



Canada: Ontario - Civil Nuclear Opportunities, CDN \$13 Billion in Nuclear Reactor Units Refurbishments

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Summary

On December 3, 2015, Ontario Government, the Minister of Energy, announced that it updated its contract with Bruce Power to proceed with the refurbishment of six nuclear reactors. Bruce Power, the operator of the 8 reactors at Tiverton-based nuclear generation station, will invest approximately CDN \$ 13 Billion (US \$ 10 Billion) to complete the refurbishment.

Background

Bruce Power is operating 8 nuclear power generation units equipped with CANDU nuclear reactors of total output capacity 6,610 MW (gross) at Tiverton, ON; Bruce A with 4 reactors of 750 MW each and Bruce B with 4 reactors (3 of 785 MW and 1 of 820 MW). Bruce A units 1 and 2 were refurbished and restarted in 2012. The Ontario Power Authority (OPA) entered negotiations with Bruce Power for the refurbishment of the remaining units and at present, the Independent Electricity System Operator (IESO), which was recently merged with OPA, signed the contract for the refurbishment of the 6 remaining units.

Bruce Power will make the investment from its own funds and secure 6,300 MW of baseload generating capacity and will benefit from a set price of 77 cents per kilowatt hour starting January 1, 2016, for the time of the contract. The actual construction works for refurbishment will start in 2020.

Opportunities for U.S. Companies

Significant opportunities exist for U.S. manufacturers and suppliers of nuclear power based energy generating systems, equipment, and components seeking to enter Ontario's market. The Bruce power units consist of main equipment - a CANDU (short for CANada Deuterium Uranium) pressurized heavy water reactor used for generating steam, a steam turbine, and the electric power generator- and a large variety of ancillary equipment necessary for such installation.

It is expected that Bruce Power will be working with general contractor(s) which will start planning and contracting the necessary supply program to secure equipment and materials in order to start the actual refurbishment on time. The procurement plan may include many

components for the main equipment, even inside the reactor or such as the steam turbine rotor (as done for the first 2 units), and a large variety of electric motors, hydraulic pumps, compressors, process controls, as well as piping, fitting, and many materials, etc. U.S. companies may have opportunities to become suppliers for the above refurbishments.

Note that Ontario Power Generation is also scheduled to start the refurbishment of one nuclear reactor unit in 2016 at its Darlington power generation plant.

Sources

Ontario Government News Release
[Ontario Commits to Future in Nuclear Energy](#)

IESO- Announcement
[Bruce Power Nuclear Refurbishment](#)

For detailed information on Ontario's Long-Term Energy Plan, please see:
[Achieving Balance: Ontario's Long-Term Energy Plan \(LTEP\)](#)

For More Information

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