

Media Backgrounder

Amended and Restated BPRIA | December 3, 2015

About the Bruce Nuclear Generating Station

The Bruce Nuclear Generating Station, which is regulated by the Canadian Nuclear Safety Commission, is the largest operating nuclear facility in the world. It provides roughly one-third of Ontario's electricity and consists of two generating stations (Bruce A and Bruce B) with a total of eight nuclear units.

The Amended and Restated Bruce Power Refurbishment Implementation Agreement (ARBPRIA) secures 6,300 MW of electricity from the Bruce Power site and is a vital step in providing long-term, low-cost, emission-free and reliable baseload electricity generation for decades to come. It is the culmination of more than two years of negotiations between the IESO and Bruce Power, which was subject to rigorous financial and technical due diligence, as well as an independent fairness opinion.

About the Amended and Restated BPRIA

The BPRIA was first executed in October 2005 between Bruce Power and the Ontario Power Authority (now Independent Electricity System Operator – IESO).

The IESO has applied 10 years of BPRIA contract administration to the development of today's agreement including all best practices developed along the way. This includes a continued focus on the successful elements of the BPRIA, which limited ratepayer exposure to cost overruns and resulted in the successful refurbishment of Units 1 and 2.

History of Results

- **2005** – The Ontario Power Authority executes agreement with Bruce Power.
 - It provided a contracted price for Bruce A, in return for the refurbishment of two units and the operation of Units 1 to 4.
 - It also provided a lower floor price for Bruce B for the operation of Units 5 to 8 without refurbishment.
- **2012** – First time in 15 years all eight Bruce units are operating and producing 6,300 MW of energy
- **2013** – The province's most recent Long-Term Energy Plan (2013 LTEP) is released, which includes nuclear refurbishment principles (further below). The IESO and Bruce Power enter negotiations for an amended and restated BPRIA.
- **2015** – The IESO and Bruce Power secure a term sheet outlining the principles for an amended and restated BPRIA.

Key Elements of IESO/ Bruce Power Agreement

- Secures the nuclear site and all eight units for the long term providing 6,300 MW of baseload generation until the 2060s while deferring refurbishments to 2020 and beyond
- Adheres to the 2013 LTEP refurbishment principles and ensures that operating and refurbishment execution risks will reside with Bruce Power, and the agreement includes contractual off-ramps
- Bruce Power will be subject to the strictest possible oversight to ensure safety, reliable supply and value for ratepayers.

Agreement Price

A key negotiating objective throughout this process was to secure the power from the site at a price consistent with 2013 LTEP assumptions:

- On January 1, 2016, Bruce Power will receive a single price for all output from the site of \$65.73 per megawatt-hour (MWh)
- The \$65.73/MWh price is about 20 percent lower than the current average electricity commodity cost of about \$83/MWh
- With additional refurbishment costs, the price over the life of the agreement will be approximately \$77/MWh or 7.7 cents per kilowatt-hour (kWh)

BPRIA (2005 – 2015)

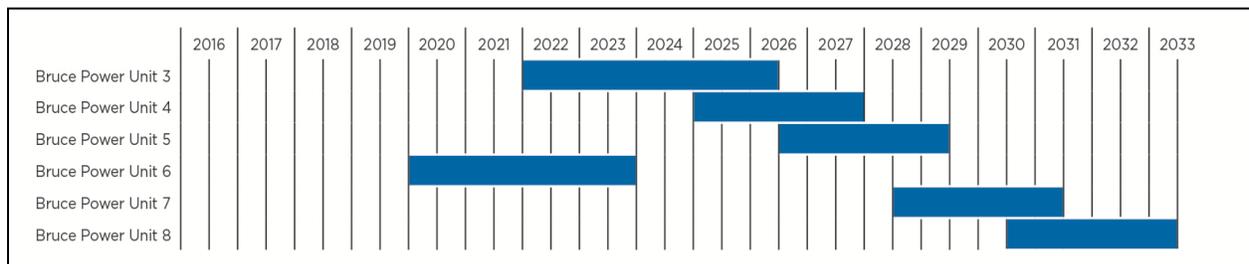
- Executed in October 2005
- Restarted Bruce A Units 1-4
- Refurbished Units 1 and 2 – 1,500 MW

Amended and Restated BPRIA (2016 – 2048)

- Focuses on the refurbishment of the remaining six nuclear units (Bruce A Units 3 and 4 and Bruce B) and the ongoing operation of the facility by Bruce Power
 - Bruce A Units 3 and 4 - 1,500 MW
 - Bruce B Units 5-8 - 3,300 MW

Refurbishment Timeline

This revised timeline will mean refurbishment commences in 2020, rather than the previously estimated start date of 2016.



Key Figures Related to Ontario's Supply Mix

- Baseload nuclear power is the backbone of Ontario's electricity system and supports Ontario's diverse economic sectors.
- Ontario's installed supply capacity is about 39,000 MW, which includes about 13,000 MW of nuclear generation, or about 30 percent of the province's installed capacity.
- Nuclear generation represents about 60 percent of Ontario's electricity output.
- Three-quarters of Ontario's installed capacity comes from non-fossil sources.

Commitment to Principles

The IESO's negotiations with Bruce Power, and the subsequent agreement, adhere to the principles for nuclear refurbishment outlined in the 2013 LTEP:

1. Minimize commercial risk on the part of ratepayers and government
2. Mitigate reliability risks by developing contingency plans that include alternative supply options if contract and other objectives are at risk of non-fulfillment
3. Entrench appropriate and realistic off-ramps and scoping
4. Hold private sector operator accountable to the nuclear refurbishment schedule and price
5. Require OPG to hold its contactor accountable to the nuclear refurbishment schedule and price
6. Make site, project management regulatory requirements and supply chain considerations and costs and risk containment the primary factors in developing the implementation plan
7. Take smaller initial steps to ensure there is opportunity to incorporate lessons learned from refurbishment including collaboration by operators.

Links to the agreement

The Bruce Power Refurbishment Implementation Agreement (BPRIA) has been available to the public since it was first signed in 2005, and both the IESO and Bruce Power continue to support this open and transparent approach with the posting of the amended and restated agreement, as well as a fairness advisor letter.