

AECL's Enhanced CANDU 6 Reactor (EC6) Achieves Important Milestone of Canadian Regulator's Pre-Project Design Review

Mississauga; April 8, 2010 — The Canadian Nuclear Safety Commission (CNSC) has completed Phase 1 of a Pre-Project Design Review of Atomic Energy of Canada Limited's (AECL) Enhanced CANDU 6 reactor™ (EC6™). The conclusion is that, at an overall level, the design intent is compliant with the CNSC regulatory requirements and meets the expectations for new nuclear power plants in Canada.

"The CNSC has determined in this Phase 1 stage of their review that the CANDU 6® design can be demonstrated to meet the latest Canadian requirements," says AECL President and CEO Hugh MacDiarmid. "So, the EC6 benefits not only from the proven track record of CANDU 6, but also from this successful review against Canada's regulatory requirements."

The objective of a Pre-Project Design review is to verify, at a high level, the acceptability of a nuclear power plant design with respect to Canadian regulatory requirements and expectations.

The CNSC Phase 1 Pre-Project Design Review of the EC6 concluded that:

- AECL has, in general, provided sufficient design and analysis information for the purpose of this review; and
- At an overall level, the design intent is compliant with the CNSC regulatory requirements and meets the expectations for new nuclear power plant designs in Canada.

This conclusion will be further confirmed during a Phase 2 review when outstanding information for specific technical items for each review topic will be provided to the CNSC. The CNSC staff anticipate that these items can be brought to closure during a Phase 2 review.

A copy of the Phase 1 Executive Summary is available for downloading from the CNSC website at:

<http://www.nuclearsafety.gc.ca/eng/licenseesapplicants/powerplants/newapplications/vendorpreproject/status.cfm>

"The current CANDU 6 design is a proven and highly successful technology, with 11 units licensed and operating in five countries," says MacDiarmid. "We have been very careful to build on these aspects in the EC6, while enhancing safety and licensability to meet the latest Canadian and international expectations for a new plant."

Phase 2 of the Pre-Project Design Review will determine whether there are any potential fundamental barriers to licensing the design in Canada, and is expected to be completed early in 2012.

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About the Enhanced CANDU 6

The Enhanced CANDU 6 (EC6) is a 700MW Class Generation III reactor based on the highly successful CANDU 6 reactor with a number of safety enhancements to meet the latest Canadian and international standards. It uses natural uranium fuel, heavy-water moderator and heavy-water coolant in a pressure tube design. It can be refueled on power and has one of the highest lifetime capacity factors among the world's reactors. It is ideal for small and medium electric grids, and benefits from the CANDU 6 experience of proven design, construction and operation.

About AECL

Atomic Energy of Canada Limited is a full-service nuclear technology company providing services to nuclear utilities around the world. Established in 1952, AECL is the designer and builder of CANDU technology, including the CANDU 6, one of the world's top performing reactors. AECL's 5,000 employees deliver cutting edge nuclear services, R&D support, design and engineering, construction management, specialized technology, refurbishment, waste management and decommissioning in support of CANDU reactor products.

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