

REGULATORY ASPECTS OF RETURN TO SERVICE OF PICKERING-A

by

J. Harvie
Director General, Reactor Regulation
Atomic Energy Control Board

The 4 Pickering-A reactors were shut down at the end of 1997 as part of the improvement plan to bring the operation of nuclear reactors in Ontario to a fully acceptable standard. The intent was to divert resources from Pickering-A to improving the standard of operation and maintenance of the reactors that continued to operate, and when this was achieved to return Pickering-A to operation with the same acceptable standards.

The shutdown coincided with the date by which the Atomic Energy Control Board had required the implementation of an enhanced shutdown capability in accordance with a licence amendment made in early 1993. This work had not been completed.

The improvement process has not proceeded as quickly as had been intended. Restart of the Pickering-A reactors will be contingent on satisfying the Atomic Energy Control Board that it will not result in a diversion of resources from the other reactors that might further jeopardize the improvement of their performance.

There is a large number of outstanding requirements and commitments on the Pickering-A reactors, as documented in the Ontario Power Generation document "Pickering A - Basis for Return to Service, Revision 2, November 24, 1999". Some of these requirements are mandatory, such as the installation and commissioning of the enhanced shutdown capability. The vast majority of the others should also be completed to ensure that the reactors can be operated at sufficiently high standards after their restart, although a small number of exceptions could be justified on a case-by-case basis.

Completion of this work should result in a station with satisfactory condition of the equipment, a clearly defined licensing basis and safe operating envelope, good processes for configuration management, and improvements to reduce the risk of accidents.

The restart of the reactors requires an amendment to the operating licence, which triggers an environmental screening in accordance with the Canadian Environmental Assessment Act. The process associated with this must be followed scrupulously, with appropriate opportunity for public and stakeholder input, to ensure compliance with the relevant legal requirements.

The Atomic Energy Control Board's decision on approving restart will be made when the necessary regulatory prerequisites are complete.