



## Énergie NB Power

January 13, 2011

### Point Lepreau Generating Station Refurbishment Project Update

#### Retube Activities

Work on the Point Lepreau Generating Station's Refurbishment Project continues to progress. The removal of the 380 calandria tubes has been safely and successfully completed. The project team has now moved on to the next work sequence, polishing the 760 calandria tube sheet bores. One quarter of the polishing has been undertaken, with an expected completion at end of March 2011. The tube sheet bores are located at each end of the calandria tube. The process to complete this work was verified in the field in August 2010 by removing eight calandria tubes, polishing their bores, re-installing and rolling the calandria tubes and successfully leak testing the rolled joints.

AECL is on track to meet the target 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.

The objective of the polishing activity is to ensure that a smooth surface is achieved on the tube sheet bores prior to new calandria tubes being inserted and joints being made at both ends of the 380 calandria tubes. The joints must be made to a smooth surface in order to ensure a leak tight seal is achieved. This complex procedure requires precision to ensure a smooth surface finish that will result in the proper leak tight performance when the new calandria tubes are installed. Each bore is polished for approximately 40 to 60 minutes by a spin brush attached to an orbital tooling head that rotates slowly around the circumference of the tube sheet bore hole. Once the initial polishing is complete, an inspection of the polished surface with a bore scope camera is required to confirm that the polishing meets the expectation or if further polishing is required.

A full scale mockup of the reactor is being used to test installation tools, develop procedures and train staff. Engineering and Construction teams are working together to proactively identify any concerns and to develop contingency plans to avoid delays when the calandria tube installation begins on the reactor.

#### Fire Protection Upgrades

The Refurbishment Project fire protection system upgrades are continuing as part of a multi-year program of improvements to meet advanced requirements of the nuclear industry codes and standards. Since the Station has been built, there have been many advancements in both technology and also improvements to codes and standards. These advances will result in Point Lepreau Generating Station meeting these new standards.

As part of other Refurbishment outage activities to support life extension, a state-of-the-art fibre optic system as part of a leading-edge early warning smoke detection system is being installed. Approximately two kilometres of fibre optic cable have been installed on site. The Very Early Smoke Detection Alarm (VESDA) has the capability to detect smoke at the thousands per particle, long before a human can smell smoke.

Coordination is key in the overall success of the fire protection upgrades due to the size of the project and because the fire protection system is all overhead which requires significant scaffolding and diligent work practices. Throughout the project, NB Power consulted with industry best practices and recognized fire protection experts nation-wide.

#### Safety and Quality

As work continues at the Point Lepreau Generating Station, safety continues to be our top priority and is reflected in everything we do. The Refurbishment Project can only be successful as a result of the focus on safe, quality work by all workers on site. NB Power and its staff take every effort to ensure safety of our personnel and contractors on-site. Should an incident occur, NB Power takes every step possible to learn from an event and to share that information in order to prevent a future repeat of that event.

**MEDIA CONTACT:** Kathleen Duguay, Public Affairs Manager, (506) 659-6433, email: [kduguay@nbpower.com](mailto:kduguay@nbpower.com)