



Refurb Report



December 17, 2009

Inspection of reactor vessel complete and results confirm another 25 to 30 years of Operation

After completing the removal of the 380 calandria tubes, AECL began the overall inspection of the reactor vessel, which included a series of very detailed inspections. For example, internal vessel surfaces, major welds and internal and external reactor components were inspected remotely by a state-of-the-art robotic camera system to validate the integrity of the design while the reactor components were removed. Based on these inspections, AECL has confirmed, as expected, that the calandria vessel and its components are in good condition. As the designer of the CANDU-6 nuclear reactor, AECL has given the reactor vessel a "clean bill of health", and has confirmed that it is good to operate for an additional 25 to 30 years.

As a result, the reactor re-assembly sequence has officially begun with the insertion of the first new calandria tube inside the reactor. During the coming months, a total of 380 calandria tubes and 380 pressure tubes will be inserted using specialized tooling. To ensure that this next step is conducted safely and efficiently, the dedicated teams have received training on the operation of this calandria and pressure tube installation tooling at the AECL Saint John Training Center.

Simultaneously work continues on the installation of the 760 upper feeders and associated instrumentation. This work is similar to a complex three-dimensional puzzle that needs to be assembled in a precise and complicated sequence. This work is particularly challenging for workers due to the limited space around the reactor vessel.

Turbine and Generator Update

Since arriving safely at the Station in May 2009, the generator rotor has been reinstalled and final assembly activities are underway. The three low pressure turbine rotors have also been installed at the Station. Work on the high pressure turbine rotor continues; including final alignment and commissioning activities.

Our dedicated workforce continues to focus on safety, which is a key to successfully delivering this project. We are very fortunate to enjoy the excellent relationship that we have with our trade unions and other partners. We continue to rely on their expertise as we progress on the project. As we approach the holiday season, we wish all New Brunswickers a safe and Happy Holiday with your friends and family.



Workers are installing feeders and associated instrumentation.



Feeders

For further information or updates, please visit the Powering the Future website at <http://poweringthefuture.nbpower.com/en/default.aspx> or contact NB Power at 1-866-754-7727.