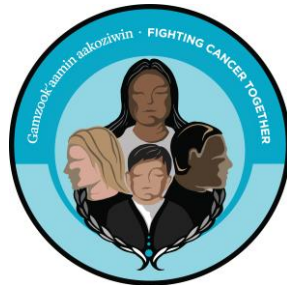
7,000 MW+
TARGET SITE NET PEAK



About equivalent to **adding one large-scale reactor** with current infrastructure

Cancer-Fighting Medical Isotopes

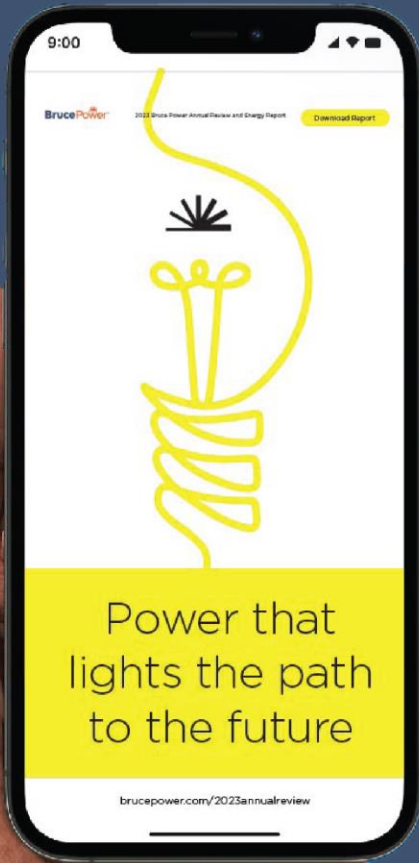
- **Leading the way in nuclear medicine** – producing cobalt-60 and lutetium-177 through made-in-Ontario partnerships
- **Commercial production of lutetium-177 began in October 2022** – first company to produce this isotope in a commercial reactor; expanding to meet growing demand
- **Future isotope production** – evaluating opportunities to expand isotope production
- **Collaboration with Saugeen Ojibway Nation** – collaborate to market new isotopes and create economic opportunities



Bruce C Project

- Bruce C Impact Assessment (IA) to evaluate impacts of adding up to 4,800 MW of new nuclear capacity on the existing site.
- No decision has been made to advance a new build. IA process used as a planning tool – focus on dialogue and engagement.
- IA will be technology neutral – considers multiple technologies and forms bounding case for reactor parameters.





Check out the
2023 Annual Review
and Energy Report at
brucepower.com

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