

# Record of Proceedings, Including Reasons for Decision

In the Matter of

Proponent Bruce Power Inc.

Subject Environmental Assessment Screening  
Report for Refurbishment for Life Extension  
and Continued Operations of the Bruce A  
Nuclear Generating Station

Date of Hearing May 19, 2006

## RECORD OF PROCEEDINGS

Proponent: Bruce Power Inc.

Address/Location: P.O. Box 3000, B06 Tiverton, Ontario N0G 2T0

Purpose: Environmental assessment Screening Report for the refurbishment for life extension and continued operations of the Bruce A Nuclear Generating Station

Date(s) of hearing: May 19, 2006

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

Members present: A.R. Graham, presiding Member  
C.R. Barnes  
J.A. Dosman  
M. J. McDill

Secretary: M.A. Leblanc  
Recording Secretary: P. Bourassa  
General Counsel: J. Lavoie

<b>Applicant Represented By</b>	<b>Document Number</b>
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<b>Intervenors</b>	
<ul style="list-style-type: none"><li>• See Appendix A</li></ul>	

Date of Decision: May 19, 2006

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## Introduction

1. Bruce Power Inc. (Bruce Power) has submitted a letter of intent to the Canadian Nuclear Safety Commission (CNSC<sup>1</sup>) to seek approval to return Units 1 and 2 of the Bruce A Nuclear Generating Station (NGS) to operational status. Bruce Power may also seek approval to refurbish the Bruce A NGS for operational life extension and use Low Void Reactivity Fuel in all four units. The Bruce A NGS is located in Kincardine, Ontario.
2. Units 1 and 2 at the Bruce A NGS were taken out of service in 1997 and 1995 respectively and are currently in a shutdown state. Units 3 and 4 are currently in operation and were the subject of an environmental assessment<sup>2</sup> approved by the Commission following a public hearing held on December 12, 2002.
3. The proposed project consists of the following elements:
  - activities required to refuel Bruce A Units 1 and 2;
  - activities required to allow Units 1 and 2 to be brought to operational status;
  - activities required to extend the planned operational life of Units 1 and 2 to allow continued generation of power for an extended period to the end of a potential Bruce Power lease in 2043;
  - activities required for the possible extended operational life of Units 3 and 4 and operation of these units through 2043; and
  - activities required for the potential use of Low Void Reactivity Fuel (New Fuel) in all four units at Bruce A.
4. Before the Commission can make a licensing decision on the proposed project pursuant to the *Nuclear Safety and Control Act*<sup>3</sup> (NSCA), the Commission must, in accordance with the requirements of the *Canadian Environmental Assessment Act*<sup>4</sup> (CEAA), make a decision on an Environmental Assessment (EA) screening of the proposal. This *Record of Proceedings* describes the Commission's consideration of the EA Screening Report (Screening Report) and its reasons for decisions on the results. The Commission is the sole responsible authority for the EA<sup>5</sup>.

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<sup>1</sup> 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.

<sup>2</sup> *Record of Proceedings, Including Reasons for Decision*, in the matter of Bruce Power Inc., Environmental Assessment Screening Report for the Return to Service of Units 3 & 4 of the Bruce Nuclear Generating Station (NGS) 'A', dated January 6, 2003

<sup>3</sup> S.C. 1997, c. 9.

<sup>4</sup> S.C. 1992, c. 37.

<sup>5</sup> Responsible Authority in relation to an EA is determined in accordance with subsection 11(1) of the CEAA.

5. Following a public hearing held on May 19, 2005, the Commission approved the *Environmental Assessment Guidelines*<sup>6</sup> (EA Guidelines) for the screening assessment. The EA Guidelines define the scope of the project and assessment to be carried out. The EA Guidelines were used by CNSC staff in delegating, pursuant to section 17 of the CEAA, the preparation of an EA Study Report to Bruce Power. The EA Study Report was then used by CNSC staff in the preparation of the required Screening Report.
6. Expert federal authorities and various stakeholders, including the public, were provided opportunities to comment on the EA Guidelines and on the draft Screening Report. The Screening Report and CNSC staff's disposition of comments from stakeholders and federal authorities are attached as Appendix A to CMD 06-H12.

### Issues

7. In considering the Screening Report, the Commission was required to decide:
  - a) whether the Screening Report is complete;
  - b) whether the project, taking into account the mitigation measures identified in the Screening Report, is likely to cause significant adverse environmental effects;
  - c) whether the project will be referred to the federal Minister of the Environment for referral to a review panel or mediator (i.e., pursuant to paragraph 20(1)(c) of the CEAA); and
  - d) whether the Commission will proceed with its consideration of the application for a licence amendment under the *Nuclear Safety and Control Act*<sup>7</sup> (NSCA) (i.e., consistent with paragraph 20(1)(a) of the CEAA).

### Hearing

8. The Commission, in making its decision on the above issues, considered information presented for a public hearing held on May 19, 2006 in Ottawa, Ontario. The public hearing was conducted in accordance with the Commission's process for considering matters pursuant to the CEAA and the *Canadian Nuclear Safety Commission Rules of Procedure*<sup>8</sup>. During the public hearing, the Commission received written submissions and heard oral presentations from Bruce Power (CMD 06-H12.1 and 06-H12.1A),

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<sup>6</sup> *Record of Proceedings, Including Reasons for Decision*, in the matter of Bruce Power Inc., Environmental Assessment Guidelines for the Proposed Refurbishment for Life Extension and Continued Operation of the Bruce A Nuclear Generating Station, dated July 14, 2005.

<sup>7</sup> S.C. 1997, c. 9.

<sup>8</sup> S.O.R./2000-211.

CNSC staff (CMD 06-H12, 06-H12.A and 06-H12.B) and from intervenors as listed in Appendix A of this *Record of Proceedings*.

### **Decision**

9. Based on its consideration of the matter, as described in more detail in this *Record of Proceedings*, the Commission decides that:

- a) the Environmental Assessment Screening Report, appended to CMD 06-H12 and as corrected in CMD 06-H12.A, is complete; that is, the scope of the project and assessment were appropriately determined in accordance with sections 15 and 16 of the *Canadian Environmental Assessment Act*, and all of the required assessment factors were addressed during the assessment;
- b) the Commission will not refer the project to the federal Minister of the Environment for her referral to a federal review panel or mediator;
- c) the project, taking into account the mitigation measures identified in the Environmental Assessment Screening Report, is not likely to cause significant adverse environmental effects; and
- d) consistent with paragraph 20(1)(a) of the *Canadian Environmental Assessment Act*, the Commission will proceed to consider the application for licence amendment under the provisions of the *Nuclear Safety and Control Act*.

### **Issues and Commission Findings**

10. The Commission addressed the four issues identified in paragraph 7 above under three main headings: (1) the completeness of the Screening Report, (2) the likelihood and significance of the environmental effects, and (3) the nature and level of public concern. The Commission's findings in each of these areas are summarized below.

#### **(1) Completeness of the Screening Report**

11. In its consideration of the completeness of the Screening Report, the Commission considered whether the assessment had adequately addressed an appropriately defined scope of project and assessment factors.
12. CNSC staff reported that it established EA Guidelines, including statements of project scope and scope of the assessment factors as required by sections 15 and 16

of the CEAA. CNSC staff stated that, in its opinion, the Screening Report contains information on the full scope of the project and for all of the factors required for a screening EA under section 16 of the CEAA and as set out in the EA Guidelines, approved by the Commission on May 19, 2005.

13. In this respect, CNSC staff noted that the Screening Report contains background information about the proposed project, a description of the project and the existing environment, the results of the environmental assessment technical studies, recommendation on mitigation measures, recommendations regarding the follow-up program, and CNSC staff conclusions on the result of the environmental assessment.
14. CNSC staff further reported that, pursuant to the CEAA *Federal Coordination Regulations*<sup>9</sup>, the following Federal Authorities were identified for the purpose of providing expert assistance during the EA: Health Canada, Environment Canada, Natural Resources Canada and the Department of Fisheries and Oceans. The Department of Indian Affairs and Northern Development indicated that it did not have a role in the EA, but suggested that First Nations located in the project area be consulted during the process. The Ontario Ministry of the Environment and Emergency Management Ontario of the Ministry of Community Safety and Correctional Services were also consulted.
15. The Commission sought assurances that the scope of the EA included all activities associated with the management of the waste generated by the proposed project and the transportation of waste to the Western Waste Management Facility. CNSC staff confirmed that these activities were included in the scope of the EA.
16. Based on the information received, the Commission is satisfied that the EA and resulting Screening Report are complete and that no additional factors need be added to that scope.
17. The Commission concludes that it is able to proceed, based on the information contained in the Screening Report, to its consideration of the likelihood and significance of the environmental effects of the project, the adequacy of the proposed impact mitigation measures, and the public concerns about the project.

## **(2) Likelihood and Significance of Environmental Effects**

18. This section contains the Commission's findings with respect to whether the project, taking into account the identified mitigation measures, is likely to cause significant adverse environmental effects. In examining this question, the Commission first considered the adequacy of the study methods used to identify and evaluate the potential environmental effects, followed by a consideration of the predicted effects on the relevant components of the environment.

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<sup>9</sup> *Regulations Respecting the Coordination by Federal Authorities of Environmental Assessment Procedures and Requirements*, S.O.R./97-181.

### **Adequacy of the Assessment Method**

19. With respect to the assessment methods, CNSC staff reported that the assessment was conducted in accordance with the methods for technical study and stakeholder consultation specified in the EA Guidelines.
20. CNSC staff noted that Bruce Power prepared a draft EA Study Report (EASR) in response to the EA Guidelines and the delegation of the technical studies for the assessment. The identified Federal Authorities provided expert technical review on the draft EASR. The finalized EASR was used by CNSC staff to prepare the draft Screening Report. CNSC staff sought stakeholder and First Nations comment as well as Federal Authority review on the draft Screening Report. CNSC staff finalized the Screening Report, taking into consideration the comments received, before submitting it to the Commission for approval.
21. In its submission, CNSC staff outlined the methodology used in the assessment of the direct and indirect effects of the project on the environment, noting that it was carried out in a step-wise manner. The EA involved a progressive identification, screening and assessment of significance of potential interactions between the 17 project works and activities (under both normal and accident conditions) and the nine components of the environment. The components were radiation and radioactivity; surface water resources; aquatic environment; atmospheric environment; geology, hydrogeology and seismicity; terrestrial environment; socio-economic conditions; land resources; and cultural heritage and aboriginal interests.
22. CNSC staff stated that the EA also included an examination of the potential effects of the environment on the project, the effects on renewable and non-renewable resources, the cumulative effects with other projects in the area, and the need for follow-up activities.
23. With respect to stakeholder consultation, CNSC staff outlined the extent of the community, stakeholder, First Nations, and government consultations conducted throughout the EA process. Information on the draft EA Guidelines and draft Screening Report was available through the Canadian Environmental Assessment Registry and on the CNSC web site. Copies of the draft Screening Report were also sent to interested parties and available at libraries in the local study area. Letters were also sent to the First Nations. CNSC staff reported on the CNSC-led open house held to assist the public in preparing comments on the Screening Report.
24. CNSC staff noted that Bruce Power carried out associated outreach activities that included all residents and businesses within a 50 kilometer radius of the Bruce Power site as well as any other stakeholder who expressed an interest in the EA. Bruce Power also described the contents of its web site, updated weekly, where interested parties can find detailed project descriptions and information on the associated EA

process.

25. Several intervenors, including representatives of local municipalities and workers' unions, attested to the adequacy of the communication and consultation performed during the EA process.
26. Considering the level of participation from the First Nations in past EAs conducted on other Bruce Power projects, the Commission sought further information on the approach taken to consult with the local First Nations. CNSC staff noted that First Nations involvement in the EA was solicited but no responses had been received. Bruce Power expressed the view that it has a very active consultation and communication relationship with the First Nations in the area of the Bruce site and thus did not consider the lack of comments on this EA as a sign of ineffective consultation.
27. The Commission is satisfied that the methods used to consult during the EA, including opportunities to comment and review the Screening Report, were acceptable and provided a suitable basis for the Commission to evaluate the public concerns about the project. The Commission's findings on the public concerns are discussed further in the section below entitled Nature and Level of Public Concern.
28. Based on its review of the Screening Report and the above information, the Commission concludes that the EA methods were acceptable and appropriate, and that the Screening Report is complete and compliant with the requirements of the CEEA.

## **Effects of the Project on the Environment**

### *Refurbishment and Operation Activities*

29. Based on the initial screening of issues, CNSC staff reported that, with the exception of malfunctions and accidents, 78 interactions for the refurbishment phase and 99 for the operations phase were identified as potentially interacting with or affecting the environmental components. Following further assessment of these interactions using established criteria and professional judgment, 109 interactions were determined to result in a likely measurable change on the environment and were advanced for a detailed assessment of likely effects.
30. CNSC staff identified mitigation measures to eliminate, reduce or control the effects of the 109 interactions on the environment. In this regard, CNSC staff noted that numerous features and operation practices are already in place at the Bruce A NGS to mitigate environmental effects. As a result of the consideration of the mitigation measures, 17 of the 109 interactions remained as having residual adverse effects on the following environmental components: radiation and radioactivity, aquatic environment, atmospheric environment, and socio-economic conditions. These

interactions were further assessed for their significance, taking into consideration the magnitude, geographic extent, timing and duration, frequency, degree of reversibility, and probability of the effects. The results of this assessment are discussed in the following paragraphs.

#### Radiation and Radioactivity

31. CNSC staff determined that the average individual radiation doses to workers were expected to increase during the refurbishment phase. However, CNSC staff concluded that the effect was not significant on the basis of the moderate magnitude and frequency of the radiation exposure and on the basis of the low geographic extent, timing and duration affecting only Nuclear Energy Workers during refurbishment and restart initiation actions.
32. The Commission sought further information on the protection of workers to radiation exposure during the refurbishment. In response, Bruce Power assured the Commission that the entire project will be managed according to the ALARA (As Low As Reasonably Achievable) principle. Thus appropriate planning and training, remote execution of activities and providing adequate shielding would ensure that time, distance and shielding principles would be respected. Bruce Power also noted that operational units will be segregated from the construction area by the erection of barriers. CNSC staff stated its satisfaction with the proposed controls to keep worker exposure to radiation to a minimum, in addition to existing mitigation measures already in place at the Bruce NGS A.

#### Aquatic Environment

33. CNSC staff examined the residual effects of entrainment, impingement, and thermal effects on the aquatic biota during the operation phase. Based on the criteria for assessing significance of the effects, CNSC staff determined that the residual adverse environmental effects were not significant.
34. The Commission sought further information with respect to the impact of additional thermal load as a result of the restart of Units 1 and 2 and the use of the New Fuel. In response, CNSC staff noted that the technical studies supporting the EA Screening Report included the modelling of thermal plumes and temperature effects on specific sensitive locations in the environment, including on the lake whitefish. The results of the modelling demonstrated that there are likely no significant adverse effects on the fish, including Lake Whitefish. However, CNSC staff noted that on-going monitoring in this respect would be included in a follow-up program.
35. With reference to the follow-up program for the restart of Units 3 and 4 of the Bruce A NGS, the Commission inquired as to the status of research carried to quantify the assessment of the impact of contaminants on the whitefish in Lake Huron. CNSC

staff described the research carried out over the last several years with the active participation of CNSC staff and various stakeholders, including the First Nations. CNSC staff noted it was satisfied with the results of the research that confirmed the conclusions of the previous EA on the restart of Units 3 and 4. Considering the satisfactory fulfillment of CNSC requirements on this matter, CNSC staff noted that from now on, it is only involved in monitoring the on-going studies that are carried out by Bruce Power and other interested stakeholders.

#### Atmospheric Environment

36. The residual adverse effects on air quality were assessed for both the refurbishment and operation phases. CNSC staff determined that the residual adverse environmental effects were not significant.
37. The Commission considered the appropriateness of the associated monitoring programs as described in the Follow-up Program. Consideration on this issue is found in paragraph 70 below.

#### Socio-economic Conditions

38. CNSC staff examined the residual effects of increased competition for temporary accommodations on the tourism industry and the Inverhuron Provincial Park, and increased community service requirements due to increased workforce during the refurbishment. Based on the criteria for assessing the significance of the effects, CNSC staff determined that the residual adverse effects on the population and economic base, and on the community services were not significant.
39. Several intervenors, including the Municipality of Kincardine and the Town of Saugeen Shores, in their interventions, expressed the view that the proposed project is perceived as having a positive impact on the community.
40. Overall, the assessment did not identify likely significant adverse effects as a result of the project during the Refurbishment Phase or Operations Phase including as a result of malfunctions and accidents. The possible effects of the project on human health were considered and no significant adverse effects on the health and well-being of Bruce A workers or the public, including First Nations, were identified.

#### Other Considerations

41. With respect to the proposed use of new fuel, the Commission sought further information on the potential of dysprosium oxide to have a new impact on the environment. CNSC staff explained that the substance was subject to the *New*

*Substances Notification Regulations*<sup>10</sup> under the *Canadian Environmental Protection Act*<sup>11</sup> (CEPA). Therefore before approval could be given for the import of this substance into Canada, an assessment was carried out jointly by Environment Canada and Health Canada to look at all aspects of dysprosium oxide for its proposed use. The substance has since been approved for use in Canada.

42. CNSC staff concluded that the New Fuel Project is not likely to result in significant adverse effects likely to be caused by the project under normal operations or under malfunctions and accidents.
43. Considering the potential operation of additional NGS units in the proposed time period, the Commission enquired as to the impact on the releases of tritium. In the course of assessing the impacts on human health from different pathways such as water and air, CNSC staff stated that the concentrations of tritium are not expected to change considering that the operational conditions would essentially remain the same. Furthermore, CNSC staff noted that the overall tritium releases have always been a small fraction of the derived release limits and public dose limit of 1 millisievert at the Bruce A NGS.
44. With respect to the possible impacts that additional activities associated with the project may have on the health and safety of workers, the Commission sought further information on possible staffing issues at the Bruce NGS. Bruce Power discussed the current situation with respect to human resources issues and expressed the view that although there are challenges in this area for the industry in general, safety would not be compromised in any way. The Commission notes that staffing issues, including relevant training for new employees and contractors, would be the subject of further discussions at a licensing hearing to consider the proposed project.

#### *Malfunctions and Accidents*

45. With respect to the residual adverse effects on the environment of malfunctions and accidents, CNSC staff noted that one conventional accident and one nuclear accident identified for the operations phase were further assessed for the significance of their effects.
46. In this respect, CNSC staff examined the effect of radiation exposure to members of the public as a result of airborne release from a severe nuclear accident, effect of radiation exposure to terrestrial biota as a result of airborne releases from a severe nuclear accident, and effect of tritium concentration in drinking water due to an accidental release of moderator-heavy water during the operations phase.
47. CNSC staff concluded that, considering the mitigation measures, the residual adverse effects on human health and non-human biota were not significant. The Commission

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<sup>10</sup> S.O.R./94-260.

<sup>11</sup> S.C. 1999, c. 33.

considered CNSC staff's descriptions of each of the likely adverse effects from the potentially severe nuclear accidents and the results of the assessment of these effects.

48. In conclusion, CNSC staff stated that overall the assessment did not identify likely significant adverse effects as a result of the project during the Refurbishment Phase or Operations Phase including as a result of malfunctions and accidents. The possible effects of the project on human health were considered and no significant adverse effects on the health and well-being of Bruce A workers or the public, including First Nations, were identified.
49. Based on its review of the Screening Report and the above-noted information and considerations, the Commission concludes that the proposed project, taking into account the identified mitigation measures, is not likely to cause significant adverse environmental effects.

### **Effects of the Environment on the Project**

50. In addition to a consideration of how the project could adversely impact on the environment, the CEAA requires that the assessment include an examination of how the environment itself could adversely impact on the project.
51. In this regard, CNSC staff reported that the EA examined the potential interactions between the potential natural hazards and the proposed project, the effects of these interactions, the mitigation measures available, and the significance of any likely residual adverse environmental effects. The physical and biological hazards included flooding, lake ice and frazil ice, severe weather, seismic events, zebra mussels, aquatic plants and fish.
52. CNSC staff found that the identified effects of the environment were not likely to result in residual adverse effects, taking into consideration the existing mitigation measures. Therefore no effects were further assessed for their significance.
53. Based on information received, the Commission concludes that the environment is not likely to cause significant adverse effects on the project.

### **Effects on Renewable and Non-Renewable Resources**

54. With respect to the adverse effects of the proposed project on the sustainability of renewable resources, CNSC staff examined surface water resources, aquatic environment and terrestrial environment as components of potential renewable resources that may be affected by the proposed project. CNSC staff reported that, since there were no adverse effects identified for these components, it is unlikely there would be any significant adverse effects on the sustainability of renewable resources.

55. CNSC staff examined the non-renewable resources that would be used for the proposed project, which include the fuel used in the reactors and other material used to operate and maintain various plant systems. Based on the quantities of these resources to be used, CNSC staff concluded that it is unlikely that there will be any significant adverse effects on the sustainability of non-renewable resources.
56. Based on the information received, the Commission concludes that the project is not likely to cause significant adverse effects on the sustainability of renewable and non-renewable resources.

### **Cumulative Effects of the Project**

57. With respect to the requirement to examine cumulative effects, CNSC staff identified 23 past, existing, planned and foreseeable projects that overlap in type of effect, time and space.
58. CNSC staff concluded that, with the identified mitigation, no likely significant adverse cumulative effects were identified for radiation and radioactivity. CNSC staff also concluded that four residual adverse cumulative effects for the aquatic environment, the atmospheric environment and the socio-economic conditions were determined not to be significant.
59. In its intervention, the Waterloo, Wellington, Dufferin & Grey Building & Construction Trades Council, expressed its satisfaction with the proposed mitigation measures.
60. Based on the information received, the Commission concludes that the project is not likely to contribute to significant adverse cumulative effects on the environment.

### **Follow-up Program**

61. The CNSC staff noted that the objectives of the Follow-Up Program are to assist in determining if the environmental and cumulative effects of the project are as predicted, to confirm that the mitigation measures are implemented and effective, and to determine if any new mitigation measures may be required. The activities to be included in a Follow-up Program are considered to be in addition to routine activities already conducted by Bruce Power.
62. CNSC staff noted that if the Commission was to approve the proposed project at a future licensing hearing, Bruce Power's design of the final scope and details of the program would involve consultation with other stakeholders as appropriate. CNSC staff further noted that the Follow-up Program would be implemented in CNSC licensing and compliance programs and would incorporate current Bruce A

monitoring programs and other environmental studies as appropriate.

63. CNSC staff provided the preliminary elements for the following components and effects:
  - radiation and radioactivity for workers, public, aquatic biota, groundwater;
  - surface water resources for lake water quality;
  - aquatic environment for aquatic biota and habitat;
  - atmospheric environment for air quality;
  - geology, hydrogeology and seismicity for groundwater quality;
  - terrestrial environment for wildlife communities and species; and
  - socio-economic condition for population and economic base, and for residents and communities.
64. CNSC staff described the monitoring programs and analysis, including the location, duration and frequency of the monitoring, that would be required to assess the impact on the environmental components. CNSC staff included the objectives or status of each preliminary element such as to confirm the effectiveness of the implemented and proposed mitigation measures as well as any assumptions and predicted effects made in the EA.
65. Inter-Tribal Fisheries and Assessment Program, in its intervention, attested to Bruce Power's involvement in the long-term study of whitefish to effectively manage the population. The intervenor further noted that Bruce Power's assessment of the Bruce NGS's impact on aquatic community of Lake Huron will advance understanding of ecology of the lake.
66. The Commission sought further information with regard to the monitoring of hydrazine and morpholine. CNSC staff responded that Bruce Power would monitor both chemicals during certain situations to ensure that the concentrations do not exceed those that have been predicted and are expected under normal operations.
67. Considering that Bruce Power's proposed project is to operate the Bruce A NGS up until the year 2043, the Commission questioned whether the proposed monitoring programs are going to be sufficient to establish whether the additional thermal loading is going to have an effect on whitefish when combined with the possibility of climate change over that period. CNSC staff stated that a detailed Follow-up Program to assess the effects of thermal loading would be included in its recommendations in the context of a licensing hearing on the proposed project. With respect to the modelling of the effects of climate change, CNSC staff noted that Environment Canada, as the expert federal authority, did not indicate that the EA was deficient in any way on this matter.
68. The Commission expressed general concern with respect to the adequacy of the proposed duration or frequency of the monitoring programs described in the Screening Report. Bruce Power and CNSC staff explained the objectives of the

proposed monitoring programs and indicated that, at this stage in the planning and consideration of the proposed project, the programs were adequate. CNSC staff took note of the Commission's comments so that in future Screening Reports, preliminary elements of a follow-up program can be more adequately described in the context of an EA.

69. The Commission is satisfied that the CNSC licensing and compliance program responsible for ensuring the final design and implementation of the Follow-Up Program will be adequate to verify and, if necessary, identify where additional mitigation measures may be required.

### **Conclusions on the Likelihood and Significance of Adverse Environmental Effects**

70. Based on the considerations and reasons noted above, the Commission agrees with CNSC staff's conclusion in the Screening Report that the proposed project is not likely to cause significant adverse environmental effects, taking into account the identified mitigation measures.
71. The Commission is also satisfied that there is no significant uncertainty associated with the assessment of the effects, taking into account the identified mitigation measures.
72. Furthermore, the Commission is satisfied that the CNSC licensing and compliance program responsible for ensuring the final design and implementation of the follow-up and monitoring program and reporting the program results will be adequate for verifying and, if necessary, identifying where additional mitigation measures may be required during the project implementation.
73. The Commission decides that it will not refer the project to the Minister of the Environment, pursuant to subparagraphs 20(1)(c)(i) and 20(1)(c)(ii), for her referral to a mediator or panel review.

### **(3) Nature and Level of Public Concern**

74. With respect to public concern as a factor in its consideration of whether to refer the project to the federal Minister of the Environment for a review panel or mediator, the Commission first examined whether the public had sufficient opportunity to become informed about the project and the EA, and express their views on it.
75. As noted in paragraph 27 above, the Commission is satisfied that Bruce Power and CNSC staff consulted appropriately with the public and other interested stakeholders. The Commission is therefore satisfied that the public had adequate opportunity to become informed about the project and express any concerns.

76. CNSC staff reported that comments were received from Health Canada and 10 stakeholders on the draft Screening Report. With respect to the nature of the comments received, CNSC staff noted the following concerns:
- request to raise the project to a Comprehensive Study;
  - expansion of the assessment study boundaries;
  - nuclear waste and used fuel management;
  - security and sabotage;
  - alternative methods of electricity generation and related energy policy concerns;
  - discussion of the Ontario Power Grid; and
  - preparatory work done by Bruce Power.
77. Several intervenors, including representatives of area municipalities and workers' unions, expressed their support of the screening EA process and its conclusions.
78. CNSC staff expressed the view that no concerns were raised that would justify the consideration to refer the project to the federal Minister of the Environment. CNSC staff noted that it addressed the concerns raised and had considered every comment when finalizing the Screening Report.
79. The Commission took into consideration the Screening Report, including the records of public comments it contained and the further comments of the intervenors at this hearing. In conclusion, the Commission is satisfied that the concerns were adequately addressed in the completion of the Screening Report. The Commission is also satisfied that the relevant issues can be addressed in the follow-up program and future consideration of the licence application.
80. The Commission therefore decides not to refer the project to the Minister of the Environment for referral to a review panel or mediator, pursuant to subparagraph 20(1)(c)(iii) of the CEAA.

### **Conclusion**

81. The Commission has considered the information and submissions of the proponent and the Canadian Nuclear Safety Commission staff as presented in the material available for reference on the record for the hearing.
82. The Commission concludes that the Environmental Assessment Screening Report appended to CMD 06-H12, and as corrected in CMD 06-H12.A, is complete and meets all of the applicable requirements of the *Canadian Environmental Assessment Act*.
83. The Commission decides not to refer the project to the Minister of the Environment

for referral to a federal Environmental Assessment review panel or mediator. Furthermore, the Commission concludes the project, taking into account the mitigation measures identified in the Screening Report, is not likely to cause significant adverse environmental effects.

84. Therefore, the Commission, pursuant to paragraph 20(1)(a) of the *Canadian Environmental Assessment Act*, decides to proceed with the consideration of a licence application under the *Nuclear Safety and Control Act* which, if approved, would allow the project to proceed.

Marc A. Leblanc  
Secretary,  
Canadian Nuclear Safety Commission

Date of decision: May 19, 2006

Date of release of Reasons for Decision: July 5, 2006

## Appendix A – Intervenors

Intervenors	Document Number
Municipality of Kincardine, represented by G. Sutton	CMD 06-H12.2
South Bruce Impact Advisory Committee, represented by H. Ribey	CMD 06-H12.3
Power Workers' Union, represented by P. Falconer, H. Phorson and P. Reece	CMD 06-H12.4 CMD 06-H12.4A CMD 06-H12.4B
Canadian Nuclear Workers' Council and the Grey-Bruce District Labour Council, represented by D. Shier, D. Trumble and K. Mackay	CMD 06-H12.5 CMD 06-H12.5A
Kincardine Business Improvement Area	CMD 06-H12.6
Inter-Tribal Fisheries and Assessment Program and the Ontario Ministry of Natural Resources	CMD 06-H12.7
The Corporation of the Municipality of Arran-Elderslie	CMD 06-H12.8
Municipality of Brockton	CMD 06-H12.9
Saugeen Valley Conservation Authority	CMD 06-H12.10
Township of Huron-Kinloss	CMD 06-H12.11
Carol Mitchell, M.P.P., Huron-Bruce	CMD 06-H12.12
Florence Mackesy	CMD 06-H12.13
7 Building Trades Unions	CMD 06-H12.14
Sierra Legal Defence Fund	CMD 06-H12.15
Waterloo, Wellington, Dufferin & Grey Building & Construction Trades Council	CMD 06-H12.16
Town of Saugeen Shores, represented by K. Kraemer	CMD 06-H12.17
County of Bruce	CMD 06-H12.18