

November 17, 2006

Delivered by Courier

National Energy Board 444-7<sup>th</sup> Avenue S.W. Calgary, AB T2P 0X8

Attention:

Dear Mr. Mantha:

Re: Application by Bruce Power Inc., the general partner of Bruce Power L.P., for authorization pursuant to Division II of Part VI of the National Energy Board Act export electricity.

Enclosed for electronic filing with the National Energy Board by Bruce Power Inc. is an application to Export Electricity pursuant to Section119 of the National Energy Board Act.

Yours truly,

Richard Horrobin

Vice President, Power Marketing

**Bruce Power** 

Web site: www.brucepower.com

# **National Energy Board**

IN THE MATTER OF: THE NATIONAL ENERGY BOARD ACT AND THE REGULATIONS MADE THEREUNDER (THE "ACT"); AND

IN THE MATTER OF AN APPLICATION BY BRUCE POWER INC., THE GENERAL PARTNER OF BRUCE POWER L.P., FOR AUTHORIZATION PURSUANT TO SECTION 119.03 OF THE ACT TO EXPORT ELECTRICITY

## **APPLICATION**

Bruce Power Inc. ("BPI") is the general partner of Bruce Power L.P. ("BPLP"; BPI and BPLP collectively referred to hereinafter as "Bruce Power"), Ontario's largest independent generator of electricity. BPLP is a limited partnership established under the laws of Ontario, the limited partners of which are Cameco Bruce Holdings Inc. and Cameco Bruce Holdings II Inc. (both of which are subsidiaries of Cameco Corporation), TransCanada Energy Investments Ltd. (a subsidiary of TransCanada PipeLines), BPC Generation Infrastructure Trust ("BPC"), an investment entity of OMERS Administration Corporation, and the two main unions on the Bruce site, namely, the Power Workers' Union Trust No. 1 and The Society of Energy Professionals Trust. The three shareholders of Bruce Power Inc. are Cameco Corporation, TransCanada Energy Management Inc. and BPC.

Bruce Power entered into a lease agreement with Ontario Power Generation on May 12, 2001 to operate the Bruce A and B nuclear generating stations. The lease is for a period of 18 years, with an option to renew up to a further 25 years.

On October 31, 2005, Bruce Power granted a sub-lease to Bruce Power A L.P. ("BALP") to the Bruce A lands and facilities. BALP is a party to a long-term power supply agreement with the Ontario Power Authority ("OPA"), wherein, among other things, BALP (i) has undertaken to restart Units 1 and 2 and refurbish Units 3 and 4 and (ii) will receive a fixed price from the OPA for all of the output of the Bruce A units. The limited partners associated with BALP are the same as those for Bruce Power L.P., with the exception that Cameo Corporation does not have any interest in BALP. Bruce Power

L.P. continues to operate the four nuclear units at Bruce B and is responsible for the overall operation of the site. Bruce Power Inc., which is also a general partner of BALP, holds the Ontario Energy Board generation licences for the Bruce A and Bruce B facilities.

Bruce Power produces a net electrical output of approximately 3,200 MW from its four operational units at Bruce B.

Bruce Power does not currently hold, nor has it held, any Canadian electricity export authorizations.

Pursuant to section 119.03 of the Act, and in compliance with the National Energy Board's Memorandum of Guidance dated January 23, 2003 (the "Memorandum of Guidance"), BPL, as general partner of BPLP, hereby applies to the National Energy Board for the following:

- A. A permit authorizing the export of interruptible electricity at points on the international boundary between Ontario and the United States, subject to the following terms and conditions:
  - 1) the term of the permit would commence on the date it is issued and extend for a term of 10 years;
  - the permit would authorize exports of interruptible electricity of not more than 7
     TWh in any consecutive 12-month period; and
  - the electricity to be exported would be transmitted over any international power line for which the Board has issued or will issue a Certificate of Public Convenience and Necessity or Permit;
- B. A permit authorizing the export of firm electricity at points on the international boundary between Ontario and the United States, subject to the following terms and conditions:
  - the term of the permit would commence on the date it is issued and extend for a term of 10 years;

- 2) the permit would authorize exports of firm electricity of not more than 7 TWh in any consecutive 12-month period; and
- the electricity to be exported would be transmitted over any international power line for which the Board has issued or will issue a Certificate of Public Convenience and Necessity or Permit;

#### Bruce Power will undertake to:

- A. inform those who have declared an interest in buying electricity for consumption in Canada of the quantity and classes of service available for sale; and
- B. give an opportunity to purchase electricity on terms and conditions as favorable as the terms and conditions which apply to the proposed exports, to those who, within a reasonable time of being informed, demonstrate an intention to buy electricity for consumption in Canada.

In support of this application and as directed by the Memorandum of Guidance, Bruce Power submits the following information which addresses the information requirements set out in section 9 of the *National Energy Board Electricity Regulations*:

A. The names of the applicant and any authorized representative of the applicant and their mailing addresses, address for personal service, telephone number and any other telecommunication numbers of the applicant or the authorized representative of the applicant:

#### Response

Name of the Applicant:

Bruce Power Inc.
% Power Marketing Division
177 Tie Road, R.R. #2
P.O. Box 1540, Building B10

Tiverton, ON N0G 2T0

Authorized Representatives:

Name: Mr. Richard Horrobin

Title: Vice President of Power Marketing

Phone: (519) 361 - 6561

Email: richard.horrobin@brucepower.com

Name: Mr. Brian Armstrong

Title: General Counsel & Corporate Secretary

Phone: (519) 361 - 6566

Email: brian.armstrong@brucepower.com

All authorized representatives can be reached at the following mailing address:

Bruce Power L.P.

177 Tie Road, R.R. #2

P.O. Box 1540, Building B10

Tiverton, ON NOG 2T0

B. A description of the applicant's power system, a copy of the applicant latest annual report and, if applicable, the applicants most recent publicly available generation or development plan:

#### Response

Bruce Power does not operate a power system in Canada. Bruce Power does not own any transmissions facilities. Bruce Power's principal business is the generation and sale of electricity.

Bruce Power operates a four-unit CANDU nuclear power plant (Bruce B) located in Tiverton, Ontario. Bruce Power also operates, on behalf of BALP, the two units currently in operation at Bruce A. Copies of Bruce Power's latest annual report are included with this application.

Bruce Power is currently proceeding with a number of significant projects as part of the ongoing development of the Bruce site. Initiatives associated with BALP are tied to a long term power supply agreement between BALP and the OPA. These initiatives include the restart of units 1 and 2 as well as major refurbishment activities planned for units 3 and 4.

Unrelated to this application to export electricity, Bruce Power is in the process of completing a number of initiatives intended to improve generator reliability, safety and performance.

Additional major refurbishment activities are also planned for Bruce B and these initiatives include Low Pressure (LP) turbine rotor replacement, reactor core fuel reorder, generator refurbishment and the use of new Low Void Reactivity Fuel (LVRP). Each of these initiatives are expected to increase reactor safety margins and increase electricity generation from the site.

# C. A proof of publication notice:

#### Response

The Applicants will notify the public of this Application by publishing in English and French the Notice of Application and Directions on Procedure (NOA/DOP) in the Canada Gazette, the Globe and Mail and in Le Droit, Ontario's largest paid circulation French language newspaper. The Applicants will place the notices at the earliest possible date following the filing of this Application with the Board. Proof of publication will be filed with the Board as soon as it becomes available.

D. The name of each person or agency outside Canada to be supplied with the electricity and the nature of the business carried on by that person or agency or, if that information is unknown at the time of application, a brief description of the markets to be served:

Bruce Power has not yet entered into any specific export arrangements. Bruce Power plans to sell electricity at market based rates to various counterparties, which may include the following:

- 1) Electric utilities
- 2) Affiliated and independent industrial power consumers
- 3) Other marketers and brokers
- 4) Municipal distribution companies
- Power pools
- 6) Other suppliers and end users
- E. In the case of a sale or transfer, the period for which the permit is sought and for each year in that period, an estimate of the following quantities, namely:
  - i. the maximum quantity of firm power exports and imports
  - ii. the maximum quantity of combined firm power and interruptible power exports and imports,
  - iii. the maximum monthly and annual quantities of firm energy exports and imports, and
  - iv. the maximum monthly and annual quantities of interruptible energy exports and imports.

## Response

The period for which the permit is being sought is 10 years.

- The estimated maximum quantity of firm power exports and imports will be no more than 2000 MW.
- ii. The estimated maximum quantity of combined firm power and interruptible power exports and imports will be no more than 2000 MW.
- iii. The maximum monthly and annual quantities of firm energy exports and imports will be no more than 1,000 GWh per month and no more than 7 TWh per year.

- iv. The maximum monthly and annual quantities of interruptible energy exports and imports will be no more than 1,000 GWh per month and no more than 7 TWh per year.
- F. In the case of equichange transfer, storage transfer, adjustment transfer or carrier transfer, a statement of the annual quantities of energy for exportation and importation for each class of transfer for the period for which the permit is sought.

## Response

Bruce Power is not applying for cross-border arrangements associated with equichange transfer, storage transfer, adjustment transfer. As of the date of application Bruce Power has no plan to enter an arrangement involving carrier transfer, however approval for this class of transfer is being requested based on the potential for future carrier transfer arrangements. The annual quantities of exportation and importation under carrier transfer will not exceed the limits requested in section 1(e).

G. A copy of any electricity transfer agreement that covers the proposed exportation of electricity.

# Response

Bruce Power has not entered into any electricity transfer agreements at this time.

- H. Where no agreements exist, a statement of:
  - the estimated maximum duration of specific exports and the basis for that estimation:

Bruce Power estimates the maximum duration of any specific export will not exceed 10 years. This is based on their assessment of market conditions.

the period of time for which the permit is sought and the basis for the selection for that period of time;

## Response

Bruce Power has applied for permits with terms of 10 years as it believes that 10 year terms will provide Bruce Power with the appropriate flexibility required to participate effectively in the electricity export market.

I. A list of the international power lines over which the applicant proposes to export or import electricity, setting forth in respect of each line: (1) the number of the certificate or permit issued by the Board; (2) the name of the certificate or permit; (3) the name of the owner of the power line outside Canada; (4) the voltage level and operating designation of each circuit, and (10) the maximum power transfer capability of each circuit and the basis for that limit;

#### Response

Bruce Power seeks authorization to export electricity over all international power lines for which the NEB has issued or will issue a Certificate of Public Convenience and Necessity of Permit.

Bruce Power respectfully submits that the technical information requested which relates to these international power lines is on file with the Board and accordingly, Bruce Power requests relief from the requirement to file this information.

J. The total simultaneous power transfer capability under normal operating conditions for all of the international power lines listed in accordance with paragraph (I) and the basis for that limit.

#### Response

Bruce Power respectfully submits that the technical information requested which relates to the power transfer capability of the international power lines is on file with the Board and accordingly, Bruce Power requests relief from the requirement to file this information.

K. A description of the approvals required for the importation of electricity into the United States, and a statement respecting the current status of the approvals.

## Response

Bruce Power is in the process of seeking a Federal Energy Regulatory Commission (FERC) license to market power within the United States as well as New York Independent System Operator (NYISO) Market Participant status. Bruce Power also expects to seek a similar Market Participant status with the Midwest Independent System Operator (MISO) at some point in the future.

L. A description of the provincial approvals that are required to be obtained by the applicant, and a statement respecting the current status of the approvals.

### Response

Bruce Power is currently a registered Market Participant with the Independent Electricity System Operator (IESO) within Ontario. No additional provincial authorizations are required.

M. A description of the review process applicable to each provincial approval that must be obtained, including (1) a description of any public consultation provided for under the review process, and (2) a schedule for the review process.

See response to question (L) above. There will be no further review or public consultation at the provincial level.

N. Whether new or modified facilities will be required to effect the proposed exportation of electricity and, if applicable, a detailed description of those facilities.

## Response

Generation capacity from Bruce Power's existing 4 units (Bruce B Generating Station) is sufficient to effect the proposed electricity exports. No modifications to existing facilities are required to cover the electricity exports requested hereunder.

Unrelated to this application to export electricity, Bruce Power is in the process of completing a number of initiatives intended to improve generator reliability, safety and performance.

Bruce Power is currently working towards the re-start of units 1 and 2. These units were previously shutdown by OPG due to safety and reliability concerns and Bruce Power is proceeding with a major equipment overhaul. These units are expected to restart before the end of the decade.

Additional major refurbishment activities are also planned for G3 and G4. Fuel channels will be replaced in G3 and G4 will be the recipient of new boilers. Both projects represent major construction activities and a significant investment of capital.

Major plant improvements are also underway at Bruce B and these include Low Pressure (LP) turbine rotor replacement, reactor core fuel re-order and the use of new Low Void Reactivity Fuel (LVRP). Each of these initiatives are expected to increase reactor safety margins and increase electricity generation from the site.

All modifications currently being implemented are unrelated to the exportation of power.

O. The adverse environmental effects resulting from the proposed exportation of electricity, and the measures to be taken to mitigate any of those environmental effects.

#### Response

Bruce Power intends to export electricity that is generated by four units at Bruce B Nuclear Power Station. Existing transmission lines will be used to export that power. Consequently Bruce Power submits that there will be no environmental impacts directly related to Bruce Power's proposed electricity exports.

P. A description of any adverse effects that the proposed exportation of electricity could have on the operation of any power system in neighboring provinces.

## Response

Bruce Power is unaware of any adverse effects that the proposed exports could have on the power system in neighboring provinces.

- Q. Where the application specifies the terms and conditions of the proposed exportation of electricity, a description detailing the manner in which the applicant:
  - has informed those persons who have declared an interest in buying electricity for consumption in Canada of the quantities and classes of services available for sale, and
  - 2) has given those persons who have demonstrated an intention to buy electricity for consumption in Canada after having been so informed, an opportunity to purchase electricity on terms and conditions, including price, as favourable as the terms and conditions specified in the application.

#### Response

## Not Applicable

- R. Where the application does not specify the terms and conditions of the proposed exportation of electricity a description, including supporting documentation, detailing the manner in which the applicant:
  - will inform those persons who declare an interest in buying electricity for consumption in Canada of the quantities of the quantities and classes available for sale, and
  - 2) will give those persons who demonstrate an intention to buy electricity for consumption in Canada after having been so informed, an opportunity to purchase electricity on terms and conditions, including price, as favourable as the terms and conditions of the export.

#### Response

The IESO dispatches all economically available generation to meet provincial load and scheduled exports, less imports. The energy to be exported by Bruce Power will principally be purchased from Ontario's IESO-administered markets and is surplus to Ontario's requirements.

Electricity for export is available thought the IESO-administered markets to any wholesaler on the same terms as those available to Bruce Power. When Bruce Power is exporting from Ontario, it will be competing with all other potential purchasers of this energy in the IESO – administered market. The IESO-administered market operations will inform other parties and provide them an opportunity to purchase energy.

The following are Bruce Power's responses to the Additional Information Requirements requested in Appendix 3 to the Memorandum of Guidance:

1) Whether any new facilities are required in regard to the applicant's proposed electricity exports, and a detailed description of those facilities:

No new facilities are required for the proposed electricity exports.

2) Whether modifications to existing facilities would be undertaken in regard to the applicant's proposed electricity exports, and a detailed description of those modifications:

## Response

No modifications to existing facilities are required for the proposed exports.

3) Whether there would be any changes to the operation of existing facilities in regard to the Applicant's proposed electricity exports, and a detailed description of those changes:

## Response

No changes to the operation of existing facilities are required for the proposed exports.

4) The adverse environmental effects of the new facilities, modifications or changes in operation described in 1), 2) and 3):

# Response

Not applicable

5) Any measure to be taken to mitigate the adverse environmental effects described in (4):

#### Response

Not applicable

6) If the Applicant is unable to provide information in response to any of 1), 2) or 3) the Applicant should explain why not, and if it will be able to provide this information at any time in the future, and if so, when:

# Response

Not applicable

All of which is respectfully submitted at Tiverton, Ontario this 17th day of November, 2006.

Bruce Power Inc.

Per:

Mr. Richard Horrobin
Vice President of Power Marketing
Bruce Power Inc.

Please direct all communications regarding this application to:

Name: Jay Robertson

Manager, Power Sales

Address: Bruce Power

Power Marketing Division 177 Tie Road, R.R. #2 P.O. Box 1540, Building B10 Tiverton, ON NOG 2T0

Phone: (519) 361 - 7159 Fax: (519) 368 - 5316

Email: jay.robertson@brucepower.com

With copy to:

Name: Bill Schnurr

Senior Legal Counsel

Address: Bruce Power L.P.

177 Tie Road, R.R. #2

P.O. Box 1540, Building B10 Tiverton, ON NOG 2T0

Phone: (519) 361 - 7484 Fax: (519) 361 - 1841

Email: bill.schnurr@brucepower.com