

Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant

Bruce Power Inc.

Subject

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

Meeting
Date

April 11 and 12, 2007

RECORD OF PROCEEDINGS

Proponent: Bruce Power Inc.

Address/Location: P.O. Box 3000, B0602, Tiverton, Ontario N0G 2T0

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

Application received: August 2006

Date of meeting: April 11 and 12, 2007

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

Members present: L.J. Keen, Chair A. Harvey
C.R. Barnes M. McDill
A. Graham J.A. Dosman

Secretary: M.A. Leblanc
Recording Secretary: P. Bourassa

Date of Release of the Decision: May 4, 2007

Table of Contents

Introduction	1
Decision	3
Issues and Commission Findings	3
Application of the CEAA	3
<i>Type of Environmental Assessment</i>	4
<i>Federal and Provincial Coordination</i>	4
Project Description	4
Referral to the Federal Minister of the Environment	5
<i>Public Concerns</i>	5
<i>Ability of the Comprehensive Study to Address Issues Relating to the Project</i>	6
Conclusion	7

Introduction

1. The Canadian Nuclear Safety Commission (CNSC¹) has received an application from Bruce Power Inc. (Bruce Power) for a licence to prepare a site for the future construction of a nuclear reactor generating facility within the municipality of Kincardine, Ontario.
2. The proposal by Bruce Power involves the site preparation and the construction and operation of up to four new nuclear reactors at the Bruce Power Nuclear site for the generation of approximately 4,000 megawatts (MW) of electrical generating capacity. Bruce Power is considering different technologies for the new reactors that include Generation III reactors of Canadian and foreign design as well as Atomic Energy of Canada Limited's Enhanced CANDU 6 design. Operations would involve activities required to operate and maintain the new reactor units, including management of waste.
3. Before considering Bruce Power's application for the necessary licences (site preparation, construction and operation licences) 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).
4. 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 In this *Record of Proceedings*, 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.

Issue

5. Considering the Commission's extensive experience on major nuclear projects and with the intent to ensure an effective and efficient process, the Commission considered the path forward for the EA at this early stage. The Commission needed to decide which of two paths, described in the following paragraphs 6 and 7, to chose.
6. 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.
7. The Commission may also decide, pursuant to section 25 of the CEAA, to request to the Minister to refer the project to a mediator or a review panel if, at any time, 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.

Proceeding

8. Pursuant to the *Canadian Nuclear Safety Commission By-laws*, the President of the Commission convened a meeting of the Commission to consider the issue.
9. The Commission, in making its decision, considered Bruce Power's application and project description. The Commission also considered preliminary consultation with the First Nations, the views already expressed by public interest groups and in media reports on major nuclear projects, as well as the Commission's extensive experience with consultation on major nuclear projects. The Commission also considered the request by the proponent, Bruce Power, that this project be referred directly and immediately to the Minister for referral to a review panel.

Decision

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

the Commission requests the federal Minister of the Environment to refer Bruce Power Inc.'s proposed project to a review panel, pursuant to section 25 of the CEAA.

11. 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 Minister approve the conduct of the environmental assessment by the Commission pursuant to section 43 of the CEAA (substitute panel) or, alternatively, that the Commission lead a joint review panel under section 40 of the CEAA.

Issues and Commission Findings

Application of the CEAA

12. The CEAA requires that an EA be completed if there is both a prescribed action by a federal authority (commonly referred to as a “trigger”) and a “project”. 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 CEAA.
13. The CNSC issues 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 project is also not of a type listed in the *Exclusion List Regulations*⁷ of the CEAA.
14. The Commission therefore concludes that an EA of the proposed project to prepare, construct and operate a NGS is required pursuant to the CEAA.

⁶ SOR/94-636.

⁷ SOR/94-639.

Type of Environmental Assessment

15. The proposal involves a new Class 1A nuclear facility that is a nuclear fission reactor that has a production capacity of more than 25 MW. As such, Bruce Power's project falls within the *Comprehensive Study List Regulations* of the CEAA. Therefore the CNSC must ensure that a comprehensive study of the project is initiated.

Federal and Provincial Coordination

16. The CNSC is the lead 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 also a responsible authority for this project. Transport Canada has indicated, at this time, that it may also be a responsible authority but that it requires additional information on the project prior to confirming its interest.
17. The CNSC has been informed by the Province of Ontario that the province has no mandate to make nuclear facilities subject to its environmental assessment requirements under the Ontario *Environmental Assessment Act*⁸ and that it does not foresee a possibility for triggering clause 7(1) of the Canada-Ontario Agreement for Environmental Assessment Cooperation. The Commission therefore concludes that a joint EA with the Province of Ontario is not required in this case.

Project Description

18. The Commission considered the project description as submitted by Bruce Power.
19. The Commission considered that, with the potential addition of four nuclear reactors and the refurbishment of existing reactors, the Bruce Nuclear site could have up to 12 reactors operating all at once, making it one of the largest nuclear facilities in the world in terms of power produced on a single site. In this regard, the Commission also considered the interaction with existing and potential nuclear facilities at the site.
20. 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.

⁸ R.S.O. 1990, C. E.18.

21. The Commission considered that the proposed project includes the use of alternative reactor designs and reactor cooling technology in Canada. In this regard, the Commission also considered the potential for uncertainties associated with the proposed project.
22. 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

23. In considering the path forward for the EA, that is either to proceed under section 21 of the CEEA or to make a request to the Minister to refer the proposed project to a review panel under section 25 of the CEEA, the Commission considered public concerns in relation to major nuclear projects and the ability of the comprehensive study to address issues related to the project. These considerations are described in the following paragraphs.

Public Concerns

24. 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 of the CEEA, the Commission considered the views of the First Nations as expressed in preliminary consultations on the proposed project and the views already expressed by public interest groups and in media reports on this and other major nuclear projects.
25. The Commission notes that during a preliminary consultation, the First Nations expressed a preference for early referral to a review panel and a desire for the establishment of a process for consultation throughout the environmental assessment and licensing stages of this project
26. The Commission also considered that public interest groups have requested review panels for other nuclear projects in the past, based on their level of concerns with the proposals. Based on its extensive experience on major nuclear projects, the higher than usual number of requests for the documents and records from interested persons following the posting of the project description on the CEA Agency registry, and the specific complexity and potential uncertainties associated with Bruce Power's proposal to use new technology, the Commission anticipates that public interest groups may have significant concerns with the proposal to construct and operate a new NGS in Canada.

27. Taking into consideration the proximity of the proposed site to Lake Huron and the related concerns expressed by intervenors at past Commission hearings, the Commission also anticipates concerns from public interest groups whose scope of interest is beyond the regional area of the proposed site.
28. Furthermore, the Commission anticipates public concern with respect to the proposal for managing the radioactive waste resulting from the operations and decommissioning of new reactors.
29. Although the Commission did not hold a public hearing or actively consult with the population at large on the issues before it, the Commission is of the opinion that it has sufficient information from both present and past consultations on other major nuclear projects with interested parties, stakeholders, First Nations and the general public to adequately determine the path forward on the EA at this stage.
30. 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 Tribunal process.

Ability of the Comprehensive Study to Address Issues Relating to the Project

31. The Commission considered the complexity of the proposed project, the interaction of the project with existing and potential future nuclear facilities and the site's proximity to Lake Huron.
32. The Commission is of the opinion that the proposal represents a new, complex initiative for building a NGS in Canada. Thus the Commission is of the view that the nature and context of the project is an important factor to consider regarding the ability of the comprehensive study to address issues related to the project.
33. Furthermore, the Commission is of the view that independent international expertise might be a benefit to the panel in order to consider the experience of facilities that use new reactor and reactor cooling technology and to identify further issues that can be addressed by the EA.
34. The Commission understands that the First Nations expressed a preference for early referral to a review panel for this proposed project rather than following the "EA track report" process provided under section 21 of the CEAA in the context of a comprehensive study.

35. The Commission notes that the EA Comprehensive Study path does not provide a similar hearing opportunity. The Commission further notes that a review panel may provide the public and First Nations with additional beneficial consultation opportunities through its public hearing process. The Commission feels that a public hearing is a necessary step for this EA and that it would provide a forum for a full discussion of the issues.
36. The Commission also notes that the proponent, Bruce Power, has indicated its preference for an immediate referral to a review panel.
37. The Commission is of the opinion that a request to the Minister for a referral to a review panel appears to be appropriate under the circumstances, considering the use of new technology in Canada and the importance and complexity of the project.
38. The Commission concludes that a review panel EA of the project is warranted. Therefore, the Commission, pursuant to section 25 of the CEAA, will request that the Minister refer the project to a review panel.

Conclusion

39. Pursuant to section 25 of the CEAA, the Commission determines that public concerns warrant that a request is made to the Minister for referral to a review panel. In further support of this request, the Commission is of the opinion that issues related to the project warrants a request to the Minister for his referral to a review panel.
40. The Commission will therefore request that the federal Minister of the Environment refer the project to a federal environment assessment review panel.
41. To assist in the effective conduct of a review panel, the Commission recommends that the Minister consider approving the conduct of the environmental assessment by the Commission pursuant to section 43 of the CEAA (substituted panel). This recommendation is based on the extensive expertise and 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 substituted panel would also be in line with current regulatory streamlining and improvement initiatives, leading to a more efficient and effective review of this major resource project. If the Minister decides not to approve a substituted panel under section 43 of the CEA Act, the Commission then recommends that the Minister consider the option of the Commission leading a joint review panel under section 40 of the CEAA.

42. In addition, the Commission further notes that, although the First Nations expressed the desire to be consulted on the membership and the Terms of Reference for a review panel and on the consultation process for the next steps, the First Nations have also expressed support for the Commission's presence on a review panel based on the Commission's experience and expertise in nuclear matters.

Linda J. Keen,
President
Canadian Nuclear Safety Commission

Date of release of Decision: May 4, 2007