

# Press Release

## Point Lepreau Generating Station Refurbishment Project Update

October 15, 2010 (revised)

**Fredericton, NB** - Work on the Point Lepreau Generating Station's Refurbishment Project continues. On Friday, October 8, 2010, it was announced that Atomic Energy of Canada Limited (AECL) had recommended that all 380 calandria tubes previously inserted inside the reactor be removed and replaced as part of the required technical solution to achieve calandria tube rolled joint seal integrity.

Guidance on the overall project schedule continues to be founded on the best information and experience available. As a result of the decision to proceed with removal and replacement of the 380 calandria tubes, AECL has now revised its project schedule with a planned completion date of May 2012 for Phase 2 of the overall Point Lepreau Generating Station Refurbishment Project. Once retube activities are completed, NB Power will proceed with the commissioning activities which will take approximately four months in order to safely return the reactor to service in the fall of 2012 ready for the heating season.

"Although the calandria tube installation work sequence will take longer to complete than previously planned, it is essential that these activities achieve the required quality standard in order to provide safe and reliable operation for the next 25 to 30 years." says Gaëtan Thomas, NB Power President and CEO. "Having the Point Lepreau Generating Station in the NB Power generation mix, is one of the reasons why electricity rates in New Brunswick have remained low compared to our neighbouring jurisdictions. Fuel costs represent a small fraction of the total operating costs for nuclear power, which means stable and predictable generation costs once the unit restarts. That makes the Point Lepreau Generating Station part of the foundation from which New Brunswick can build its future energy mix."

As part of the project management process and its own due diligence, NB Power is reviewing the schedule to better understand the impact of the AECL revised schedule completion date on the overall project activities.

### PROJECT ACTIVITIES

As previously reported, the first work sequence of the reactor reassembly activities is the installation of the new calandria tubes in the reactor vessel. A CANDU-6 reactor has 380 calandria tubes. Inserted in each calandria tube is a pressure tube which contains the fuel bundles used to power the reactor.

Earlier this year, the project team encountered difficulties in achieving the necessary seal tightness between the calandria tube and the tube sheets that form the two end plates of the calandria vessel. Over the last four months, a specialized team of engineers, scientists and industry experts worked on developing an acceptable solution to this problem that is technically feasible and will ensure that the reactor will operate safely and reliably for another 25 to 30 years. All technical assessment and results were reviewed by a panel of independent experts.

As part of the solution process to determine the future steps, the Station Retube Project team removed eight calandria tubes and polished each tube sheet bore using a technique developed for the Wolsong Retube project in Korea. Eight new calandria tubes were installed and tested to ensure that the joints at both end of these eight calandria tubes met the seal tightness criterion. All joints tested successfully.

## Press Release

Detailed analysis has confirmed that the inability of some tubes to meet the acceptable criterion was due to the surface roughness of the tube sheet. Based on the success achieved with the approach taken with these eight calandria tubes, AECL decided to proceed with replacing all 380 calandria tubes using the proven polishing method on the tube sheet bores. This has been determined to be the most technically and economically feasible solution for a safe and reliable operation.

Employees and supplemental staff are committed to this project and are confident in their ability to fulfill the commitment to complete this project safely. Safety is the number one priority for NB Power and AECL. A strong safety culture and healthy workplace environment are at the heart of everything we do. Since the Refurbishment Project has started, our regular workforce has tripled with the addition of contractors. Approximately 2,800 workers achieving more than 11 million person-hours have worked on the Refurbishment Project. Station staff has achieved more than 4.8 million person-hours without a lost-time accident and AECL staff and contractors achieved more than 3.5 million person-hours without a lost-time accident.

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