

**AGREEMENT
TO ESTABLISH A JOINT REVIEW PANEL
FOR THE NEW NUCLEAR POWER PLANT PROJECT BY BRUCE POWER
WITHIN THE MUNICIPALITY OF KINCARDINE, ONTARIO**

BETWEEN

**THE MINISTER OF THE ENVIRONMENT
-and-
THE CANADIAN NUCLEAR SAFETY COMMISSION**

PREAMBLE

WHEREAS the Minister of the Environment has statutory responsibilities pursuant to the *Canadian Environmental Assessment Act*;

WHEREAS the Commission has statutory responsibilities pursuant to the *Nuclear Safety and Control Act* and to the *Canadian Environmental Assessment Act*;

WHEREAS Bruce Power has applied to the Commission to seek approval to prepare a site for the construction and operation of nuclear power reactors;

WHEREAS the Project would be carried out within the area that the Chippewas of Nawash Unceded First Nation and the Chippewas of Saugeen First Nation identify as Anishnaabekiing, the territory they have traditionally used and occupied;

WHEREAS the Chippewas of Nawash Unceded First Nation and the Chippewas of Saugeen First Nation have expressed concerns that the Project might adversely affect Aboriginal rights or title they assert in that area;

WHEREAS the Minister and the Commission acknowledge that a duty to consult arises when the Crown has knowledge, real or constructive, of the potential existence of an Aboriginal rights or title and contemplates conduct that might adversely affect it;

WHEREAS a review of the Project by a Joint Review Panel is an important source of information about effects the Project may have on the Chippewas of Nawash Unceded First Nation and the Chippewas of Saugeen First Nation's asserted Aboriginal rights or title, and would therefore support ongoing

consultations between the Crown and Chippewas of Nawash Unceded First Nation and the Chippewas of Saugeen First Nation;

WHEREAS the Project is within the jurisdiction of the Commission under the *Nuclear Safety and Control Act* and requires an environmental assessment pursuant to the *Canadian Environmental Assessment Act*;

WHEREAS the Commission, Fisheries and Oceans Canada, and Transport Canada are the responsible authorities for the Project pursuant to the *Canadian Environmental Assessment Act*;

WHEREAS the Project requires a public hearing pursuant to the *Nuclear Safety and Control Act* and the *Canadian Nuclear Safety Commission Rules of Procedure*;

WHEREAS the Commission has recommended, in accordance with paragraph 25 of the *Canadian Environmental Assessment Act*, that the Minister of the Environment refer the Project to a review panel;

WHEREAS the Minister of the Environment has referred the Project to a review panel in accordance with section 29 of the *Canadian Environmental Assessment Act*;

WHEREAS the Parties to this Agreement have determined that a review of the Project by a joint review panel will ensure that the Project is reviewed in a manner that will provide for an effective and efficient environmental assessment and regulatory process;

AND WHEREAS the Minister of the Environment has determined that a joint review panel should be established pursuant to subsection 40(2) of the *Canadian Environmental Assessment Act* to consider the Project;

NOW THEREFORE, the Parties hereby establish a Joint Review Panel for the Project in accordance with the provisions of this Agreement and the Terms of Reference attached as an Appendix to this Agreement.

1. DEFINITIONS

In this Agreement:

“**Agency**” means the Canadian Environmental Assessment Agency;

“**CEAA**” means the *Canadian Environmental Assessment Act*;

“**Commission**” means the Canadian Nuclear Safety Commission;

“Environment” has the same meaning as set out in section 2 of the CEEA;

“Environmental Effect” has the same meaning as set out in section 2 of the CEEA;

“Environmental Impact Statement” means the document that the proponent has prepared in accordance with the Environmental Impact Statement Guidelines issued by the Parties pursuant to Part II of the Appendix to this Agreement.

“Federal Authority” has the same meaning as set out in section 2 of the CEEA;

“Follow-up program” has the same meaning as set out in section 2 of the CEEA;

“Intervenor”, means a person appearing at a Joint Review Panel Hearing pursuant to rule 18 of the *Canadian Nuclear Safety Commission Rules of Procedure*, a person participating as an intervenor in a Joint Review Panel Hearing pursuant to rule 19 of the *Canadian Nuclear Safety Commission Rules of Procedure* or a person who establishes an interest to participate in the Joint Review Panel Hearings by way of a written submission and/or an oral presentation.

“Joint Review Panel” means a Joint Review Panel established through this Agreement;

“Joint Review Panel Agreement” means this Agreement to Establish a Joint Review Panel for the New Nuclear Power Plant Project by Bruce Power (Bruce NNPP) within The Municipality of Kincardine, Ontario and the attached Appendix;

“Joint Review Panel Hearing” means the public hearing process followed by the Joint Review Panel to hear information and evidence required for the Review;

“Joint Review Panel Report” means a report which sets out the rationale, conclusions and recommendations of the panel relating to the environmental assessment of the project, including any mitigation measures and follow-up program, and a summary of any comments received from the public in the course of the Joint Review Panel Hearings;

“Jurisdiction” has the same meaning as set out in subsection 40(1) of the CEEA;

“Licence Application” means the documentation filed by the Proponent under the NSCA to prepare a site for the construction of the Project.

“NSCA” means the *Nuclear Safety and Control Act*;

“Parties” mean the signatories to this Agreement;

“**Project**” means the preparation of a site for, and the construction, operation, decommissioning and abandonment of, up to four new nuclear power reactors on the existing Bruce Nuclear Site within the Municipality of Kincardine, Ontario described in Part I of the Appendix to this Agreement;

“**Proponent**” means Bruce Power;

“**Public Registry**” means the Canadian Environmental Assessment Registry established under section 55 of the CEEA, to facilitate public access to records relating to the environmental assessment of the Project;

“**Responsible Authority**” has the same meaning as set out in section 2 of the CEEA;

“**Review**” means the assessment by the Joint Review Panel of the environmental effects of the Project to be conducted pursuant to the CEEA and the consideration of the Licence Application under the NSCA to determine whether the Project will pose an unreasonable risk to the health and safety of persons, the environment and national security.

“**Rules of Procedure**” means the *Canadian Nuclear Safety Commission Rules of Procedures*; and

“**SON**” means the Chippewas of Nawash Unceded First Nation and the Chippewas of Saugeen First Nation.

2. ESTABLISHMENT OF THE JOINT REVIEW PANEL

- 2.1 A process is hereby established to create a Joint Review Panel that will:
- a) constitute a review panel pursuant to sections 40, 41 and 42 of the CEEA for the purposes of carrying out an environmental assessment of the Project; and
 - b) constitute a panel of the Commission, created pursuant to section 22 of the NSCA, for the purposes of the review of the Licence Application pursuant to section 24 of the NSCA.
- 2.2 Nothing in this Joint Review Panel Agreement shall be construed as limiting the ability of the Joint Review Panel to have regard to all considerations that appear to be relevant pursuant to section 24 of the NSCA and to include a consideration of the factors set out in sections 16 and 16.1 of the CEEA.

3. CONSTITUTION OF THE JOINT REVIEW PANEL

- 3.1** The Joint Review Panel will consist of three members. Two members, including the Joint Review Panel Chair, will be appointed by the President of the Commission with the approval of the Minister of the Environment.
- 3.2** The Minister of the Environment will propose to the President of the Commission a candidate as a third member of the Joint Review Panel who may also serve as a temporary member of the Commission.
- 3.3** Upon approval by the President of the Commission of a candidate as a third member of the Joint Review Panel who may also serve as a temporary member of the Commission, the President of the Commission will recommend to the Minister of Natural Resources that the Minister of Natural Resources recommend the proposed candidate to the Governor in Council for the appointment of that proposed candidate as a temporary member of Commission.
- 3.4** If appointed by the Governor in Council as a temporary member of Commission, the selected candidate will then be appointed by the Minister of the Environment as a member of the Joint Review Panel.
- 3.5** The members of the Joint Review Panel are to be unbiased and free of any conflict of interest in relation to the Project and are to have knowledge or experience relevant to the anticipated environmental effects of the Project.

4. CONDUCT OF THE REVIEW

- 4.1** The Joint Review Panel shall conduct the Review in accordance with the Terms of Reference attached as an Appendix to this Joint Review Panel Agreement in a manner that:
 - a) discharges the requirements set out in the CEAA; and,
 - b) permits it to obtain the information and evidence required for it to consider the Licence Application.
- 4.2** The Joint Review Panel shall have all the powers and duties of a review panel described in section 35 of the CEAA.
- 4.3** As a panel of the Commission, the Joint Review Panel shall also have the powers and duties of the Commission described in section 20 of the NSCA and the Rules of Procedure.

5. SECRETARIAT

- 5.1** A Secretariat will be formed consisting of professional, scientific, technical or other Agency and Commission personnel necessary for the purposes of the Review.
- 5.2** The Secretariat will provide information to the Joint Review Panel orally and in writing during the Joint Review Panel Hearings.
- 5.3** The personnel who comprise the Secretariat shall not be considered to be Intervenors.
- 5.4** The Commission will provide its offices for the conduct of the activities of the Joint Review Panel and the Secretariat.
- 5.5** The Secretary of the Commission, or his designate will act as Secretary to the Joint Review Panel and as co-manager of the Secretariat.
- 5.6** The Agency shall appoint a panel manager as co-manager of the Secretariat.

6. RECORD OF THE REVIEW

- 6.1** Subject to section 55 and subsections 35(4), and 35(4.1) of the CEEA, the Public Registry will include all submissions, correspondence, hearing transcripts, exhibits and other information received by the Joint Review Panel and all public information produced by the Joint Review Panel relating to the Review.
- 6.2** The internet site component of the Public Registry will be maintained by the Secretariat during the course of the Review in a manner that provides for convenient public access, and for the purposes of compliance with sections 55 to 55.5 of the CEEA.
- 6.3** A project file will be maintained by the Secretariat during the course of the Review in a manner that provides for convenient public access, and for the purposes of compliance with sections 55 and 55.4 of the CEEA. This project file will be located in the offices of the Secretariat.

7. JOINT REVIEW PANEL REPORT

- 7.1** On completion of the assessment of the Project, the Joint Review Panel will prepare a Joint Review Panel Report.

7.2 The Joint Review Panel will convey the Joint Review Panel Report in writing in both official languages to the Minister of the Environment who will then publish the report.

7.3 The panel of the Commission will take a course of action with respect to the Licence Application in accordance with section 37 of the CEEA.

8. OTHER FEDERAL DEPARTMENTS AND JURISDICTIONS

8.1 At the request of the Joint Review Panel, federal authorities having specialist information or knowledge with respect to the Project shall make available that information or knowledge in a manner acceptable to the Joint Review Panel.

8.2 Subject to article 8.1, nothing in this Joint Review Panel Agreement shall restrict the participation of a Jurisdiction by way of submission to the Joint Review Panel,

9. PARTICIPANT FUNDING

9.1 Participant funding for the Review will be provided and administered by the Agency pursuant to the Participant Funding Program.

10. AMENDING THIS JOINT REVIEW PANEL AGREEMENT

10.1 The terms and provisions of this Joint Review Panel Agreement may be amended by written memorandum executed by both the Minister of the Environment and the President of the Commission.

10.2 Subject to section 27 of the CEEA, upon completion of the Review, this Joint Review Panel Agreement may be terminated at any time by an exchange of letters signed by both Parties.

The Honourable John Baird
Minister of the Environment

Michael Binder
President, Canadian Nuclear Safety
Commission

APPENDIX

Terms of Reference for the Review

Part I - Project Description

The scope of the Bruce Power New Nuclear Power Plant Project (Bruce NNPP) includes site preparation, construction, operation, decommissioning and abandonment of up to four new nuclear power reactors. Operations would involve activities required to operate and maintain the Bruce NNPP, including management of all conventional and radioactive wastes. The proponent is considering a range of reactor designs, but has not yet decided on a specific technology. The proposed Bruce NNPP would be constructed as two twin-unit modules. It is anticipated that the Bruce NNPP would have an approximate 60-year operating life and would include a mid-life refurbishment depending on the reactor design technology chosen by the Proponent.

The principal project is comprised of the following physical works:

- The power block, consisting of the buildings housing the nuclear reactors and all associated facilities and equipment, including two sets of the following structures:
 - Reactor Building – containing the nuclear steam supply system;
 - Turbine Building – holding the turbine and electrical generator;
 - Annex and Auxiliary Buildings – holding laydown areas, purification systems, used fuel handling system, used fuel bay, water treatment plant, heavy water upgrading plant, pump houses for service water, heavy handling equipment, low and intermediate level waste handling facilities, and internal maintenance; and
 - Other support facilities, including chemical storage facilities, emergency back-up diesel generators, and their associated storage tanks.

- The shared facilities between two-reactor modules including:
 - Condenser Cooling Water Systems, including the cooling towers or the once-through cooling system with all of its associated submerged intake, forebay and discharge systems;
 - Administrative buildings and offices;
 - Laboratories;
 - External maintenance structures (boiler chemical clean tanker laydown area), and
 - Maintenance facilities and workshops

- The plant's main switchyard, including buses, lines, circuit breakers and towers.

The physical works for this Project also include shoreline and underwater structures including:

- Installation of pilings in the area infilled from Lake Huron (McPherson Bay);
- A docking facility to receive large reactor components; and
- Underwater tunnels/pipes into Lake Huron.

Other physical works, accessory to the principal Project, considered as part of the scope of Project include site infrastructure needed to support the above-mentioned physical works, including power, sanitary sewer and potable water systems; storm water and subsurface drainage systems, construction laydown areas, dedicated roadways into the construction site and installation of a fence to create a physical barrier between the Project construction site and the nuclear facilities which will continue to operate.

Also considered part of the scope, are ancillary physical works that may be needed to provide interim storage on the Bruce Site for low and intermediate waste and for the storage of spent nuclear fuel waste.

The undertakings in relation to the physical works to be considered for the purposes of this assessment are site preparation, construction, operation, decommissioning and abandonment phases of the Project. The following describes activities expected to be undertaken for each of these undertakings and include:

Site Preparation Phase:

Clearing of vegetation, grubbing, stripping of top soil, grading, drilling and blasting to create sampling/monitoring wells or additional geophysical borings, infilling of McPherson Bay (Lake Huron) involving installation of coffer dams, dewatering, excavation and blasting, construction of a docking facility, building roads for heavy equipment, trenching for the installation service pipelines (sewer, water), installation of temporary construction support facilities (e.g., warehouses, concrete mixing plants), installation of site services including fencing, exterior lighting and security systems, construction of roadways and parking lots, development of on-site facilities for the storage and management of construction waste, and management of hazardous substances and hazardous waste.

Construction:

Blasting/dredging and offshore lake dumping activities associated with the intake/discharge tunnels, installation of pilings, construction of the switchyard, installation of towers and transmission lines between the power block and the switchyard and between the switchyard and the provincial grid system and other associated switchyard gear, installation of plant internal components (e.g., reactor components, steam generators, steam supply piping, turbines, electrical power systems, fire protection system, water piping, sewage handling and treatment equipment, lighting); continued installation of site services including,

plant security, fencing and security systems, and post-construction rehabilitation of the site.

Operation and Maintenance Phase:

This phase consists of the 60-year timeframe over which the nuclear power station is expected to generate electricity.

Commissioning a new nuclear power plant consists of the following general activities: verification and qualification of systems, pressure testing of vessels, fuelling of reactor; pressure testing of containment building, approach to criticality, approach to full power; testing of the reactor core physics, verification of control systems, connection to the grid, operational testing and full power operation. Some commissioning activities, specifically those that take place without fuel in the reactor core, may be authorized during the construction phase.

Following commissioning, the activities to be undertaken include the operation and maintenance of plant systems including nuclear steam supply systems, turbine generator and feedwater systems, electrical power systems, nuclear safety systems, ancillary systems, systems for maintaining facility security, activities associated with the maintenance program, materials handling systems, solid waste handling systems and administration and support systems.

Operation and maintenance activities can be categorized as follows: operation of equipment for production of electricity; verification, sampling, testing and maintenance during operation at power; maintenance, repairs, cleaning, and decontamination during planned shutdowns and outages; fuelling and refuelling of the reactor; management of low and intermediate waste and spent fuel waste within the reactor, and the transfer of waste for interim or long-term storage; management of hazardous substances and hazardous waste; and activities relating to environmental monitoring and radiation protection programs. During this phase, the assessment would include consideration of the effects associated with mid-life refurbishment for CANDU-type reactors as well as the effects relating to outages to refuel or refurbishment boiling water and pressurized water-type reactors.

Decommissioning Phase:

Decommissioning activities can be conceptually summarized as follows: removal of fuel from reactor and transfer of fuel and associated wastes to interim or long-term storage; decontamination of plant; flush purging of equipment and systems; removal of surface decontamination of facilities or equipment; dismantling and removal of equipment and systems; demolition of building; and site restoration.

Abandonment Phase:

A few activities are expected to be carried out for this phase of the Project, including monitoring of radiation. Once the site's radiation levels are demonstrated to meet all regulatory requirements, the site may be made available for re-use.

Part II - Components of the Review

1. Within 30 days of the close of the public comment period regarding the draft Environmental Impact Statement Guidelines, the Minister of the Environment shall, following consultation with the President of the Commission and after taking into account the comments received by the public and the SON, issue the Environmental Impact Statement Guidelines.
2. The Parties shall require the Proponent to prepare the Environmental Impact Statement in accordance with the Environmental Impact Statement Guidelines issued by the Minister.
3. The Joint Review Panel will ensure that the Environmental Impact Statement is distributed for examination and comment by the public and the SON to determine whether additional information should be provided before convening the Joint Review Panel Hearings.
4. The Joint Review Panel will conduct a conformity check to determine whether the Environmental Impact Statement contains sufficient information in response to the Environmental Impact Statement Guidelines. If the Joint Review Panel determines that the Environmental Impact Statement does not contain sufficient information, it will issue instructions to the Proponent for the submission of additional information. The proponent will submit any additional information necessary to satisfy the Joint Review Panel.
5. Once the Joint Review Panel determines that the Environmental Impact Statement sufficiently conforms to the Environmental Impact Statement Guidelines, it will issue instructions and set a timetable for the technical review that will include opportunities for public comment and participation.
6. Should the Joint Review Panel identify deficiencies during the technical review, and in consideration of any comments received from the public and the SON, Federal Authorities, other Jurisdictions, or the proponent, the Joint Review Panel may obtain any additional information it deems necessary.
7. Written comments obtained pursuant to clause 3 shall be made public and provided to the Proponent by the Joint Review Panel.
8. The Joint Review Panel will review the information available on the Public Registry and comments received from the public and determine whether all the information available is sufficient to proceed to the Joint Review Panel Hearing phase of the process.
9. The Joint Review Panel shall schedule and announce the start of the Joint Review Panel Hearings once it is satisfied that it has obtained the necessary information; it shall provide public notice of 60 days prior to the start of the Joint Review Panel Hearings.
10. A maximum 6-month period is provided for the initial conformity review of the Environmental Impact Statement, technical analysis and the start of the public notice period for the Joint Review Panel Hearings, in addition to

- the time taken by the proponent for responses to any information requests from the Joint Review Panel.
11. At the request of the Joint Review Panel, the Secretariat shall provide written and oral professional, scientific, technical or other assessment to the Joint Review Panel.
 12. The Joint Review panel may secure the services of independent experts to provide information on and help interpret technical and scientific issues and issues relative to community knowledge and aboriginal traditional knowledge.
 13. The Joint Review Panel shall hold the Joint Review Panel Hearings within the Municipality of Kincardine.
 14. The Joint Review Panel shall deliver its Joint Review Panel Report to the Minister of the Environment within 90 days following the close of the Joint Review Panel Hearings.

Part III – Procedure

1. The Joint Review Panel Hearings will be conducted in accordance, and the Joint Review Panel shall comply with the NSCA and the Rules of Procedure.
2. The Joint Review Panel, when appointed, will issue Directions on Procedure in accordance with the Rules of Procedure and in conformity with the provisions of the Joint Review Panel Agreement.
3. As a panel of the Commission, the Joint Review Panel may vary, pursuant to Rule 3, the Rules of Procedure to follow throughout the Joint Review Panel Hearings.
4. Subject to article 12 of the Joint Review Panel Agreement and articles 25 and 26 of this Appendix, the Joint Review Panel Hearings shall be public and the Review will provide opportunities for timely and meaningful participation by the public and the SON.
5. For the purposes of CEEA or the NSCA, the Joint Review Panel Hearings shall be public unless the Joint Review Panel is satisfied after representations made by a witness that specific, direct and substantial harm would be caused to the witness or specific harm to the environment by the disclosure of the evidence, documents or other things that the witness is ordered to give or produce, or that information to be presented involves national or nuclear security; the information is confidential information of a financial, commercial, scientific, technical, personal or other nature that is treated consistently as confidential and the person affected has not consented to the disclosure; or the disclosure of the information is likely to endanger the life, liberty or security of a person.
6. Intervenors in the Joint Review Panel Hearings will be limited to a 40 minute presentation. Each presentation may be followed by a question and answer period led by the Joint Review Panel, followed by questions from other Intervenors. Additional time for presentations or questions may be granted at the discretion of the Joint Review Panel Chair.

7. Questions will be directed through the Joint Review Panel Chair who may subsequently allow a participant to put questions directly to the presenter. Where a person does not adhere to the procedures and the direction of the Joint Review Panel Chair, the Joint Review Panel Chair will have the authority to refuse to permit further questioning from that person.
8. The Joint Review Panel Chair may limit or exclude questions or comments that fall outside the mandate of the Joint Review Panel, are repetitive, irrelevant, or immaterial.
9. The Joint Review Panel Chair may limit discussion that exceeds the time limit.

Part IV – Scope of the Environmental Assessment and Factors to be Considered in the Review

1. The Review will include a consideration of the following factors listed in paragraphs 16(1)(a) to (d) and in subsection 16(2) of the CEAA:
 - a) The environmental effects of the Project, including the environmental effects of malfunctions or accidents that may occur in connection with the Project and any cumulative environmental effects that are likely to result from the Project in combination with other projects that have been or will be carried out;
 - b) The significance of the effects referred to in paragraph a;
 - c) Comments from the public that are received during the Review;
 - d) Measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the Project;
 - e) The purpose of the Project;
 - f) Need for the Project;
 - g) Alternatives to the Project;
 - h) Alternative means of carrying out the Project that are technically and economically feasible and the environmental effects of any such alternatives means;
 - i) The requirements of a follow-up program in respect of the Project;
 - j) The capacity of renewable resources that are likely to be significantly affected by the Project to meet the needs of the present and those of the future; and
 - k) Consideration of Community knowledge and aboriginal traditional knowledge.