

# Bruce Power Update

Grey County Council

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March 28, 2024

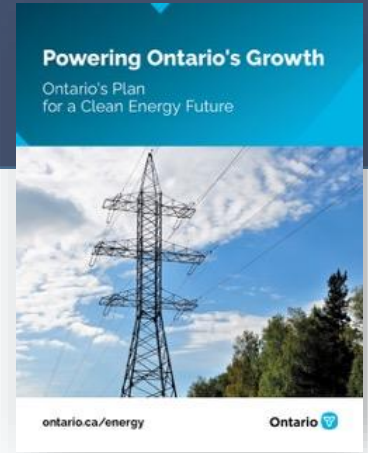
**BrucePower™**  
Innovation at work




# 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

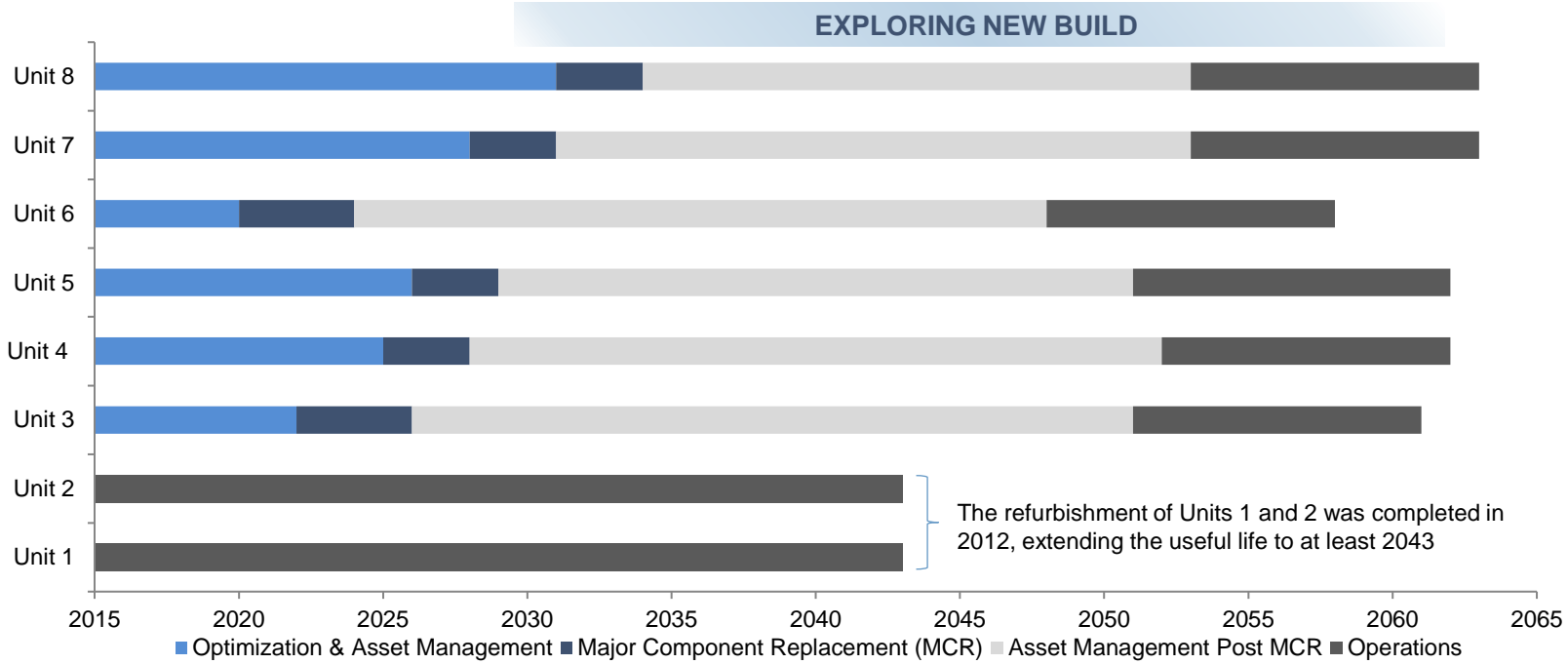
U3



Bruce-Palliser  
Unit 3 811 MW

- 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+**

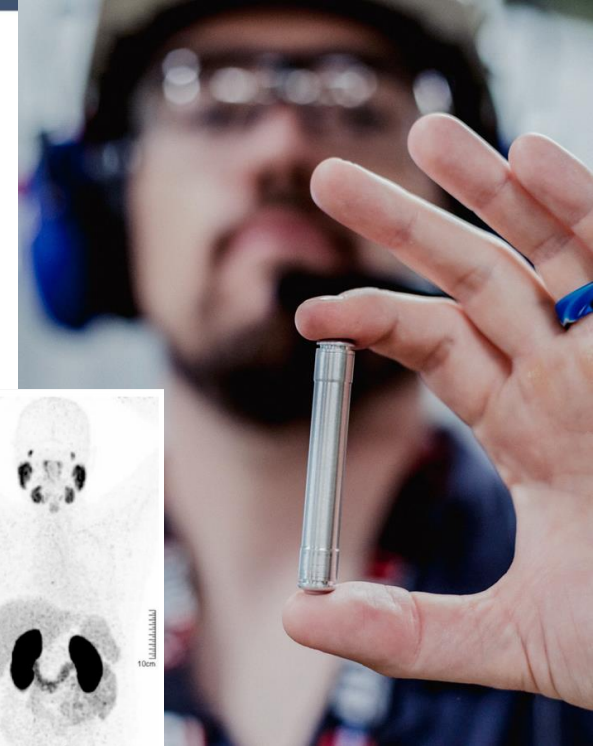
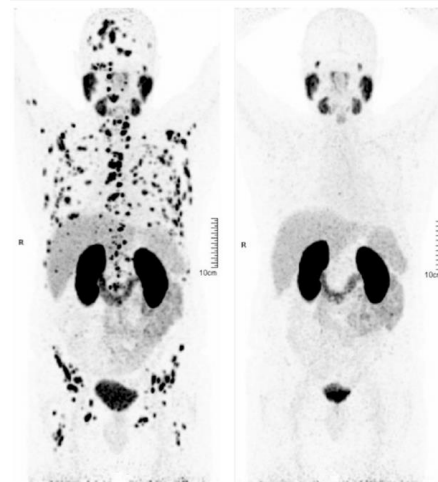
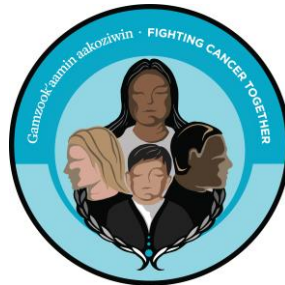
TARGET SITE NET PEAK



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

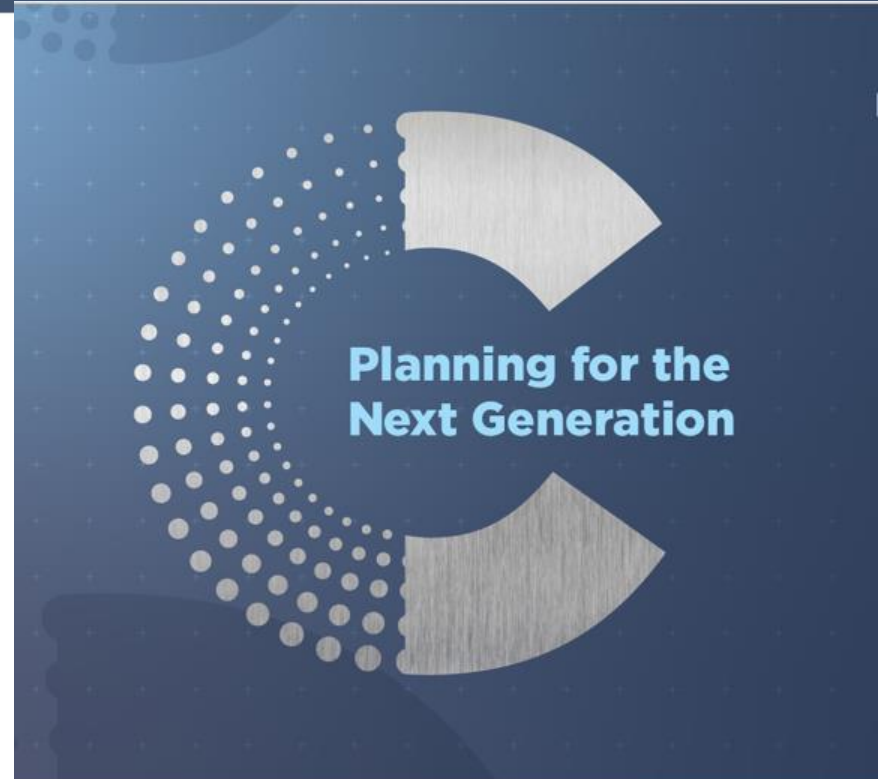
# Cancer-Fighting Medical Isotopes

- **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

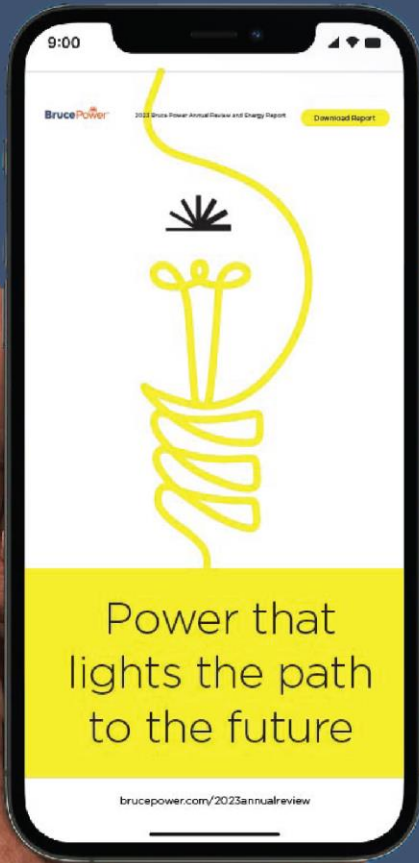


# Bruce C Project

- 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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