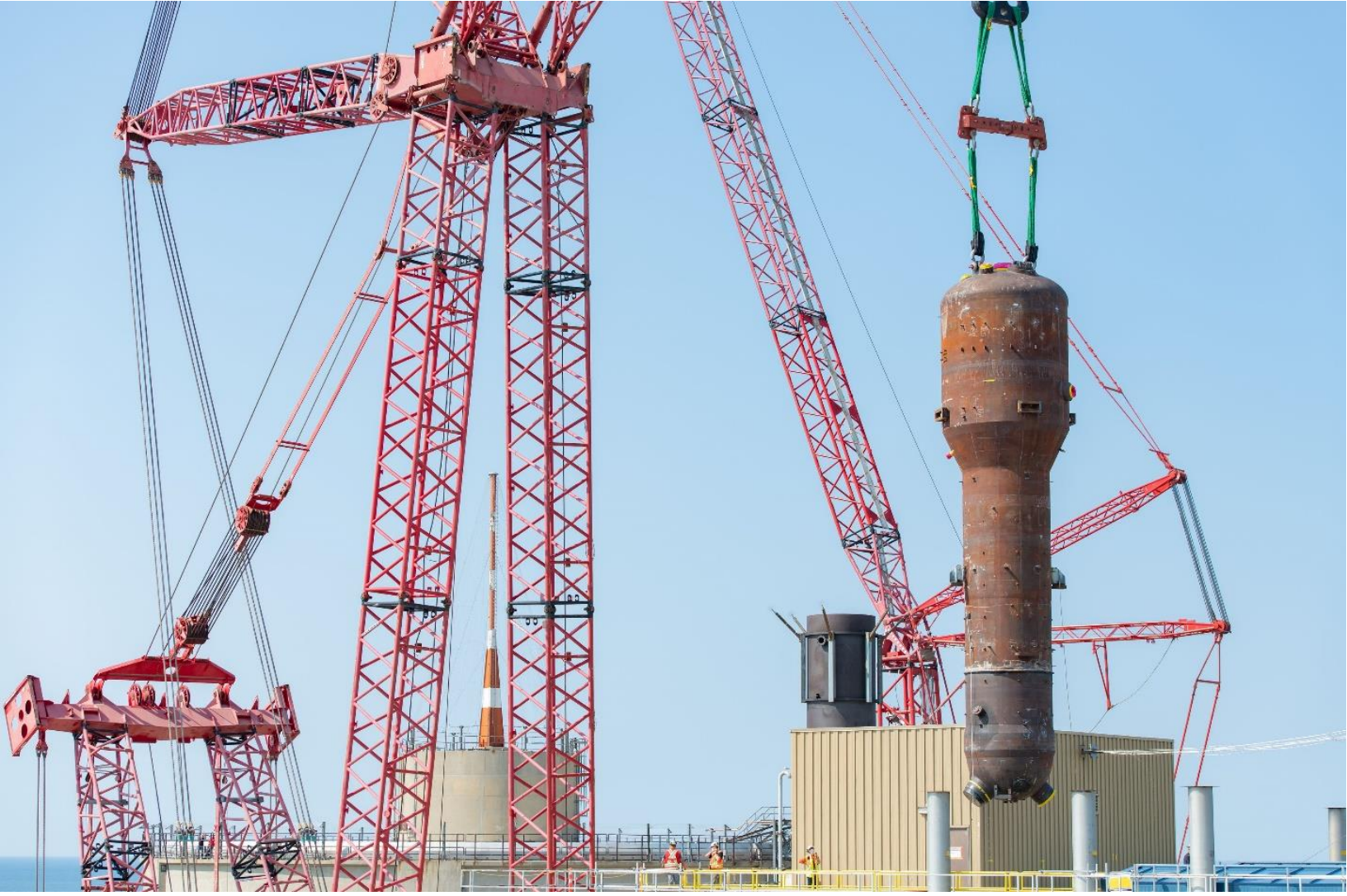


Steam Generator Lift photos courtesy Bruce Power

Bruce Power driving economic revitalization across Ontario's nuclear supply chain

The CANDU Owners Group Member utility celebrated several key Major Component Replacement Project contracts with COG supplier participants ATS Automation, Cameco, and Aecon (a partner in the Steam Generator Replacement Team JV)

ATS™

CANDU Owners Group Inc. COG "Excellence Through Collaboration"

BrucePower™ Innovation at work

Cameco

AECON

CANDU OWNERS GROUP

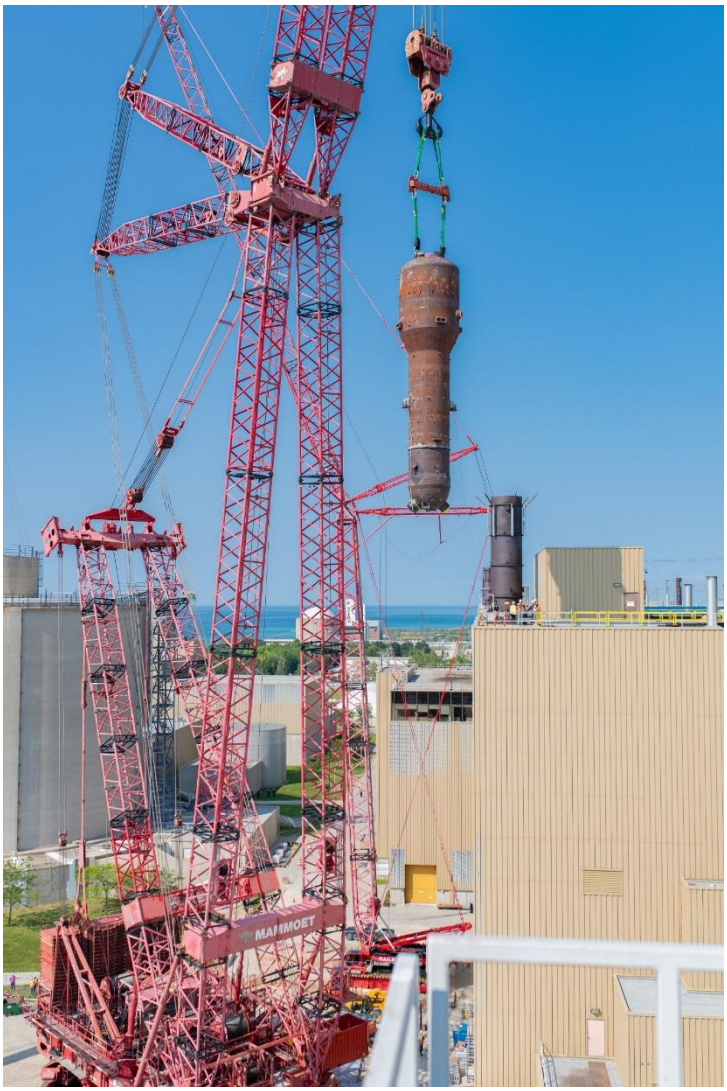
Bruce Power, along with its supply chain partners, continues to advance their key Major Component Replacement (MCR) Project for Units 3-8. The project includes replacement of key reactor components, including pressure tubes, calandria tubes and feeder tubes plus the eight steam generators. Starting with Unit 6, which is expected to return to service in 2024, all work is scheduled to be completed by 2033. The project is part of Bruce Power's Life-Extension Program which will refurbish all eight Bruce CANDU reactors, enabling continued safe operation until 2064. The program that began on Jan. 1, 2016 remains on time and on budget.

In 2021, Bruce Power announced a $3 billion 'Made in Ontario' plan as part of the MCR project to support local economic growth and put Ontario at the forefront of global nuclear innovation and awarded the following contracts:

- ATS Automation has secured a $30 million contract to automate the installation and inspection of calandria tubes for the Unit 3 MCR – an industry-first for a CANDU nuclear refurbishment. Udo Panenka, President of ATS Industrial Automation, said "This type of collaboration demonstrates how innovation and technology can advance refurbishment efforts, which include delivering the first fully automated system for fuel channel installation in a CANDU nuclear reactor, while ensuring the health and safety of workers and the dependable operation of a critical energy source."

- Cameco Fuel Manufacturing has completed calandria tube manufacturing for the upcoming Unit 3 MCR. Scheduled to begin next year, the calandria tube order is part of a $62 million contract announced in 2017. Cameco will produce all of the calandria tubes and annulus spacers needed for the six Bruce Power units undergoing MCR between 2020 and 2033. In addition to delivery of the Unit 3 calandria tubes, Cameco previously completed delivery of 480 calandria tubes in support of the Unit 6 MCR, which began in 2020.

- SGRT, a joint venture between Aecon and SGT (a partnership between Framatome and the United Engineers & Constructors), has been awarded a contract to replace eight steam generators in Units 3 & 4. SGRT already replaced the steam generators at Bruce 6, completing the final lift in December 2021.



Steam Generator Lift photos courtesy Bruce Power

These agreements demonstrate the CANDU industry's commitment to promoting innovation to enable utilities to realize cost, schedule and dose savings in current and planned refurbishments. COG celebrates this prime example of excellence in collaboration and is proud to support the industry in achieving these objectives through research and development, joint projects, and programs such as COG's Supplier Participant and Refurbishment Forum. Learn more here, or on COGonline (account required).
Research & Development
Joint Projects & Services