



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Record of Decision

In the Matter of

Applicant

Bruce Power Erie Inc.

Subject

Environmental Assessment Referral Regarding
Bruce Power Erie Inc.'s Proposal to Construct
and Operate a Nuclear Power Generating
Station at Nanticoke, Ontario

Meeting
Date

April 20, 2009

RECORD OF DECISION

Proponent: Bruce Power Erie Inc.

Address/Location: 177 Tie Road, R.R.#2, Tiverton, Ontario N0G 2T0

Purpose: Environmental assessment referral regarding Bruce Power Erie Inc.'s proposal to construct and operate a Nuclear Power Generating Station at Nanticoke, Ontario

Application received: October 31, 2008

Date of meeting: April 20, 2009

Location: Canadian Nuclear Safety Commission (CNSC) Headquarters,
280 Slater St., 14th. Floor, Ottawa, Ontario

Members present: M. Binder, Chair

Secretary: M.A. Leblanc
Senior General Counsel: J. Lavoie
Recording Secretary: S. Dimitrijevic

Date of Release of the Decision: May 1, 2009

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Introduction

1. The Canadian Nuclear Safety Commission¹ (CNSC) has received an application from Bruce Power Erie Inc. (Bruce Power) for a licence to prepare a site for the future construction of a nuclear power generating facility in the Province of Ontario, Haldimand County, former township of Nanticoke. There are no existing nuclear facilities in the area.
2. Bruce Power has launched a long-term planning process to build between 2200 and 3200 megawatts (MW) of electrical generating capacity on an approximately 900 hectare property in the Lake Erie Industrial Park. The application involves the site preparation for the construction of two new nuclear reactors and associated facilities. The electricity generating operation is planned to begin in 2018.
3. Bruce Power has not identified a specific reactor type for the project site. Considerations of reactor design would focus on an envelope of potential environmental impacts associated with different Generation III reactor designs. Bruce Power stated that technical information from several state-of-the-art reactor designs would be used to develop the facility characterisation needed to perform the evaluations of the site suitability for the facility.
4. Before considering Bruce Power's application for the site preparation licence, under the *Nuclear Safety and Control Act*² (NSCA), the Commission must consider the results of an environmental assessment (EA). This consideration includes making a decision on the potential for the project to cause adverse environmental effects, and determining a subsequent course of action under the *Canadian Environmental Assessment Act*³ (CEAA).
5. The Commission is a Responsible Authority⁴ under the CEAA in regard to this matter. As Bruce Power's project falls within the *Comprehensive Study List Regulations*⁵ of the CEAA, the Commission is required to submit an Environmental Assessment Track Report to the federal Minister of Environment (the Minister) which includes a Recommendation to the Minister on the proposed track for the EA. These possible tracks are to either continue the EA as a comprehensive study or refer the EA to a review panel or mediator. Alternately, if the Commission is at any time of the opinion that the project may cause significant adverse environmental effects or that public concerns warrant a reference to a review panel, the Commission may refer the matter directly to the Minister for referral to a review panel or mediator.

¹ The *Canadian Nuclear Safety Commission* is referred to as the "CNSC" when referring to the organization and its staff in general, and as the "Commission" when referring to the tribunal component.

² S.C. 1997, c. 9.

³ S.C. 1992, c. 37.

⁴ Responsible Authority in relation to an EA is determined in accordance with subsection 11(1) of the CEAA.

⁵ SOR/94-638.

6. A Notice of Commencement, informing the public of the EA of Bruce Power Erie's proposed Nanticoke New Nuclear Power Plant, was posted on the Canadian Environmental Assessment Registry (CEAR) on November 14, 2008. Key information on this project has also been posted on the CNSC's Web site.

Issue

7. The Commission needed to decide on one of the paths described in the following two paragraphs.
8. Pursuant to section 21 of the CEAA, the Commission is required to proceed with public consultation and report to the Minister regarding the scope of the project, the factors to be considered in its assessment and the scope of those factors, public concerns in relation to the project, the potential of the project to cause adverse environmental effects, and the ability of the comprehensive study to address issues relating to the project. The Commission is also required to recommend to the Minister to continue with the environmental assessment by means of a comprehensive study, or to refer the project to a mediator or review panel.
9. Pursuant to section 25 of the CEAA, the Commission may, at any time, decide to request that the Minister refers the project to a mediator or a review panel, if it is of the opinion that (a) a project, taking into account the implementation of any mitigation measures that the responsible authority considers appropriate, may cause significant adverse environmental effects, or (b) public concerns warrant a reference to a mediator or a review panel.

Decision

10. With the intent to ensure an effective and efficient process and based on its extensive experience with major nuclear projects, the Commission considered the path forward for the EA at this early stage.
11. Pursuant to section 22 of the NSCA, the President of the Commission established a Panel of the Commission to review the application. In establishing the process, a standing panel on procedural matters determined that it was not necessary to hold a public hearing on the matter, and that the matter can be considered by a panel of one commission member.
12. The Commission, in making its decision, considered Bruce Power's application and project description and Bruce Power's request that this project be referred directly and immediately to the Minister for referral to a review panel.

13. Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Proceedings*,

the Commission requests that the federal Minister of the Environment refers Bruce Power Erie Inc.'s proposed project to a review panel, pursuant to section 25 of the CEEA.

14. In making this request, the Commission notes that, should the Minister accept the request that the proposed project be referred to a review panel, the Commission is open to discuss process options to further assist in the effective conduct of the EA, including the option that the Commission lead a joint review panel under section 40 of the CEEA.

Issues and Commission Findings

Application of the CEEA

15. The CEEA requires that an EA be completed if there is both a "trigger" and a "project". The CNSC has the authority to issue licences for activities involved in Bruce Power's proposal under the authority of Section 24(2) of the NSCA, which is prescribed in the *Law List Regulations*⁶. Therefore, there is a "trigger" for an EA. The proposal involves the site preparation, construction and operation of a nuclear generating station (NGS). This is an undertaking in relation to a physical work and as such is a "project" for the purposes of the CEEA.

Type of Environmental Assessment

16. The project is not of a type listed in the *Exclusion List Regulations*⁷ of the CEEA.
17. The project falls within the *Comprehensive Study List Regulations*⁸ of the CEEA.
18. The Commission therefore concludes that an EA of the proposed project to prepare, construct and operate a NGS is required pursuant to the CEEA.
19. The proposal involves a new Class 1A twin-unit nuclear power station and associated facilities that has a production capacity of approximately 2,200 to 3,200 MWe. The CNSC must ensure that a comprehensive study of the project is initiated.

⁶ SOR/94-636.

⁷ SOR/2007-108.

⁸ SOR/94-638.

Federal and Provincial Coordination

20. The CNSC is a responsible authority under the CEAA identified for this Comprehensive Study. Consultation with other federal departments and agencies has been conducted. The Department of Fisheries and Oceans (DFO) is a federal authority for this project. Environment Canada, Natural Resources Canada and Health Canada were identified as potential federal authorities with specialist expert knowledge and information that would be of assistance in the completion of this EA.
21. The Ontario Ministry of the Environment has indicated that Ontario's *Environmental Assessment Act* does not apply to this undertaking. This response is consistent with their position on the other new build projects undergoing panel reviews in Ontario.
22. The proposed project qualifies as a major resource project, as defined under the federal government's Major Resource Project Regulatory Improvement Initiative triggering the Major Projects Management Office's (MPMO) involvement.

Project Description

23. The Commission considered the project description as submitted by Bruce Power.
24. The Commission considered that a similar project, that is site preparation, construction and operation of a new NGS, has not been carried out in Canada in recent decades. The most recent facility to join Canada's nuclear fleet is the Darlington NGS which reactors came into service in the early 1990's.
25. The Commission noted that Bruce Power has not yet decided on a specific reactor design. As the proposed project includes the use of alternative reactor designs and reactor cooling technology in Canada, the Commission also considered the potential for uncertainties associated with the proposed project.
26. Based on the above considerations, the Commission concludes that Bruce Power's proposed project is a new major nuclear project whose complexity and potential uncertainties should be addressed in a broad EA process such as is offered by a review panel.

Referral to the Federal Minister of the Environment

27. In considering the path forward for the EA, that is either to proceed under section 21 of the CEAA or to make a request to the Minister to refer the proposed project to a review panel under section 25 of the CEAA, the Commission considered public concerns in

relation to major nuclear projects.

28. The Commission also considered that it has made early referrals to the Minister for panel reviews on the following two similar projects: Bruce Power Inc.'s proposal⁹ to construct and operate a new nuclear generating station in Kincardine, Ontario and Ontario Power Generation Inc.'s proposal¹⁰ to construct and operate a new nuclear generating station at the Darlington Nuclear Site, in Clarington, Ontario.
29. The Commission expresses the view that consultation is an important aspect of the EA. To assist in its decision whether to proceed with the EA under section 21, or under section 25 of the CEAA, the Commission considered the views already expressed by public interest groups, Aboriginal groups and in media reports on previous major nuclear projects.
30. The Commission also anticipates public concern regarding the management of radioactive waste resulting from the operations and decommissioning of new reactors.
31. The Commission is of the opinion that it has sufficient information from both present and past consultations on other major nuclear projects to adequately determine the path forward on the EA at this stage.
32. The Commission notes that it has capacity and experience in evaluating nuclear projects and associated environmental assessments in Canada, and that the CNSC staff has extensive expertise in conducting environmental assessments.
33. In this regard, the Commission expresses its view that making a direct request to the Minister for referral to a review panel at this stage is an efficient and effective use of the environmental assessment process.

Conclusion

34. Pursuant to section 25 of the CEAA, the Commission determines that public concerns related to the project warrant that a request is made to the Minister for referral to a review panel.
35. The Commission will therefore request that the federal Minister of the Environment refer the project to a federal environment assessment review panel.
36. To assist in the effective conduct of a review panel, the Commission is open to discuss process options, including that the Commission lead a joint review panel under section 40 of the CEAA. This recommendation is based on the extensive expertise and

⁹ Refer to the Record of Proceedings of the Commission meeting held on April 11 and 12, 2007.

¹⁰ Refer to the Record of Proceedings of the Commission meeting held on December 5, 2007.

experience of the Commission in nuclear projects in Canada, its capacity and expertise in conducting environmental assessments, its international network and its status as an independent quasi-judicial administrative tribunal and court of record under the *Nuclear Safety and Control Act*.

A handwritten signature in black ink, appearing to read "M. Binder". The signature is fluid and cursive, with a long horizontal stroke at the beginning.

Michael Binder,
President
Canadian Nuclear Safety Commission

Date of release of Decision: May 1, 2009