

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*;

AND IN THE MATTER OF an Application by Hydro One Networks Inc. pursuant to s. 92 of the *Act* for an order or Orders granting leave to construct new transmission facilities (“Lake Superior Link”) in northwestern Ontario;

AND IN THE MATTER OF an Application by Hydro One Networks Inc. pursuant to s. 97 of the *Act* for an Order granting approval of the forms of the agreement offered or to be offered to affected landowners.

BOOK OF AUTHORITIES CONSUMERS’ COUNCIL OF CANADA MOTION HEARD JUNE 4th and 5th, 2018

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Statutory Powers Procedure Act

R.S.O. 1990, CHAPTER S.22

Consolidation Period: From November 3, 2015 to the [e-Laws currency date](#).

Last amendment: 2015, c. 23, s. 5.

Legislative History: 1993, c. 27, Sched.; 1994, c. 27, s. 56; 1997, c. 23, s. 13; 1999, c. 12, Sched. B, s. 16; 2002, c. 17, Sched. F, Table; 2006, c. 19, Sched. B, s. 21; 2006, c. 19, Sched. C, s. 1 (1, 2, 4); 2006, c. 21, Sched. C, s. 134; 2006, c. 21, Sched. F, s. 136 (1); 2009, c. 33, Sched. 6, s. 87; 2015, c. 23, s. 5.

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4.5 (1) Subject to subsection (3), upon receiving documents relating to the commencement of a proceeding, a tribunal or its administrative staff may decide not to process the documents relating to the commencement of the proceeding if,

- (a) the documents are incomplete;
- (b) the documents are received after the time required for commencing the proceeding has elapsed;
- (c) the fee required for commencing the proceeding is not paid; or
- (d) there is some other technical defect in the commencement of the proceeding.

Notice

(2) A tribunal or its administrative staff shall give the party who commences a proceeding notice of its decision under subsection (1) and shall set out in the notice the reasons for the decision and the requirements for resuming the processing of the documents.

Rules under s. 25.1

(3) A tribunal or its administrative staff shall not make a decision under subsection (1) unless the tribunal has made rules under section 25.1 respecting the making of such decisions and those rules shall set out,

- (a) any of the grounds referred to in subsection (1) upon which the tribunal or its administrative staff may decide not to process the documents relating to the commencement of a proceeding; and
- (b) the requirements for the processing of the documents to be resumed.

Continuance of provisions in other statutes

(4) Despite section 32, nothing in this section shall prevent a tribunal or its administrative staff from deciding not to process documents relating to the commencement of a proceeding on grounds that differ from those referred to in subsection (1) or without complying with subsection (2) or (3) if the tribunal or its staff does so in accordance with the provisions of an Act that are in force on the day this section comes into force. 1999, c. 12, Sched. B, s. 16 (3).

Section Amendments with date in force (d/m/y)

1999, c. 12, Sched. B, s. 16 (3) - 14/02/2000

Dismissal of proceeding without hearing

4.6 (1) Subject to subsections (5) and (6), a tribunal may dismiss a proceeding without a hearing if,

- (a) the proceeding is frivolous, vexatious or is commenced in bad faith;
- (b) the proceeding relates to matters that are outside the jurisdiction of the tribunal; or
- (c) some aspect of the statutory requirements for bringing the proceeding has not been met.

Notice

(2) Before dismissing a proceeding under this section, a tribunal shall give notice of its intention to dismiss the proceeding to,

- (a) all parties to the proceeding if the proceeding is being dismissed for reasons referred to in clause (1) (b); or
- (b) the party who commences the proceeding if the proceeding is being dismissed for any other reason.

Same

(3) The notice of intention to dismiss a proceeding shall set out the reasons for the dismissal and inform the parties of their right to make written submissions to the tribunal with respect to the dismissal within the time specified in the notice.

Right to make submissions

(4) A party who receives a notice under subsection (2) may make written submissions to the tribunal with respect to the dismissal within the time specified in the notice.

Dismissal

(5) A tribunal shall not dismiss a proceeding under this section until it has given notice under subsection (2) and considered any submissions made under subsection (4).

Rules

Ontario Energy Board Act, 1998

S.O. 1998, CHAPTER 15 Schedule B

Consolidation Period: From April 1, 2018 to the [e-Laws currency date](#).

Last amendment: 2017, c. 34, Sched. 46, s. 33.

Legislative History: 1999, c. 6, s. 48; 2000, c. 26, Sched. D, s. 2; 2001, c. 9, Sched. F, s. 2; 2002, c. 1, Sched. B (But see Table of Public Statute Provisions Repealed Under Section 10.1 of the *Legislation Act, 2006* - December 31, 2012); 2002, c. 17, Sched. F, Table; 2002, c. 23, s. 4; 2003, c. 3, s. 2-90; 2003, c. 8; 2004, c. 8, s. 46, Table; 2004, c. 17, s. 32; 2004, c. 23, Sched. B (But see Table of Public Statute Provisions Repealed Under Section 10.1 of the *Legislation Act, 2006* - December 31, 2014); 2005, c. 5, s. 51; 2006, c. 3, Sched. C; 2006, c. 21, Sched. F, s. 136 (1); 2006, c. 32, Sched. C, s. 42; 2006, c. 33, Sched. X; 2006, c. 35, Sched. C, s. 98; 2007, c. 8, s. 222; 2009, c. 12, Sched. D; 2009, c. 33, Sched. 2, s. 51; 2009, c. 33, Sched. 6, s. 77; 2009, c. 33, Sched. 18, s. 21; 2010, c. 8, s. 38; 2010, c. 26, Sched. 13, s. 17; 2011, c. 1, Sched. 4; 2011, c. 9, Sched. 27, s. 34; See: Table of Public Statute Provisions Repealed Under Section 10.1 of the *Legislation Act, 2006* - December 31, 2011; 2014, c. 7, Sched. 23; 2015, c. 20, Sched. 31; 2015, c. 29, s. 7-20; CTS 16 MR 10 - 3; 2016, c. 10, Sched. 2, s. 11-16; 2016, c. 19, s. 17; 2016, c. 23, s. 61; 2017, c. 1; 2017, c. 2, Sched. 10, s. 2; 2017, c. 16, Sched. 1, s. 44; 2017, c. 16, Sched. 2; 2017, c. 20, Sched. 8, s. 109; 2017, c. 25, Sched. 9, s. 106; 2017, c. 34, Sched. 18, s. 3; 2017, c. 34, Sched. 31; 2017, c. 34, Sched. 46, s. 33.

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Leave to construct hydrocarbon line

90 (1) No person shall construct a hydrocarbon line without first obtaining from the Board an order granting leave to construct the hydrocarbon line if,

- (a) the proposed hydrocarbon line is more than 20 kilometres in length;
- (b) the proposed hydrocarbon line is projected to cost more than the amount prescribed by the regulations;
- (c) any part of the proposed hydrocarbon line,
 - (i) uses pipe that has a nominal pipe size of 12 inches or more, and
 - (ii) has an operating pressure of 2,000 kilopascals or more; or
- (d) criteria prescribed by the regulations are met. 2003, c. 3, s. 63 (1).

Exception

(2) Subsection (1) does not apply to the relocation or reconstruction of a hydrocarbon line unless the size of the line is changed or unless the acquisition of additional land or authority to use additional land is necessary. 1998, c. 15, Sched. B, s. 90 (2); 2003, c. 3, s. 63 (2).

Section Amendments with date in force (d/m/y)

2003, c. 3, s. 63 (1, 2) - 01/08/2003

Application for leave to construct hydrocarbon line or station

91 Any person may, before constructing a hydrocarbon line to which section 90 does not apply or a station, apply to the Board for an order granting leave to construct the hydrocarbon line or station. 2003, c. 3, s. 64.

Section Amendments with date in force (d/m/y)

2003, c. 3, s. 64 - 01/08/2003

Leave to construct, etc., electricity transmission or distribution line

92 (1) No person shall construct, expand or reinforce an electricity transmission line or an electricity distribution line or make an interconnection without first obtaining from the Board an order granting leave to construct, expand or reinforce such line or interconnection. 1998, c. 15, Sched. B, s. 92 (1).

Exception

(2) Subsection (1) does not apply to the relocation or reconstruction of an existing electricity transmission line or electricity distribution line or interconnection where no expansion or reinforcement is involved unless the acquisition of additional land or authority to use additional land is necessary. 1998, c. 15, Sched. B, s. 92 (2).

93 REPEALED: 2003, c. 3, s. 65.

Section Amendments with date in force (d/m/y)

2003, c. 3, s. 65 - 01/08/2003

Route map

94 An applicant for an order granting leave under this Part shall file with the application a map showing the general location of the proposed work and the municipalities, highways, railways, utility lines and navigable waters through, under, over, upon or across which the proposed work is to pass. 1998, c. 15, Sched. B, s. 94.

Exemption, s. 90 or 92

95 The Board may, if in its opinion special circumstances of a particular case so require, exempt any person from the requirements of section 90 or 92 without a hearing. 1998, c. 15, Sched. B, s. 95.

Order allowing work to be carried out

96 (1) If, after considering an application under section 90, 91 or 92 the Board is of the opinion that the construction, expansion or reinforcement of the proposed work is in the public interest, it shall make an order granting leave to carry out the work. 1998, c. 15, Sched. B, s. 96.

Applications under s. 92

(2) In an application under section 92, the Board shall only consider the following when, under subsection (1), it considers whether the construction, expansion or reinforcement of the electricity transmission line or electricity distribution line, or the making of the interconnection, is in the public interest:

1. The interests of consumers with respect to prices and the reliability and quality of electricity service.
2. Where applicable and in a manner consistent with the policies of the Government of Ontario, the promotion of the use of renewable energy sources. 2009, c. 12, Sched. D, s. 16.

Section Amendments with date in force (d/m/y)

2003, c. 3, s. 66 - 01/08/2003

2009, c. 12, Sched. D, s. 16 - 09/09/2009

Lieutenant Governor in Council, order re electricity transmission line

96.1 (1) The Lieutenant Governor in Council may make an order declaring that the construction, expansion or reinforcement of an electricity transmission line specified in the order is needed as a priority project. 2015, c. 29, s. 16.

Effect of order

(2) When it considers an application under section 92 in respect of the construction, expansion or reinforcement of an electricity transmission line specified in an order under subsection (1), the Board shall accept that the construction, expansion or reinforcement is needed when forming its opinion under section 96. 2015, c. 29, s. 16.

Obligations must be followed

(3) Nothing in this section relieves a person from the obligation to obtain leave of the Board for the construction, expansion or reinforcement of an electricity transmission line specified in an order under subsection (1). 2015, c. 29, s. 16.

Section Amendments with date in force (d/m/y)

2015, c. 29, s. 16 - 04/03/2016

Condition, land-owner's agreements

97 In an application under section 90, 91 or 92, leave to construct shall not be granted until the applicant satisfies the Board that it has offered or will offer to each owner of land affected by the approved route or location an agreement in a form approved by the Board. 1998, c. 15, Sched. B, s. 97.

No leave if covered by licence

97.1 (1) In an application under section 92, leave shall not be granted to a person if a licence issued under Part V that is held by another person includes an obligation to develop, construct, expand or reinforce the line, or make the interconnection, that is the subject of the application. 2016, c. 10, Sched. 2, s. 16.

Transition

(2) For greater certainty, an application made, but not determined, before the day section 16 of Schedule 2 to the *Energy Statute Law Amendment Act, 2016* comes into force, is subject to subsection (1). 2016, c. 10, Sched. 2, s. 16.

Section Amendments with date in force (d/m/y)

2016, c. 10, Sched. 2, s. 16 - 01/07/2016

Leave in the procurement, selection context

97.2 (1) In an application under section 92, leave to construct, expand or reinforce an electricity transmission line or to make an interconnection shall not be granted to a person if,

- (a) the IESO has commenced, been directed to commence, or announced a future procurement process for the development, construction, expansion or reinforcement of that line or for the making of that interconnection, and the procurement process has not yet been completed or otherwise terminated;
- (b) the IESO has commenced, been directed to commence, or announced a future process to select a transmitter for the development, construction, expansion or reinforcement of that line or for the making of that interconnection, and the process has not yet been completed or otherwise terminated;
- (c) the IESO has completed a procurement process for the development, construction, expansion or reinforcement of that line or for the making of that interconnection, and the person is someone other than the person with whom the IESO

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reviews and appeals available to it and such reviews and appeals have been finally determined.

- 17.03 A notice of appeal shall be in such form as may be approved or specified by the Board and shall be accompanied by such fee as may be set for that purpose by the management committee under section 12.1(2) of the *OEB Act*.
- 17.04 At a hearing of an appeal, an appellant shall not seek to appeal a portion of the order, decision, market rules, reliability standard or finding or remedial action referred to in **Rule 15.03** or rely on any ground, that is not stated in the appellant's notice of appeal, except with leave of the Board.
- 17.05 In addition to those persons on whom service is required by statute, the Board may direct an appellant to serve the notice of appeal on such persons as it considers appropriate.
- 17.06 The Board may require an appellant to file an affidavit of service indicating how and on whom service of the notice of appeal was made.
- 17.07 Subject to **Rule 17.08**, a request by a party to stay part or all of the order, Decision, market rules, reliability standard or finding or remedial action referred to in **Rule 15.03** being appealed pending the determination of the appeal shall be made by motion to the Board.
- 17.08 For greater certainty, a request to stay shall not be made where a stay is precluded by statute.
- 17.09 In respect of a motion brought under **Rule 17.07**, the Board may order that implementation or operation of the order, decision, market rules or reliability standard be delayed or stayed, on conditions as it considers appropriate.

18. Dismissal Without a Hearing

18.01 The Board may propose to dismiss a proceeding without a hearing on the grounds that:

- (a) the proceeding is frivolous, vexatious or is commenced in bad faith;

- (b) the proceeding relates to matters that are outside the jurisdiction of the tribunal; or
- (c) some aspect of the statutory requirements for bringing the proceeding has not been met.

18.02 Where the Board proposes to dismiss a proceeding under **Rule 18.01**, it shall give notice of the proposed dismissal in accordance with the *Statutory Powers Procedure Act*.

18.03 A party wishing to make written submissions on the proposed dismissal shall do so within 10 calendar days of receiving the Board's notice under **Rule 18.02**.

18.04 Where a party who commenced a proceeding has not taken any steps with respect to the proceeding for more than one year from the date of filing, the Board may notify the party that the proceeding shall be dismissed unless the person, within 10 calendar days of receiving the Board's notice, shows cause why it should not be dismissed or advises the Board that the application or appeal is withdrawn.

18.05 Where the Board dismisses a proceeding, or is advised that the application or appeal is withdrawn, any fee paid to commence the proceeding shall not be refunded.

19. Decision Not to Process

19.01 The Board or Board staff may decide not to process documents relating to the commencement of a proceeding if:

- (a) the documents are incomplete;
- (b) the documents were filed without the required fee for commencing the proceeding;
- (c) the documents were filed after the prescribed time period for commencing the proceeding has elapsed; or
- (d) there is some other technical defect in the commencement of the proceeding.

RP-2005-0022
EB-2005-0441
EB-2005-0442
EB-2005-0443
EB-2005-0473

IN THE MATTER OF the *Ontario Energy Board Act, 1998*,
S.O. 1998, c.15 (Sched.B);

AND IN THE MATTER OF an Application by Greenfield Energy Centre Limited Partnership for an Order or Orders pursuant to section 90 of the *Ontario Energy Board Act, 1998* granting leave to construct a natural gas pipeline in the Township of St. Clair, Ontario;

AND IN THE MATTER OF an Application by Greenfield Energy Centre Limited Partnership for an Order or Orders pursuant to section 101 of the *Ontario Energy Board Act, 1998* for authorization for certain road and utility crossings required for the proposed pipeline;

AND IN THE MATTER OF an Application by Greenfield Energy Centre Limited Partnership for a Certificate of public convenience and necessity, pursuant to section 8 of the *Municipal Franchises Act*;

AND IN THE MATTER OF an Application by Union Gas Limited for an Order or Orders pursuant to section 90 of the *Ontario Energy Board Act, 1998* granting leave to construct a natural gas pipeline in the Township of St. Clair, Ontario.

BEFORE: Paul Vlahos
Presiding Member

Cynthia Chaplin
Member

Ken Quesnelle
Member

DECISION AND ORDER

January 6, 2006

EXECUTIVE SUMMARY

On July 20, 2005, Greenfield Energy Centre Limited Partnership ("GEC") filed an application with the Ontario Energy Board for leave to construct a natural gas pipeline to supply a 1005 MW gas-fired generating station in Courtright, south of Sarnia. GEC has entered into a 20-year Clean Energy Supply contract with the Ontario Power Authority. On August 30, 2005, Union Gas Limited ("Union") also filed an application to build a pipeline to serve the GEC generating station. The Board combined the two competing applications in one proceeding.

The Board approves both applications. However, only one approval can proceed. The approval for Union's application is non-operative if it does not have the GEC power plant as a customer. A key condition therefore for Union is that it must contract to provide service to the GEC plant whether owned by GEC or another entity, as long as the power plant is in the same location and requires the same proposed pipeline, both in terms of size and route.

The Board's findings on the two applications can be summarized as follows. If a power generating station is built at the proposed location, there is clearly a need for a pipeline to serve the power plant. There are no negative rate implications for Union or its customers if Union builds the pipeline. There are no outstanding matters from the perspective of the Ontario Pipeline Coordination Committee with respect to the environmental reports commissioned by both applicants. The environmental impacts associated with the proposed competing pipelines are found by the Board to be acceptable and there are no outstanding landowner matters for each pipeline proposal. Union is known to be a competent builder and operator of gas pipelines. The Calpine companies that will be building and operating the GEC pipeline under contracts with GEC are also experienced builders and operators in many jurisdictions in the United States. Both applications, Union's and GEC's, are credible and in the public interest.

The Board accepts the evidence provided by GEC that the current financial difficulty being experienced by Calpine Corporation should not have a direct impact on the financial wherewithal of the applicant (GEC). However, should the entities that will construct and operate the pipeline be different from what has been presented in the proceeding, the Board finds that GEC must file with the Board, when its plans are finalized and before construction is commenced, appropriate information for the Board's review.

With respect to the public interest considerations raised by GEC's application, the Board finds that the public interest would not be well served if GEC's application is denied. It is in the public interest for gas customers to have access to the services they require. In this case, GEC cannot currently access adequate services from Union. It is therefore in the public interest to allow GEC to pursue those services directly through the option of bypassing Union. At the same time, Union and other parties have not established that Union or its other customers would suffer direct harm in the event that GEC's application is approved. Moreover, GEC's application is credible. Therefore the Board finds GEC's application to be in the public interest.

The Board observes that it is possible for Union to develop a tariff solution for customers of the size and needs of GEC to permit the utility's offerings to be more robust against bypass. It is within the control of Union and the Board to manage the longer term, more speculative impacts arising from this transitional decision, beginning with the pending Natural Gas Electricity Interface Review proceeding. It is not in the public interest in this case however to require GEC to await the resolution of an appropriate tariff in the NGEIR proceeding.

The Board notes that it does not expect to decide any other bypass applications prior to the results of the NGEIR review.

The Board observes that it is appropriate for the applicants to consider any cumulative (either additive or interactive) effects between the pipeline construction and the construction and operation of the GEC generating station but in this case, the environmental effects of the power station that are raised by the Society of Energy Professionals and the Power Workers' Union, namely, air emissions, the taking and discharge of water into the St. Clair River, and the loss of jobs and other socio-economic impacts consequent on the closure of the Lambton generation station, cannot be tied back to some effect of pipeline construction. In the Board's view, the fact that the existence of the pipeline will enable a certain end use to occur does not mean that the environmental effects of that end use are within the realm of "cumulative effects" as contemplated in the Board's environmental guidelines. The Board is satisfied from the evidence before it that the effects from the pipeline are minimal and the cumulative effects from the construction of the generating station will only last for the duration of the construction phase of the pipeline. These effects are different from

the environmental effects related to the operation of a GEC gas-fired generating station, which are not cumulative with respect to the pipeline project in any respect.

Walpole Island First Nations asked the Board to start a process to develop a policy regarding consultation with First Nations. The Board agrees that the matter of creating a Board policy needs to be reviewed, and the Board will do so.

Chapter 1- The Applications and Process

On July 20, 2005, Greenfield Energy Centre Limited Partnership (“GEC”) filed an application with the Ontario Energy Board. GEC has entered into a 20-year Clean Energy Supply (“CES”) contract with the Ontario Power Authority (“OPA”) to construct and operate a 1005 MW gas-fired generating station in Courtright, in the Township of St. Clair, south of Sarnia and requires the pipeline to supply natural gas to the generating station. GEC seeks leave to construct the pipeline, pursuant to section 90 of the *Ontario Energy Board Act*, 1998, S.O. 1998, c.15, Sched. B (“OEB Act”).

If leave to construct the pipeline is granted, GEC also seeks a Certificate of Public Convenience and Necessity, pursuant to section 8 of the *Municipal Franchises Act*, R.S.O. 1990, c. M.55 (“MFA”). GEC initially also sought an order pursuant to section 101 of the *Ontario Energy Board Act* because the proposed pipeline route crosses a municipal water main, runs along a road allowance, crosses an abandoned brine line and crosses gas pipelines belonging to Union Gas Limited and TransCanada PipeLines Limited. During the hearing, GEC asked the Board to stay the section 101 application to allow for negotiations with the affected landowners for crossing permits to be completed. GEC will either withdraw the section 101 application or ask the Board to review the section 101 application at a later time.

The Board issued a notice of GEC’s application on July 28, 2005. GEC served and published the notice as directed by the Board. In Procedural Order No. 1, dated August 24, 2005 the Board indicated it would proceed by way of oral hearing, set the scope of public interest factors related to bypass and set the schedule for the proceeding.

On August 30, 2005, Union Gas Limited (“Union”) also filed an application to construct a pipeline to serve the GEC generating station.

Due to the competing nature of the GEC and Union applications, the Board found it appropriate to combine, pursuant to section 21(5) of the OEB Act, the proceedings for GEC’s and Union’s applications. All intervenors of record in the GEC proceeding were considered intervenors in the joint proceeding. In addition, certain new parties were accepted by the Board and became intervenors in the joint proceeding.

In addition to the applicants and Board staff, 25 parties were given intervenor status and 5 parties were given observer status. A list of active participants and their counsel or representatives, and a list of witnesses who testified in the joint proceeding are attached as Appendix 1 to this decision. Intervenor evidence was filed by Union and Walpole Island First Nations ("WIFN").

On October 4, 2005 the Board received certain material from the Society of Energy Professionals ("SEP"). On October 6, 2005 the Board received a Notice of Motion and Motion Record from GEC. In the Notice of Motion, GEC sought an order of the Board to exclude certain documents in the material filed by SEP. The Board dealt with the motion by way of a written process. On November 7, 2005 the Board issued its decision pursuant to which certain material filed by SEP was excluded. The Board's decision on the Motion is attached as Appendix 2.

The oral hearing on the two applications commenced on November 14, 2005 and was completed with oral reply argument on December 1, 2005.

The Board has summarized the record in this decision only to the extent necessary to provide context to its findings.

Below in this chapter are particulars of the respective competing applications by GEC and Union. The Board's findings are contained in the next chapter, Chapter 2.

The Power Plant

Pursuant to the 20-year CES contract with the OPA, GEC will construct a 1005 MW gas-fired generating station in Courtright, in the Township of St. Clair, south of Sarnia and requires a pipeline to supply natural gas to the generating station. The demand for gas by the plant under peak winter operating conditions is estimated at 208,000 GJ per day and about 186,240 GJ per day under peak summer conditions. The plant would operate either as a baseload or an intermediate generating resource on the Ontario power grid. Total annual gas consumption at the plant, assuming an annual capacity factor between 40% and 70%, is estimated at between 28,000,000 GJ and 48,000,000 GJ. According to the CES contract, the plant is required to provide electricity to the grid no later than February 12, 2008. The generating plant is located on a property owned by Terra International (Canada) Inc. ("Terra").

The Partnership

The GEC project is being developed as a limited partnership between a Canadian subsidiary of Calpine Corporation of the U.S. ("Calpine Corporation") and a Canadian subsidiary of Mitsui & Co. Ltd of Japan ("Mitsui"). The partners are MIT Power Canada Investments Inc. which is a wholly owned subsidiary of Mitsui, and Calpine Energy Services Canada Ltd. which is wholly owned subsidiary of Calpine Corporation. CM Greenfield Power Corp., the general partner, holds 0.01% of the partnership. The limited partners, MIT Power Canada LP Inc. and Calpine Greenfield Commercial Trust, hold 49.995% interest each. According to the evidence, Greenfield Energy Centre LP, will raise financing on the project's own financial strength, not on the strength of its parents.

Calpine Corporation will act as the lead for the development of the GEC project. Specifically, Calpine Greenfield Partnership Limited will be the energy procurement construction contractor for the project, and Calpine Corporation O&M Affiliate will provide administrative services, environmental support, permitting support, environmental monitoring during the course of operations and engineering support to the project.

The GEC Pipeline

The pipeline project proposed by GEC consists of a 16 inch diameter high pressure steel pipeline and related facilities, including a metering and control station, and an access tap to the Vector pipeline owned and operated by Vector Pipeline Limited Partnership. The Vector pipeline connects the Dawn Hub with United States markets. The proposed pipeline will be approximately 2 kilometers long and will connect the generating station to the Vector pipeline located to the north of the GEC plant. GEC plans to start construction of the pipeline and metering facilities in June 2006. GEC estimated the total capital cost of the pipeline and required facilities at \$4.9 million.

The proposed pipeline route leaves the generating station at a point north of the Bickford Line, runs easterly along an agricultural field owned by Terra, turns north and travels along the west side of Greenfield Road to connect with the Vector pipeline at the Vector Gate Station. A metering facility would be located south of the Pollard Plant access road south of the Vector Gate Station. GEC's proposed pipeline route is shown in Appendix 3.

Most of the proposed route is within the municipal road allowance. GEC filed a resolution by the Township of St. Clair supporting the use of the municipal road allowance of the Greenfield Road for the purpose of locating the pipeline. For the sections of the route on privately owned land, GEC is negotiating three permanent easement agreements and is in the process of obtaining a lease agreement for the tie-in to the power plant. GEC is also negotiating encroachment permits to cross a brine pipeline, three TCPL pipelines, Union's pipeline and Vector's facilities. GEC would obtain a number of temporary easements as required to construct the proposed facilities. GEC sought approval of the form of easement agreement offered to Terra and to the private landowners, pursuant to section 97 of the OEB Act. The proposed route crosses Wylie Drain and GEC would need a permit to cross from the Ministry of Natural Resources and from the Conservation Authority.

GEC confirmed that design, installation and testing specifications for the proposed pipeline would conform to the Canadian Standards Association ("CSA") Z662-03 Oil and Gas Pipeline Systems Code and the requirements of Ontario Regulation 210/01 under the Technical Standards and Safety Act, 2000. GEC confirmed that it would obtain a licence and pay the corresponding fee required to operate the proposed pipeline as required by section 18 of Ontario Regulation 210/01.

An Environmental Report was prepared by SENES Consultants for the proposed facilities which indicated that there will be minimal and temporary environmental impacts given the implementation of the mitigation measures that were recommended and accepted by GEC. The SENES Consultants report was reviewed by the Ontario Pipeline Coordinating Committee ("OPCC") in accordance with the process outlined in the Board's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* ("Guideline"). The OPCC had no outstanding concerns with the project.

The Union Pipeline

Union, in its competing application, proposed to construct 2 km of 12 inch natural gas pipeline to supply gas to the generating station at an estimated cost of \$5.1 million. The proposed Union pipeline would originate at Union's Courtright Station which is connected to the Vector and TCPL pipelines. Union holds the municipal franchise and certificate rights to distribute natural gas in the Township of St. Clair. Construction would start in the spring of 2007.

Union's proposed route is similar to the route proposed by GEC except that it is somewhat shorter, runs on the east side of Greenfield Road and terminates at Union's Courtright Station. It does not cross any pipelines. The location of the proposed pipeline within the Greenfield Road allowance falls under Union's existing franchise agreement with the Township of St. Clair and an encroachment permit is not needed. The proposed route crosses Wylie Drain and Union would require a permit to cross from the Ministry of Natural Resources and the Conservation Authority. Union's proposed pipeline route is shown in Appendix 4.

The proposed pipeline will be installed in road allowance and on easement on privately owned lands. A previously Board-approved easement form was provided to the affected landowners.

The only permanent easement that may be required by Union would be an easement from Terra, the lessor of the GEC plant site. The easement may be needed to connect the pipeline to the power plant. In the hearing, Union explained that its industrial customers would typically either enter into an easement agreement or elect not to enter into an agreement. Should the easement agreement be requested, Union would offer to Terra a recently Board-approved form of easement agreement.

According to Union, design, installation and testing specifications for the proposed pipeline are in accordance with the CSA Z662-03 Oil and Gas Pipeline Systems Code and will conform to the requirements of Ontario Regulation 210/01 under the Technical Standards and Safety Act 2000.

An Environmental Report was prepared by Stantec Consulting for the proposed facilities which indicated that there will be minimal environmental impacts given Union's standard construction practices and the mitigation measures recommended in the report and accepted by Union. The Stantec Consulting report was reviewed by the Ontario Pipeline Coordinating Committee in accordance with the process outlined in the Board's Guideline. The OPCC had no outstanding concerns with the project.

Chapter 2 – Board Findings

What we have before us are two competing applications to build and operate a gas pipeline to serve the GEC plant. There are certain standard issues that the Board considers in its review of applications for leave to construct a pipeline. We will look at those issues in this case. In addition, since the GEC application is an application for bypass, it invokes additional public interest issues beyond those which would be considered if the only applicant was Union. The Board will also assess GEC's competency to build and operate its own pipeline.

In our view, the issues before for the Panel are as follows:

- a) Is there a need for a pipeline?
- b) Are there any undue negative rate implications for Union's customers, if Union builds the pipeline?
- c) What are the environmental impacts associated with the proposed pipelines and are they acceptable?
- d) Are there any outstanding landowner matters for each pipeline proposal?
- e) Is GEC a competent builder and operator for the proposed pipeline?
- f) Is GEC's bypass application in the public interest?
- g) Should one or both applications be approved and what should the conditions of that approval be?
- h) Does GEC need a Certificate of Public Convenience and Necessity?

For the reasons set out below, the Board finds that both applications for leave to construct should be approved, subject to certain conditions.

a) Is there a need for a pipeline?

The Board must be satisfied that there is a need for a proposed pipeline before approval is granted.

GEC has entered into a 20-year Clean Energy Supply contract with the Ontario Power Authority to construct and operate a new 1,005 Megawatt natural gas-fired power plant at Courtright, south of Sarnia. The power plant is scheduled to be completed in time to begin operating in December 2007. The purpose of the pipeline is to carry the natural gas to the GEC power plant. Should all approvals for the power plant be obtained and GEC proceeds to build the plant, there is clearly a need for a pipeline to carry natural

gas to the power plant. The approval of Union's application is conditional on Union having the GEC power plant as a customer.

b) Are there any undue negative rate implications for Union's customers, if Union builds the pipeline?

Should it be the case that there is an agreement that Union will serve the GEC power plant, the economics of the pipeline project become a consideration as the costs will be borne by Union's ratepayers.

Based on Union's evidence, the overall profitability index for the pipeline project is estimated at over 10 assuming a revenue stream based on Union's firm T1 service. This evidence by Union was tested but not challenged. The Profitability Index is below one only in the first year of the project. We accept Union's estimates and are satisfied that there would not be undue adverse rate impacts on Union's ratepayers in the first year. Should Union build the pipeline as a result of a negotiated interruptible rate, or a combination of firm and interruptible service, Union must demonstrate at the time that it seeks to reflect the costs of this project in its rates that the project is economically feasible and that any adverse rate impacts are not undue.

c) What are the environmental impacts associated with the proposed pipelines and are they acceptable?

The pipelines proposed to be constructed by each applicant are similar in their routing. As required by the Board's Guideline, both applicants filed environmental reports undertaken by known consultants, who also testified at the hearing. Both reports concluded that there are only minimal and temporary effects associated with the building of the pipeline. Consideration was given to cumulative effects from other projects, including the construction of the GEC generating station, as confirmed in the answers to interrogatories and in the hearing, but because the environmental impacts of the pipeline itself were minor, any cumulative effects were considered insignificant. Both applicants stated that they will abide by the recommendations contained in their respective environmental reports.

Cumulative Effects

(i) Scope of Review

An issue arose during the hearing with respect to whether the applicants had appropriately abided by the Board's Guideline. The Guideline requires consideration of the environmental impacts of other projects within the area of pipeline construction under section 4.3.13 entitled "Cumulative Effects". That section states in part:

In many situations, individual projects produce impacts that are insignificant. However, when these are combined with the impacts of other existing or approved projects, they become important. Such cumulative effects may include both biophysical and socio-economic effects, and should be identified and discussed in the ER as an integral part of the environmental assessment.

The Guideline indicates that the consideration of cumulative effects should not be restricted to the immediate area of pipeline construction. The section relating to cumulative effects is a subsection of the Guideline relating to the identification of environmental impacts in the context of route and site selection. The relevant and operative portion of section 4.3.13 reads, in part:

The applicant is required to consider four distinctive cumulative effects pathways when delineating the study area and analysing and assessing the cumulative effects:

. . .

(g) additive effects of pipeline construction and other existing and future projects in the area (e.g. additive forest cover losses due to tree clearing for pipeline construction and subdivision development);

(h) interaction of pipeline construction with other existing and future projects in the area (e.g. cold stream fish habitat degradation as an interactive effect of increased erosion and sedimentation due to pipeline stream crossing and floodplain development downstream).

This excerpt from the Guideline indicates that the Board will have regard to the cumulative effects of the construction of the GEC generating station together with the pipeline. What is crucial to the review of cumulative effects, however, is to understand the scope of that review.

SEP and PWU, who adopted the same position in the proceeding, argued that there has not been a proper assessment before the Board of the cumulative environmental impacts of the proposed facilities and therefore, both applications should be denied.

In these parties' view, a proper assessment should involve examination of the environmental and socio-economic effects of the construction and operation of the GEC generating station in addition to the pipeline because the pipeline and the generating station are interconnected. In their view, the environmental effects of the station are "indistinguishable from the use and operation of the pipeline which serves it" such that the public interest test in section 96 of the OEB Act cannot be satisfied without a full consideration of the cumulative effects from construction of both the station and the pipeline. It is argued that there are adverse effects on air quality due to emissions from the generating station, on water quality associated with the discharge of heated water into the St. Clair River and adverse socio-economic impacts related to job and economic losses as a result of the construction of the GEC generating station and the potential subsequent closure of the Lambton generating station. They argue that these are environmental effects that the Board should consider in its environmental review of the proposal to construct a pipeline to serve the station. In support of their position, the two parties provided certain case law and referred to best environmental practice from other jurisdictions. They also argued that the Board's own Guideline confirms their position.

Both GEC and Union argued that the Province has an environmental assessment regime for natural gas-fired generation facilities and that this process was completed by the refusal of the Minister of the Environment to elevate the process to a full environmental assessment. A full assessment had been requested by SEP. The effect of the proposition by SEP and PWU is not only that the Board would second guess the Minister's discretion, but it would be erring in law. Both applicants argued that the cumulative effects provision in the Board's Guideline is for analysing the combined effects of the pipeline construction with the effects caused by the

construction of the power facility in such areas for example as noise and soil disruption. In their view, the cumulative effects section does not expand the review into any and all possible environmental and socio-economic effects of shutting down the Lambton coal-fired generation station due to the government's off-coal policy. GEC termed the intervention of SEP and PWU in this proceeding as forum shopping.

The Board disagrees with SEP and PWU.

In our view, this section of the Guideline requires an applicant to first identify the environmental (including socio-economic) effects of the project that is the subject of the application, in this case the construction of the pipeline. Once these effects are known, the applicant identifies whether there are any other existing or known future projects in the study area. If there are any such other projects, the applicant determines whether any of the effects from the construction of the pipeline will be made worse or act to increase the environmental damage caused by similar effects of other projects in the area. To be clear, only those effects that are additive or interact with the effects that have already been identified as resulting from the pipeline construction are to be considered under cumulative effects. If the environmental impacts are compounded, the applicant will, with the help of experts in the field, determine whether these effects warrant mitigation measures such as alterations in routing, timing of construction or other measures that can address the cumulative impacts and the Board will review the adequacy of those measures.

One of the examples provided in the Guideline is forest cover. If the clearing of a right-of-way for the pipeline involves the cutting of a few trees, this may be a minor overall effect on the environment. However, if the applicant is aware that a new subdivision is being developed in the same area and that for this purpose, significant forest cover would be removed, this could be an important consideration for the Board. The Board would expect that the applicant would propose mitigation measures, if, for instance, species of interest could be affected by cumulative impacts and this factor would, along with the applicant's proposed mitigation measures, weigh into the Board's determination of public interest. It is important to note, however, that the identification of a cumulative impact is not, in and of itself, necessarily fatal to an application. It would warrant further investigation by the Board so that the Board may satisfy itself

that all reasonable measures are being taken to minimize or avoid the impacts and it may lead to certain conditions being imposed upon an applicant during construction.

This is not to say that the cause of damaging effects of pipeline construction and the other projects must be identical to be considered cumulative. For example, a reduction in productivity of the soil can be caused by a number of factors such as compaction, disturbance of watercourses, mixing of soil layers and removal of vegetation. Each of these causes of soil degradation should be considered as cumulative impacts on the soil. However, there must be some effect caused by the pipeline construction itself to trigger an assessment of similar effects caused by other projects.

In this case, the applicants each identified minor and temporary environmental effects arising out of the construction of the pipeline. The only other project that was identified as being in the study area of the pipeline was the construction of the GEC generating station. Mr. Muraca of SENES Consultants testified for GEC that:

“The impacts of the pipeline, as stated in the report, are basically from construction impacts. They’re minor. They’re transitory, and, as I said in the interrogatories, again, the only interaction it could have is an overlap in construction time period between that and the proposed GEC.”

In respect of the cumulative effects of the pipeline and the GEC generating station, he indicated that:

“Once, again, the pipeline, once the pipeline is operating and is in the ground and has no air, land or water impacts. So the operation of the pipeline is not an issue to be taken in consideration with the operation of the GEC.”

It is appropriate for the applicants to consider any cumulative (either additive or interactive) effects between the pipeline construction and the construction and operation of the GEC generating station but in this case, the environmental effects of the power station that are raised by SEP and PWU, namely, air emissions, the taking and discharge of water into the St. Clair River, and the loss of jobs and other socio-economic impacts consequent on the closure of the Lambton generation station, cannot be tied back to some effect of pipeline construction. In our view, the fact that

the existence of the pipeline will enable a certain end use to occur does not mean that the environmental effects of that end use are within the realm of “cumulative effects” as contemplated in the Board’s Guideline. We are satisfied from the evidence before us that the effects from the pipeline are minimal and the cumulative effects from the construction of the generating station will only last for the duration of the construction phase of the pipeline. These effects are different from the environmental effects related to the operation of a GEC gas-fired generating station, which are not cumulative with respect to the pipeline project in any respect.

(ii) Jurisdiction to Review Environmental Effects of the GEC generation station

The Board’s jurisdiction over gas pipeline construction derives from the OEB Act and the *Municipal Franchises Act*. Both these Acts prescribe a public interest test, but do not provide criteria for assessing the public interest.

SEP and PWU cited case law from various Canadian jurisdictions that, in their view, demonstrate that a tribunal with a broad public interest mandate can and should look beyond the narrow scope of the specific environmental effects of the facility before it for approval, and consider the environmental effects of construction connected to or enabled by the facility under review: Bow Valley Naturalists Society v. Canada [2001] 2 F.C. 461 (C.A.); Friends of the West Country Assn v. Canada (Min. of Fisheries and Oceans) 31 C.E.L.R. (N.S.) 239 (Fed C.A.); Nakina (Township) v. Canadian National Railway Co. [1986] F.C.J. No. 426 (C.A.); Québec (A.G) v. Canada (N.E.B.) [1994] 1 S.C.R.159; Sumas Energy 2 Inc. v. National Energy Board (unrep.) Nov 9, 2005, Fed. C.A. In the Board’s view, and as discussed below, the cited cases are either distinguishable from the situation before the Board or make points that are instructive to the Board and are incorporated as indicated.

In Bow Valley Naturalists Society v. Canada, Canadian Pacific Hotels proposed to develop a meeting facility in Banff National Park and conducted an environmental screening that was reviewed and approved by Parks Canada. The Bow Valley Naturalists Society and Banff Environmental Action and Research Society launched a judicial review of the Parks Canada decision based on the failure of the proponent to include within the screening several future developments included in its Long Range Plan and related to the meeting facility. In reviewing the Parks Canada decision, the

Federal Court of Canada found that the Superintendent's assessment and inclusion of some of the aspects of the broader project within the cumulative effects analysis was reasonable. In the Board's view, this case takes a narrower view of cumulative effects than the Board in respect of the application of its Guideline. As previously indicated, the Board does require a consideration of the cumulative effects of the GEC generating station in the context of the impacts of the pipeline construction and is satisfied that the cumulative effects are minor or non-existent.

In Sumas Energy 2 Inc. v. National Energy Board a developer applied under provisions of the *National Energy Board Act* ("NEB Act") for a Certificate of Public Convenience and Necessity to construct an international power line connecting its proposed generation station located in the U.S. to a substation located in British Columbia. Ultimately, the Federal Court of Appeal did not interfere with the NEB's decision that it had the jurisdiction to consider the environmental impact in Canada of the power plant in the U.S. in the context of an application to construct the international power line. This case can be distinguished from the case before this Board.

Although the international power line itself would have been subject to an environmental assessment pursuant to the *Canadian Environmental Assessment Act* ("CEAA"), the power plant would not have undergone a similar assessment by a Canadian entity. The NEB did have before it testimony from the U.S. environmental review that concluded that the power plant was expected to emit more than 800 tons of pollutants annually into the Fraser Valley air shed. The Board identified the negative environmental impact in Canada stemming from the U.S. plant as a "relevant" consideration in its decision. In addition, the Federal Court of Appeal determined that although there was a U.S. environmental assessment the NEB "...had to consider the Canadian perspective. Both were seeking to advance their respective public interests, which in this case did not coincide." (at par. 27) This is important since in the present case an environmental review process has been conducted in accordance with the Ontario *Environmental Assessment Act* and has been reviewed by the Ministry of the Environment. It is appropriate for the Board to defer to that Minister's expertise and

legislative mandate in respect of the GEC generating station and the Board recognizes that the Minister has regard to the public interest in the province of Ontario.

The case of Quebec (A.G.) v. Canada (N.E.B.) dealt with the grant of licenses for the export of electricity from Québec to New York and Vermont. The NEB granted the licences subject to the completion of environmental assessments of future generation facilities. The Supreme Court of Canada overturned the decision of the Federal Court of Appeal holding that the NEB acted within its jurisdiction by considering the environmental effects of the construction of future generating facilities. This case is distinguishable on the basis that the legislation provides expansive powers to the NEB in deciding whether or not to grant the licence. Specifically, the relevant section reads as follows:

119.06(2) In determining whether to make a recommendation, the Board shall seek to avoid the duplication of measures taken in respect of the exportation by the applicant and the government of the province from which the electricity is exported, and shall have regard to ***all considerations that appear to it to be relevant***, including

..

(b) ***the impact of the exportation on the environment***;

...

(d) such other consideration as may be specified in the regulations.

[Emphasis added]

It was, therefore, clearly within the NEB's jurisdiction to consider all relevant issues, including environmental issues in the context of the export licence application.

It should also be noted that the NEB imposed the environmental assessment conditions upon the licence because the environmental effects of the construction of the future facilities were not known with certainty at the time the decision was made. The Supreme Court of Canada went to some length to discuss the NEB's jurisdiction vis-à-vis that of provincial regulators in terms of the environmental assessments of the plants that would be built to export power. The court was careful to note that the provinces would have jurisdiction over the environmental assessment of the plants but that the NEB would still be concerned about the subset of environmental effects from the plant stemming from the power generated for export. The court found that there could be "co-existence of responsibility" for reviewing the environmental aspects of exports.

From this Board's perspective, this case is therefore, distinguishable because of the NEB's express jurisdiction to consider the environmental aspects of the exports and the fact that, although this is not expressly stated in the decision, it is implied that if an environmental assessment had been available from the relevant environmental assessment agency, the NEB would likely have used the conclusions of that assessment to assist it in making its determination. In this case this Board does have the results of a completed environmental review process and is without the jurisdiction or the desire to embark on a review of the process in relation to that assessment.

The case of Friends of the West Country Assn v. Canada (Min. of Fisheries and Oceans) is not on all fours factually with the case before the Board but is instructive to the present inquiry. The facts of the case involved a federal environmental assessment under the CEAA of two bridges proposed to be constructed by a forestry company. The federal environmental assessment was triggered as a result of water crossings requiring permits under the *Navigable Waters Protection Act*. The Coast Guard was the responsible authority for the purposes of advancing the environmental assessment. Part of the case revolved around the application of sections 15(1), 5(3) and 16(1) of the CEAA which read as follows:

15(1) The scope of the project in relation to which an environmental assessment is to be conducted shall be determined by

(a) the responsible authority; or...

15(3) Where a project is in relation to a physical work, an environmental assessment shall be conducted in respect of every construction, operation, modification, decommissioning, abandonment or other undertaking in relation to that physical work that is proposed by the proponent...

16(1) Every screening or comprehensive study of a project and every mediation or assessment by a review panel shall include a consideration of the following factors:

(a) the environmental effects of the project, including...any cumulative environmental effects that are likely to result from the

project in combination with other projects or activities that have been or will be carried out;

A lower court judge had determined that section 15(3) of the CEAA required the Coast Guard to include within the scope of the environmental assessment, the construction of a road associated with the bridges that had already been approved by the Province of Alberta Environmental Protection. On appeal, the Federal Court of Appeal determined that the road should not be included and stated as follows:

The words “in relation to” in subsection 15(3) might be read in the abstract to contemplate any construction, operation, modification, decommissioning, abandonment or other undertaking that has any connection, no matter how remote, to the physical work which is the focus of the project as scoped. However, such an interpretation would ignore the context of sections 15 and 16 and the logical reason for the words “in relation to” in subsection 15(3). The first contextual point is that the responsible authority is required to scope the project under subsection 15(1). This would be an unnecessary exercise if, under subsection 15(3) every other construction, operation, modification, decommissioning, abandonment or other undertaking that had even a remote connection to the project had to be the subject of the environmental assessment. Second, paragraph 16(1)(1) provides for a cumulative effects analysis taking account of the project as scoped under subsection 15(1) in combination with other projects or activities that have been or will be carried out. This portion of paragraph 16(1)(a) would be redundant if projects or activities outside the project scoped under subsection 15(1) had to be considered under subsection 15(3).

This finding is relevant to the Board’s inquiry for several reasons.

First, it is important to note that this appeal occurred entirely within the context of an environmental assessment conducted pursuant to the CEAA. There was no issue with an entity other than the entity charged with approving or rejecting environmental assessments conducting an environmental assessment for a project outside of its jurisdiction.

Second, there is no provision within the OEB Act or any regulation or guideline (including the Board's Environmental Guideline) made pursuant thereto, that is in any way similar to section 15(3) of the CEAA. Even with the existence of the requirements mandated by section 15(3) of the CEAA, in this case, the Federal Court of Appeal was not prepared to find that a project initiated by the same entity and linked to the project for which the environmental assessment was being sought, could be rolled-in to the larger project and require a broader environmental assessment. It is important to note that the Federal Court made this finding in spite of the fact that the regulator in this case clearly had the authority to conduct an assessment of the related project.

Finally, the Federal Court made reference to the cumulative effects provisions of CEAA and the interpretation and rationale for that section. Importantly, the Federal Court of Appeal later agreed with the lower court's decision that the Coast Guard had erred in excluding from its consideration the cumulative effects from other projects, including the road, in conducting its cumulative effects analysis.

This case, therefore, supports the Board's position that the applicants are required to conduct a cumulative effects analysis of other projects within the study area of the pipeline but that this analysis is not tantamount to conducting a new environmental assessment of those other projects and in no way confers upon the Board the jurisdiction to review any existing assessment.

The Board's mandate is set out in Section 96(1) of the OEB Act which provides that:

If, after considering an application under section 90, 91 or 92 the Board is of the opinion that the construction, expansion or reinforcement of the proposed work is in the public interest, it shall make an order granting leave to carry out the work.

In this case, the proposed work is the construction of a pipeline, not of an electricity generation station.

In the Board's view, the law is clear that jurisdiction on environmental matters associated with the power station falls under the *Environmental Assessment Act* administered by the Ministry of the Environment, and not with the Ontario Energy Board. The process under the provincial *Environmental Assessment Act* in relation to

the GEC generating station has been concluded. During the hearing, GEC filed a letter from the Minister declining the elevation request made by SEP and PWU. SEP and PWU argued that refusal by the Minister of the Environment to elevate the GEC generating station project from the requirements of an environmental screening to those of an individual environmental assessment means that there will have been no proper environmental assessment of the GEC generating plant and that this makes it even more incumbent on the Board to undertake such a review as it is now the only authority that could undertake or order the assessment. However, a denial of an elevation request to carry out a full environmental assessment does not confer jurisdiction in the Board to undertake a further environmental assessment of the station. For the Board to engage in the kind of review argued by SEP and PWU would be to exceed our jurisdiction.

The Board finds that an assessment of the environmental and socio-economic effects of the construction and operation of the GEC generating station are outside the scope of its jurisdiction, with the exception of the narrower issue of “cumulative effects” as outlined above.

The Guideline, as it is a statement of Board policy, does not prohibit the Board from looking into matters that may be relevant and practical under given circumstances. This does not mean however that the Board can consider matters that are clearly outside its jurisdiction.

SEP and PWU are in effect asking the Board to engage in an environmental review associated with the use of the energy or the product or service. In addition to the jurisdictional problems inherent in undertaking a review of the environmental effects of the end use of the gas flowing through a pipeline, there are practical problems.

In general, the gas pipeline construction proposals reviewed by the Board are not tied to a single end use. In some cases, the load which drives the initial need for a pipeline changes or disappears and other loads are served. It would be highly impractical for the Board to attempt to assess the environmental impacts of loads to be served by a gas pipeline. As a matter of general policy, it would be undesirable to find that the Board’s public interest mandate under section 96 of the OEB Act requires such an assessment. If the Board thought that cumulative impacts should involve the end-use of the energy, it would have said so in its Guideline or would have provided guidance

to address such complications and impracticalities that arise from that interpretation of cumulative impacts.

The proceeding revealed that the intervention and interests of SEP and PWU were out of scope.

Conclusions

The environmental reports filed by the applicants identified some minor environmental effects along the construction corridor, and proposed measures for their mitigation. We find that the environmental reports, including their assessment of cumulative effects, are adequate, given the nature of the construction proposed. However, in future, the Board will require that applicants ensure that the consulting reports they sponsor also depict, or at least repeat or summarize, the analysis and findings on cumulative effects separately for an easier review by the Board and intervenors. The presentation of the cumulative impacts in the SENES Consultants report could have been better organized.

We find the environmental impacts associated with each of the proposed pipelines acceptable. The Board will require that GEC and Union comply with the recommendations for environmental protection and mitigation recommended by their respective environmental consultants. This condition is included in the respective Conditions of Approval for each applicant appended to this decision.

d) Are there any outstanding landowner matters for each pipeline proposal?

In a leave to construct application for a gas pipeline, the applicant must satisfy the Board that it has offered or will offer to each owner of land affected by the approved route or location an agreement in a form approved by the Board.

On the evidence, the Board approves the agreement forms that have been provided to the affected landowners by both applicants and finds that there are no outstanding matters in this regard, except as follows. GEC shall update the Board as to whether it intends to withdraw the stayed section 101 application or to reactivate it.

Walpole Island First Nation ("WIFN") intervened in these proceedings because it has four land claims that it asserts are affected by the proposed GEC generation station and by the gas pipelines proposed by the two applicants. It provided pre-filed and oral

evidence and made submissions. Walpole's intervention was driven by its concern about the consultation and accommodation process for matters affecting First Nations.

During its oral submission, WIFN advised that it had reached an agreement with GEC to address WIFN's concerns about the impacts of the proposed project; it did not disclose the nature of that agreement.

WIFN reported that Union indicated that it intends to reach agreement with WIFN over its concerns if Union is successful in its application. In that regard, WIFN asked that the Board impose a condition upon Union that in the event that Union receives leave to construct the pipeline, it must negotiate an agreement with WIFN to address the impacts of the pipeline on its land claims. Union responded that while it fully expects to reach an agreement with WIFN regarding the proposed pipeline, it viewed the condition as strict and unnecessary. Union noted that, should the Board find that such condition is necessary and order it, Union might have to come back to the Board for relief if there is no agreement reached.

We note that the first stage of the archaeological assessment indicated that there is a moderate possibility of archaeological sites that may be impacted by Union's proposed route and that therefore a stage 2 assessment will be conducted. Union stated that it would welcome participation from WIFN during that assessment. On the basis of the evidence and testimony, we find the language of the proposed condition to be too broad and strict, and, we believe, unnecessary. It would place Union in the difficult position of having to reach an agreement if it did not wish to risk a delay in the final determination of its application for leave to construct. This is not only a Union matter. It is also a public interest matter. In the result, rather than the proposed condition, the Board is prepared to impose a condition that Union shall involve a representative designated by the WIFN in the stage 2 archaeological assessment of the pipeline route. Union shall also provide to the Board the results of the stage 2 assessment and indicate whether there are outstanding matters in respect of that assessment. This condition is included in the Conditions of Approval appended to this decision.

A general issue raised by WIFN is that the Ontario Energy Board needs to put in place a policy to deal with situations where the Board's decisions could impact constitutionally-protected First Nations rights and for which consultation with First Nations is required. In support of its position, WIFN referred to findings of the courts

about the duty to consult and commented how these should be reflected in the Board's work.

In WIFN's view, while the Ontario Energy Board does not need to undertake direct consultation with First Nations in reviewing applications brought before it, the Board does have a responsibility to ensure that it receives the appropriate evidence that consultation has occurred. WIFN filed a public communiqué from the National Energy Board, dated August 3, 2005, in which the NEB acknowledged that the NEB's policy on consultation with First Nations needed to be revisited to reflect current law.

We note that WIFN is not asking the Board to put into place a new policy based on the record of this particular proceeding. Rather, WIFN is asking the Board to start a process to develop a policy regarding consultation with First Nations and to consult with First Nations as to what that consultation process ought to be. The Board agrees that the matter of creating a Board policy needs to be reviewed, and the Board will do so.

e) Is GEC a competent builder and operator for the proposed pipeline?

The Board has a responsibility to ensure applicants in leave to construct cases have the financial and operational ability to build and operate the proposed facilities in a safe and reliable manner.

Enbridge submitted that the Board should concern itself with a financial challenge that GEC may be facing. The purported challenge is based on a public report of the financial difficulties currently being experienced by Calpine Corporation.

Through its subsidiaries, Calpine Corporation will be acting as the lead in developing and operating the project. Evidence provided by GEC indicates that the current financial difficulty being experienced by Calpine Corporation should not have a direct impact on the financial wherewithal of GEC, the applicant. Testimony of Mr. Wendelgass, witness for GEC, under cross examination from Enbridge Gas Distribution, indicated that the financial challenges of Calpine Corporation had been considered by the partners in GEC.

"Calpine's financial troubles are Calpine's to resolve, but they're not necessarily of relevance to Greenfield Energy Centre because of the structures that Greenfield Energy Centre has in place to deal with those kinds of risks, which

the partners have recognized from very early on.”

Since the time of the hearing, it is on the public record that Calpine Corporation has filed for bankruptcy protection. This does not change the Board’s acceptance that GEC’s application should be assessed on the partnership’s own merits as testified by Mr. Wendelgass.

The Board’s interest in ensuring that GEC has the financial ability to build and operate the pipeline for which it is requesting leave to construct is also addressed in the single purpose nature of the pipeline. The reliance of the GEC generation facility on the pipeline for its operation marries the investment and risk mitigation objectives of the two projects. If the construction of the generation plant does not proceed, then the pipeline will not be built.

We do find however that there remains the issue of competency.

In seeking leave to construct a gas pipeline that will be a physical bypass of the distributor with a franchise in the territory, GEC has submitted evidence on its capabilities to build and operate the pipeline as well as procure and manage the supply of the gas to the GEC generation plant.

The supply of gas to the generating facility will be an ongoing concern of the generation plant operation regardless of ownership. If Calpine’s experience in procuring and managing gas supply is not available to the GEC partnership, the risk rests with the partnership. The price paid to GEC under the CES contract will not change. However, the safe and reliable operation and maintenance of the pipeline remains a public concern regardless of ownership and is therefore of importance to the Board.

Based on GEC’s submission, GEC has yet to identify the entity that it will engage for the pipeline operation and maintenance. Options cited were to use trained personnel from the GEC generation plant itself or contract for services with local experienced service providers. In any event, GEC recognized that it, as the applicant, is responsible for the ongoing operation and maintenance of the pipeline. In demonstrating its capacity to fulfil its responsibility, GEC relied on evidence pointing to

its relation to Calpine Corporation and the Calpine experience in these types of undertakings.

We find that the GEC partnership, as it existed at the time of the hearing, has demonstrated that it is competent to build and operate the proposed gas pipeline in a reliable and safe manner. However, Calpine's financial challenges, acknowledged by GEC at the hearing and confirmed since with Calpine's filing for bankruptcy protection, create a real possibility that the roles of the existing partners in GEC could change. We therefore find that it would be in the public interest to attach a condition to the approval of GEC's application that enables the Board to receive information and review the capabilities of any new participants in the project that will bear responsibility for the construction or operation of the pipeline. This is a Board matter and any material changes noted above shall be filed with the Board for its review and shall not necessarily constitute a re-opening of the hearing.

f) Is GEC's bypass application in the public interest?

Physical bypass in Ontario's natural gas sector refers to the construction and use of a facility other than that of the distributor with a franchise to distribute gas in the territory. This is distinguishable from economic bypass, a situation where a customer may seek and obtain a bypass competitive rate from the utility with the approval of the Board. GEC's application is for physical bypass.

Section 90 of the OEB Act, which deals with matters of leave to construct a hydrocarbon line, refers to a "person" that may seek an order of the Board. A person

may be other than a distributor. While the incumbent distributor may have a high expectation of being the only entity to construct and serve in its franchise area, it does not have an absolute right.

Over the years, the Board has dealt with many applicants seeking bypass status, mostly in pursuit of a bypass competitive rate. Some were successful, others were not. In all cases the Board considered these applications from a public interest perspective and will do so in this application.

The public interest issue before the Board is whether GEC should be allowed to build its own pipeline interconnection with Vector, thereby bypassing the Union distribution

system, giving consideration to the circumstances that apply in this specific case. In considering this issue the Board takes as its starting point its conclusion in EBRO 410-I/411-I/412-I, in which it stated:

The Board is of the opinion that a general policy opposing bypass is not in the public interest. The Board will consider each application for bypass on its individual merits. The Board does not consider it appropriate to limit its consideration of any specific application at this time. In reaching this conclusion, the Board relies on a very broad definition of the public interest.

In that Decision, the Board went on to identify a number of criteria to be considered in assessing applications for bypass. These criteria have been used in subsequent Board decisions dealing with applications for bypass since the EBRO 410-I/411-I/412-I Decision.

These criteria are:

1. Cost/economic factors related to the applicant, the utility, and the utility's other customers
2. The type of bypass (single or multiple customers; incremental or existing load)
3. The duration of the bypass (will the end-user return to the LDC)
4. Safety and environmental factors
5. Rate-making alternatives and other rate-making options
6. Public policy
7. Other factors relevant to the specific application

In our view, these criteria form a useful framework in which to consider the public interest aspects of GEC's application.

1. Cost/Economic Factors

Under this criterion, we will consider the impact on GEC, the impact on Union and the impact on Union's ratepayers.

Impact on GEC

GEC claimed that through operating its own interconnection with Vector, it will be able to

- (i) pay a lower price than if it is served by Union; and

- (ii) have greater flexibility, control and more effective access to competitive upstream services than is available from Union, which would provide greater flexibility, and greater control over future costs.

With respect to price, GEC testified that Union's T1 firm service that would apply to GEC is more expensive than alternative services on Vector, but acknowledged that this comparison was illustrative only, and did not provide precise evidence as to the price differential or the precise services GEC will use. Union and others argued that there is not sufficient evidence to determine the price differential between the GEC proposal and service on Union. Many parties believed that this comparison was integral to establishing the credibility of GEC as a bypass candidate and that the lack of this evidence was grounds for denying the application.

Beyond direct cost comparisons of building the pipeline as opposed to being served by Union, GEC argued that building its pipeline will provide it with greater flexibility and greater control over its costs over the life of the overall project. GEC testified that it wants direct access to competitive services through operating in the wholesale market on its own in order to ensure the efficient operation of the plant, and that it values the ability to manage its own services and the flexibility to make changes over time. Union countered that as negotiations between it and GEC ended, the only disagreement was around price, not services or flexibility.

We find that it is not necessary for GEC to establish the cost differential precisely. GEC has provided credible evidence that the cost of transportation service to its facility will be less if it self-serves, and that it will have greater control over long term costs, flexibility and access to competitive upstream services than if it were to use Union's current firm service offerings. This does not mean that a cost comparison is not necessary in an application for physical bypass. To find so would mean that the Board was abrogating its responsibility to ensure that an application for physical bypass is economically rational. In the case of comparing service on Union and services on Vector, the precise cost differences can not be known until negotiations are complete and a contract (or contracts) is signed. This uncertainty is not a reason to deny GEC's application, because it does not give rise to the same adverse effect as in a bypass competitive rate application. In a bypass competitive rate application, the Board must ensure that the rate is no lower than necessary and must therefore have precise

information regarding the bypass alternative. The same risk does not arise in this application, because it is for physical bypass and not for a bypass competitive rate.

In the case of physical bypass, this risk is self-correcting. If the application is approved and GEC does bypass, then it will be because it is more cost effective to do so (in terms of price, flexibility, control and access to competitive upstream services) than to take service from Union. If GEC were to determine that bypass is not genuinely more cost effective than service from Union, given the possibility that Union may still be in a position to make further offers even if GEC's application is approved, then it is highly probable that GEC will instead negotiate for service from Union. To the extent that the service is negotiated within the parameters of Union's approved rates, then a special rate application will not be required.

Many parties criticized GEC's testimony that the GEC plant may not be built if the application is denied, as the project's partners will need to reassess the situation. Some parties characterized this as a threat and as disrespectful to the Board. They urged the Board to conclude that the threat was not credible. We note that GEC has not testified that the plant will not be built if the application is denied. The fact that there is a risk that the plant will not be built is not a reason to approve the application. However, even if we were certain that the plant would be built if the application were denied, that would not be a sufficient reason to deny the application. Consequently, the risk associated with the plant not being built has not influenced our conclusions on this application.

GEC testified that it had included the costs of connecting to and using Vector in its CES bid. Similarly, we do not find this factor directly determinative for the application. This was a risk which GEC took; it is not a reason to approve the application. We do observe, however, that this factor demonstrates GEC's commitment to attempt to meet the expected return it assumed in a competitive process, and enhances GEC's credibility that it in fact intends to construct the facilities.

Impact on Union

Union testified that approval of GEC's application could have adverse impacts on its long term planning and the rational development of the gas system and on its cost of capital and access to financing. If the GEC application is approved, Union will be deprived of the investment on which it would have had an opportunity to earn a return.

Those opposing GEC's application supported Union's evidence on the adverse consequences of approving GEC's application. In our view, the approval of GEC's application will not significantly undermine Union's expectations regarding the likelihood of it serving customers in its franchise area. As Union itself acknowledged, it does not have an absolute right to serve. There is no evidence that the approval of one physical bypass application changes that presumption fundamentally.

With respect to system planning, Union maintained that it cannot plan the system rationally if it does not retain its high expectation that it will serve new loads in its franchise area. We observe that system expansions, if they are to serve one customer, are invariably supported by a contract, and if they are for general system growth, then they are not dependent upon a single customer.

With respect to cost of capital and access to financing, Union acknowledged that the impact will be a function of how capital markets interpret the Board's decision. We note that the GEC application is being considered within the traditional bypass framework, and the risk of physical bypass has always existed. That risk is being realized in this case, but there is no direct or immediate adverse impact on shareholders or investors, and there are no stranded assets.

We do agree that these long-term, indirect factors are potential concerns. However, these risks are more speculative than the assessment of the short term impact, which is limited to Union's foregone return on the assets that would be used to serve GEC. Also, these long-term risks arise from subsequent applications, not the GEC application itself. More importantly, though, the adverse impacts can largely be managed by the Board and the utilities. Specifically, as we will discuss further below, the Board concludes that it is in the public interest to allow GEC the opportunity to bypass Union's distribution service because the Board is not convinced that Union's distribution service, as presently structured, provides GEC with the control, flexibility and access to competitive upstream services that GEC requires. We believe that this case has not exhausted the review of the adequacy of distribution services in Ontario to meet the requirements of customers with requirements similar to GEC's. That review will be conducted in the Natural Gas Electricity Interface Review (or NGEIR) proceeding. Union (and Enbridge) will have the opportunity in that proceeding to propose alternative services to meet these requirements.

Impact on Union Ratepayers

Two potential ratepayer impacts were identified. First, if GEC is allowed to bypass, then Union's other customers will not receive the benefit of GEC's contribution to system costs. Second, if GEC is allowed to bypass, then Union might lose \$29 million in existing margin if other similarly situated customers bypass or get bypass competitive rates.

GEC argued that there is no direct adverse impact on Union's ratepayers if GEC's application is granted. Union, and others, countered that the impact of lost revenues and the associated contribution to system costs, is an important consideration. If GEC took service from Union, it would lower rates for other Union customers. As a Union T1 customer, GEC would make a significant contribution to system costs - based on firm T1 rates, the Net Present Value of the pipeline project is over \$46 million and the Profitability Index is over 10. GEC characterized this as a cross-subsidy from GEC to Union's ratepayers; others characterized it as a contribution to system costs.

We agree that customers who are connected to the utility system should contribute to system costs. However, the rates must be just and reasonable. There would be a benefit to other ratepayers if GEC takes service from Union, but this benefit might be the result of providing a service which does not meet the needs of GEC. We note that if the application is approved, the indirect adverse impact on other ratepayers is balanced by a direct benefit to GEC. Rates for other customers will not increase as a result of approving GEC's application, but GEC's ability to control its costs, to operate flexibly and have more effective access to competitive upstream services will be enhanced. We find that the adverse impact of foregone revenues is not as great as the adverse impact of lost revenues, and that therefore this case can be distinguished from other potential applications by the fact that GEC is an incremental load.

With respect to the potential margin loss, Union identified \$29 million as the upper limit and was careful to acknowledge that it did not believe the full impact would come about. One approval to bypass does not necessarily result in a flood of similar applications. IGUA submitted that if GEC's application is approved, then all large volume gas users should be entitled to similar authorizations. We find that such a sweeping conclusion would be contrary to the Board's historic and continued approach to consider bypass on a case-by-case basis, considering all the circumstances. In the case of a bypass competitive rate application, the Board will have to carefully consider

the public interest issues with respect to a special rate in situations where the customer has been served on the posted rate, apparently satisfactorily, for some time.

2. Type of Bypass

The issue arises as to whether there is duplication of facilities and/or stranded assets associated with granting the GEC application. The concern regarding stranded assets is primarily a financial one, while the concern about duplication of facilities is grounded in environmental and economic efficiency concerns. In this case, the issue of stranded assets does not arise.

On the issue of duplication of assets, Union took the position that there will be duplication because it already has an interconnection with Vector and that those facilities were constructed at least in part because of expected gas-fired power generation in the area. Union characterized it as a loss of efficiency. Union also suggested that there would be duplication of facilities if it were necessary to add facilities in the Sarnia area for future load growth, that might otherwise be unnecessary if Union were to build the GEC pipeline. GEC countered that Union's evidence is that

Union's interconnection with Vector was driven by issues of system stability in the area for all customers and that it might have been sized to accommodate some additional growth, but not the addition of a 1000 Megawatt plant in the area.

While we accept that there is a potential risk related to future duplication and reduced efficiency, it is speculative in nature, and not material. There is no evidence as to the timing and extent of future load growth in the area, nor is it certain that Union's proposed facilities to serve GEC would be sufficient to serve that future load. We conclude that any potential adverse impact is not of sufficient significance to deny GEC's application. With respect to the immediate duplication of facilities, this is limited to the Union-Vector interconnect and we are of the view that potential adverse impact in terms of environmental and economic efficiency concerns is not such that it would warrant denying the application.

The concerns of parties in respect of the impact of duplication on the rational development of the distribution system focused on the long term effect, not of the GEC application in isolation, but rather in combination with likely future applications. The Board must necessarily be cautious when arriving at conclusions regarding future

impacts – both positive and negative – of as yet unmade applications and possible developments. It is Union's and the Board's responsibility to ensure that these developments as they occur do not yield adverse outcomes.

Our conclusion on this issue is based on a case specific analysis. If other customers were to seek to bypass Union, the issues related to the duplication of facilities and the stranding of assets may be more significant.

3. Duration of the Bypass

GEC has applied to build facilities dedicated for the plant, and the plant has a 20-year contract with the OPA. GEC may still contract for services on Union, which we note would mitigate the "notional" cost shifting associated with the bypass. No issues were raised in this area, and we conclude that there is no particular impact on the public interest related to this criterion.

4. Safety and Environmental Factors

Elsewhere in this decision, we have addressed the safety and environmental concerns arising from the construction and operation of the GEC pipeline. We do not need to consider those issues further here.

5. Rate-making alternatives to bypass and other rate-making options

The Board described the significance of this criterion in its decision in EBRO 410-1/411-1/412-1 as follows: "Bypass is a question of competing economic benefits. Potential rate-making solutions must be considered as alternatives to ensure that the public interest is fully protected." In coming to this conclusion, the Board made the following observation:

The major question that underlies the entire discussion on bypass is how well is regulation working in determining utility prices that are appropriate for the changing circumstances in Ontario. Bypass as a circumstance is economically motivated and likely unnecessary if rates are properly determined using sound regulatory principles.

The evidence is that GEC has undertaken negotiations with Union for both T1 firm and T1 interruptible services. However, a mutually acceptable arrangement has not been achieved. GEC has indicated that even if its application is approved, it will make its

decision on commercial grounds and is prepared to continue discussions with Union in this regard. Union testified that it offered GEC the lowest unitized rate on its system and submitted that to go lower would have compromised its principles and would not be consistent with its practices. Union did not provide evidence as to the specific rate offered to GEC. Rather, it relied on qualitative descriptions of the factors surrounding negotiations.

There was much discussion in the hearing and in the submissions on the issue of postage stamp rates. Union's position is that bypass is completely antithetical to postage stamp rates. The Board continues to support the principle of postage stamp rates, but does not conclude that the approval of GEC's application would undermine that principle. An important foundation for postage stamp rates is the appropriate determination of a class and the accurate allocation of costs to that class. An equally

important consideration is that customers should be entitled to receive the services they require and the tariff should reflect those services appropriately.

We find that the evidence and submissions in this case suggest that loads such as GEC (in terms of size and requirements for flexibility) may warrant a different class, or different set of services, than the T1 rate class as currently structured. This is supported by recent developments as well as parties' submissions in this proceeding. Specifically,

- The Board directed Union to investigate this possibility in RP-2003-0063, and although in this proceeding Union filed the report prepared pursuant to that Board directive, this hearing was not constituted to address that issue directly, and the report was not tested.
- Board staff, in its report on the Natural Gas Electricity Interface Review has recommended that the Board examine services provided to power generators and similar gas consumers. The Board has subsequently confirmed that this issue will be addressed.
- Enbridge submitted that consideration should be given to developing new more flexible services for power generation customers and argued that ratemaking responses are the best response to changing market conditions, noting that this reflected the Board's comments in EBRO 410-I/411-I/412-I.

- VECC submitted that Union should be ordered to negotiate a more flexible rate with GEC and that new rate class options for both Union and Enbridge should be examined in the Natural Gas Electricity Interface Review.
- CCC opposed GEC's application, but it was not entirely satisfied with Union's approach in administering the T1 rate in that it in effect acts as a gatekeeper for investments in the electricity sector.
- Union, in its reply argument, acknowledged that there should be a tariff solution as an alternative to bypass.

We believe there may be a ratemaking alternative to GEC's bypass solution, one that is grounded in class-based postage stamp ratemaking. The public interest would be served if Union were able to negotiate a just and reasonable rate and package of services which met the needs of GEC. However, Union was not able to bring forward an alternative which was acceptable to GEC at this time. The issue is whether there is an onus on GEC to put forward a tariff alternative. We do not think so. Such an approach would be burdensome and costly for a non-utility applicant. Union itself acknowledged its responsibility for ensuring that its tariff meets its customer needs.

Enbridge took the position that new types of services may be needed, but suggested that this should be pursued through the Natural Gas Electricity Interface Review and that this application should not pre-empt that consideration. We agree with Enbridge that other gas-fired power generators (and other gas consumers with similar requirements) may well require flexibility regardless of location and that a tariff review is appropriate. We note that the Board has confirmed already that the Natural Gas Electricity Interface Review will address this issue. The question is whether GEC should be required to await that review. We think not. We remain satisfied that GEC's application must be decided now on its own merits, and we find that it is in the public interest to approve it. However, now that the scope of the Natural Gas Electricity Interface Review proceeding is better defined, the Board does not expect to decide any other bypass applications prior to the results of that proceeding. It must be emphasized that the approval of GEC's by-pass is being granted in a transitional state. Following the Natural Gas Electricity Interface Review, we expect distributors' tariffs to be more robust against bypass. The Board intends to bring this transition to a close as soon as possible.

6. Public policy

Two areas of public and regulatory policy were raised during the proceeding:

- the regulatory compact
- energy markets, in particular the electricity market

The Regulatory Compact

Union argued that the regulatory compact consists of the following components:

- the utility's obligation to serve
- the high expectation of the right to serve
- the opportunity to earn a fair return

We note that Union agreed that a utility does not have an absolute right to serve all customers in its franchise area. Likewise, the obligation to serve is not absolute, but is subject to economic feasibility. The main factor, though, is that whatever the balance between the right to serve and the obligation to serve, the utility is afforded the opportunity to earn a fair return on its existing investments. There has been no suggestion in this proceeding that that fundamental tenet will be compromised.

While Union acknowledged that it does not have an absolute right to serve, its position is that it should serve in all but the most exceptional circumstances. For Union, the standard or threshold for allowing bypass should be "special harm" or "exceptional circumstances", mainly associated with the customer having to cancel a project or shutting an existing facility. GEC, on the other hand, argued that Union's position regarding the threshold is not correct as the concepts of "special harm" or "exceptional circumstances" are not supported by the legislation. In particular, GEC pointed out that section 90 of the OEB Act refers to "person", not gas distributor, and section 96 refers to public interest, not special circumstances.

We do not agree completely with GEC in this regard. Given the history and development of the natural gas distribution system, there is a high burden of proof for a customer to bypass the distribution system. That being said, we do not agree with Union that GEC must demonstrate a "special harm" in order to qualify for bypass. Rather, the case to be met, as in all physical bypass or bypass competitive rate applications is the public interest under the given circumstances. We would also note that Union does not have a right to monopoly protection for competitive services. In other words, GEC's evidence is that the key concern it has with Union's T1 service is that it impedes access to competitive upstream services, especially storage and load

balancing services. Customers on Union's T1 service have less effective access to those services than do customers directly served by Vector. It is in the public interest for customers to have access to the services they require. In this case, GEC cannot currently access adequate services from Union. It is therefore in the public interest to allow GEC to pursue those services directly through the option of bypassing Union. Appropriately designed distribution services can be designed to be robust against bypass. The same cannot be said about competitive services that are bundled with distribution services.

We must still consider whether the granting of GEC's application is contrary to the regulatory compact. We think not, given that all parties recognize that the right to

serve is not absolute. The Board has always indicated that bypass was a possibility. Does the fact that one has been granted somehow make others more likely? Again, we think not. Union has some control given its ability to develop rates which address the economic drivers for bypass. We note that if Union developed suitable services, it would reduce the economic incentive to seek bypass and enhance Union's position in asserting its right to serve, thereby reducing the likelihood of the Board approving a bypass or bypass competitive rate. The Board retains ultimate control through the exercise of its jurisdictions regarding bypass and rate setting.

Given the continued practice of case-by-case decision making for bypass, we conclude that the regulatory compact is not adversely affected by the granting of this application.

Energy Markets

Union, VECC and Enbridge argued that the Board's legislated electricity objectives are not relevant to this application and only the gas objectives are relevant. CCC on the other hand submitted that the Board must take account of the impact on electricity. GEC argued that the Board can take account of its electricity objectives in gas matters. In its view, the list of objectives for gas matters would not have been intended to result in the Board ignoring other relevant considerations.

Bypass cases have always been case specific examinations, involving an enquiry into the specific circumstances of the customer in question and a broad assessment of the public interest. In this case the customer is an electricity generator. Some parties

suggested that the Board should examine only the economic circumstances of the customer, but not the broader circumstances related to its end use.

Our decision to grant GEC's application is based on the requirements which GEC has demonstrated it requires and our finding that Union's current services do not meet those requirements. No special consideration has been given to GEC because it is an electricity generator. We did not also need to assess GEC's applications within the Board's electricity objectives. The Board is concerned with ensuring all gas customers have the opportunity to receive services which they require and which allow them to operate as cost effectively as possible. While the integration of the gas and electricity markets makes it particularly important for generators to be able to control transportation and related service costs over the long term, there may be other customers who require the same type of control, flexibility and access to competitive upstream services.

We therefore conclude that it is in the public interest to allow GEC the option to operate as economically efficiently and cost effectively as possible by having as much flexibility, control, and access to competitive upstream services as possible. This consideration is important given the uncertainty of future market conditions and uncertainty regarding operating parameters. This conclusion is grounded in GEC's status as a potential gas consumer and market participant, not on the basis that it is a generator in the Ontario electricity market.

Some parties noted that if the GEC application were granted, this might represent discrimination against other power generators or would create a precedent for other power generators. Similarly, IGUA submitted that there should be no special regulatory treatment for a large volume customer on the basis of end use as this would be discriminatory. The principle of case-by-case consideration of bypass and bypass competitive rate applications has always allowed for the potential for discrimination; the issue is whether the result is undue discrimination and therefore not in the public interest. Determination of that requires individual assessment of each applicant, again on a case-by-case basis. We conclude from the evidence and testimony that not all generators, or large volume customers, will necessarily have the same level of economic motivation as GEC and that if Union develops a rate and services which meet their needs, the motivation to bypass will be addressed. We note that to the extent that a new tariff is developed, customers will be eligible based on their load

characteristics, not their end use. No other generators, or large volume customers, have pursued a bypass application to the same degree as GEC. We cannot conclude now that there would be undue discrimination.

7. Other factors relevant to the specific application

There was some discussion during the proceeding regarding the potential analogy between gas bypass and electricity bypass. GEC raised this analogy in support of its application, but Union submitted that the evidence was not sufficient for the Board to conclude that the analogy was valid and that therefore consistent treatment was warranted. We note that Union did not address in any detail why the analogy is not appropriate. In any event, we do not have the evidence necessary to make a conclusion on this point, and therefore it has not been considered in the overall determination of the application.

Conclusions

We find that the public interest would not be well served if we deny GEC's application. It is in the public interest for gas customers to have access to the services they require. In this case, GEC cannot currently access adequate services from Union. It is therefore in the public interest to allow GEC to pursue those services directly through the option of bypassing Union. At the same time, Union and other parties have not established that Union or its other customers would suffer direct harm in the event that GEC's application is approved. Moreover, GEC's application is credible. Therefore we find GEC's application to be in the public interest and will approve it.

We believe that it is possible for Union to develop a tariff solution for customers of the size and needs of GEC to permit the utility's offerings to be more robust against bypass. It is within the control of Union and the Board to manage the longer term, more speculative impacts arising from this transitional decision, beginning with the pending Natural Gas Electricity Interface Review proceeding. It is not in the public interest in this case however to require GEC to await the resolution of an appropriate tariff in the NGEIR proceeding.

g) Should one or both applications be approved and what should the conditions of approval be?

The competing applications are for a natural gas pipeline to serve the same potential load. Our findings on the two applications can be summarized as follows. If a power

generating station is built at the proposed location, there is clearly a need for a pipeline to serve the power plant. There are no negative rate implications for Union's customers, if Union builds the pipeline. There are no outstanding matters from the perspective of the Ontario Pipeline Coordination Committee with respect to the environmental reports commissioned by both applicants. The environmental impacts associated with the proposed competing pipelines are found by the Board to be acceptable and there are no outstanding landowner matters for either pipeline proposal. Union is known to be a competent builder and operator of gas pipelines. The Calpine group of companies that will be building and operating the GEC pipeline under contracts with GEC are also experienced builders and operators of pipelines in many jurisdictions in the United States. The applications of Union and GEC are credible and in the public interest.

Whether there is a high or low probability that GEC and Union will come to an arrangement whereby the power plant may become Union's customer, we must allow for that. We conclude therefore that it is in the public interest to approve both applications, subject to the normal conditions the Board imposes for such applications and certain other specific conditions in the case of GEC that flow from our findings in this decision. These conditions are attached as appendix 5 and 6 for GEC and Union, respectively.

Naturally, the approval for Union's application is non-operative if it does not have the GEC power plant as a customer. A key condition therefore for Union is that it must contract to provide service to the GEC plant whether owned by GEC or another entity, as long as the power plant is in the same location and requires the same proposed pipeline, both in terms of size and route.

With respect to the approval of GEC's application, as noted earlier, should there be any new participants in the project that will bear responsibility for the construction or operation of the pipeline, GEC must submit the relevant information to the Board.

h) Does GEC need a Certificate of Public Convenience and Necessity?

In addition to its application for leave to construct a hydrocarbon pipeline, GEC applied for a Certificate of Public Convenience and Necessity (or "Certificate") under section 8(1) of the *Municipal Franchises Act* (MFA). That subsection reads:

8.(1) Despite any other provision in this Act or any other general or special Act, no person shall construct any works to supply,

- (a) natural gas in any municipality in which such person was not on the 1st day of April, 1933, supplying gas; or
- (b) gas in any municipality in which such person was not on the 1st day of April, 1933, supplying gas and in which gas was being supplied, without the approval of the Ontario Energy Board, and such approval shall not be given
- (c) unless public convenience and necessity appear to require that such approval be given.

There was some debate at the hearing as to whether GEC needed a certificate to build the pipeline, as no person other than the GEC facility would be supplied with gas through the pipeline. Counsel addressed some remarks on the question of whether the word “supply” in section 8 included the situation where the builder and operator of the pipeline was the same entity that received the gas.

In addition, GEC took the position that it would not be a gas distributor within the meaning of section 3 of the OEB Act. “Gas distributor” is defined as follows:

“gas distributor” means a person who delivers gas to a consumer, and “distribute” and “distribution” have corresponding meanings;

The question of whether the recipient of a Certificate under the MFA could be exempt from regulation as a distributor under the OEB Act was not addressed at the hearing.

As GEC has applied for a Certificate, and has thereby acknowledged the jurisdiction of the Board to grant a Certificate in this situation, the question is not squarely before us. However, it may be of some use to future proponents to have some indication of the Board’s views on this issue.

First, it is clear from the MFA that the application of section 8 is not restricted to utilities or gas distributors. The need for pre-approval applies to all persons.

Secondly, it appears that the purpose of section 8 of the MFA is to deal with construction of works to supply gas, not the supply of gas itself. The first part of section 8 of the MFA, before an amendment in 1998, read:

8.(1) Despite any other provision in this Act or any other general or special Act, no person shall construct any works to supply, **or supply**
(a) natural gas in any municipality...
(*emphasis added*)

The amendment reduced the scope of section 8 of the MFA such that it is the construction of works that is addressed by the section.

The Board finds that a purposive interpretation of the MFA suggests that all persons who wish to construct pipelines to supply natural gas need a Certificate, unless such persons are exempted by the words in the section that relate to supply before 1933. The Board is of the view that the section applies even where the recipient of the gas is identical with the constructor of the pipeline. We find that the word “supply” should be interpreted to include supplying oneself.

It is important that the Board retain oversight of the construction of hydrocarbon pipelines in Ontario for reasons including safety, regulatory policy and the avoidance of the unnecessary proliferation of gas works. As pointed out in the hearing, not every gas pipeline is subject to approval under the leave to construct provisions of the OEB Act. The need for a Certificate under the MFA provides the Board with the opportunity to assess the need for a gas pipeline and the competency of the proponent to construct the line safely.

In contrast, the definition of “gas distributor” under the OEB Act addresses the delivery of gas to a consumer. Many of the provisions relating to gas regulation in the OEB Act, such as the rate setting provision, deal with the relationship between the distributor and the consumers it serves. In the case before us, there is no relationship to regulate, as the consumer of the gas is the same as the person who is delivering the gas. We find that it is not inconsistent to require a person to obtain a Certificate under the MFA, while finding that the person is not a gas distributor within the meaning of the OEB Act.

The Board finds that the applicant GEC should be required to obtain, and should be granted a Certificate of Public Convenience and Necessity under section 8 of the MFA. GEC has satisfied us of the need for the pipeline and that it is competent to undertake

construction and operation of the line. However, as indicated elsewhere in this decision, if the project partner Calpine is not overseeing construction, the Board will require GEC to provide the Board with information as to the entity supervising construction of the line and its competence in gas pipeline construction.

GEC indicated that it would not object to a geographic restriction of the Certificate to the area needed to construct and operate the pipeline. The Board finds that it would be appropriate to so restrict the Certificate. The certificate that it will be issued to GEC will be for the sole purpose of building the pipeline to supply gas to the GEC generating station. The area of the certificate shall cover only the area necessary for the construction of the pipeline including permanent and temporary workspace.

Union has a Certificate for the municipality, and those rights remain in effect.

Counsel for Union raised the question of whether Vector would need a Certificate for the facilities that will connect the GEC line to the Vector transmission line. However, Counsel for GEC made it clear in his reply submissions that Vector is not undertaking any construction of facilities. Section 8 of the MFA applies only to persons constructing works to supply gas. It therefore appears that Vector will not require a Certificate.

Board Order and Cost Awards

Pursuant to section 90 and 96 of the *Ontario Energy Board Act*, 1998 the Board grants GEC leave to construct the pipeline and associated equipment as applied for, subject to the conditions attached in Appendix 5. Pursuant to section 8 of the *Municipal Franchises Act*, the Board grants GEC a Certificate for Public Convenience and Necessity, which shall be issued to GEC in due course.

Pursuant to section 90 and 96 of the *Ontario Energy Board Act*, 1998 the Board grants Union leave to construct the pipeline and associated equipment as applied for, subject to the conditions attached in Appendix 6. Union's rights in its existing Certificate for the municipality remain in effect.

GEC and Union shall pay in equal shares intervenor cost awards. GEC and Union shall also pay in equal shares the Board's costs, if any. Intervenors eligible for cost awards shall file their cost statements with the Board, GEC and Union by January 16,

2006, in which they must indicate the requested percentage of cost recovery. GEC and Union may respond by January 31, 2006, and intervenors may reply by February 15, 2006.

Dated at Toronto, January 6, 2006

Original signed by

John Zych
Board Secretary

Appendix 1

Active Participants and Witnesses RP-2005-0022

Applicants

Counsel or Representative

Greenfield Energy Centre Limited
Partnership ("GEC")

Patrick Moran
Ogilvy Renault LLP

Union Gas Limited

Gordon Cameron
Blake, Cassels & Graydon LLP

Active Intervenors

Counsel or Representative

Aiken & Associates

Randy Aiken

Canadian Manufactures &
Exporters ("CME")

Brian Dingwall
Barrister & Solicitor

Consumers Council of Canada
("CCC")

Robert Warren
Weir Foulds LLP

Enbridge Gas Distribution

Helen Newland
Fraser Milner Casgrain LLP

Federation of Northern Ontario
Municipalities ("FONOM")

Peter Scully

Industrial Gas Users Association
("IGUA")

Vincent DeRose
Borden Ladner Gervais LLP

Power Workers' Union ("PWU")

Andrew Lokan
Paliare Roland Rosenberg Rothstein LLP

Society of Energy Professionals
("SEP")

Paul Manning
Willms and Shier Environmental Lawyers
LLP

TransCanada Energy ("TCE")

David M. Brown
Stikeman Elliott LLP

Walpole Island First Nation
("WIFN")

Lorraine Land
Olthuis Kleer Townshend
Barristers and Solicitors

Vulnerable Energy Consumers
Coalition ("VECC")

Michael Janigan
Public Interest Advocacy Centre

Witnesses for GEC

Paul Wendelgass

Director, Business Development
Calpine Corporation

John Rozenkranz

Director, Gas Marketing
Calpine Corporation

Lyle Fedje

Director, Pipeline Operations
Calpine Corporation

Kristy Snarey

Senior Archaeological Field Director
Mayer Heritage Consultants Inc.

Joe Muraca

Environmental Scientist
SENES Consultants Limited

Witnesses for Union

Laura Callingham

Team Leader, Financial Analysis
Union

Larry Hyatt

Manager, System Planning
Union

David Wesenger

Senior Project Manager
Stantec Consulting Ltd.

Douglas Schmidt

Principal Technical Specialist, Construction
Permitting, Union

Gerard Mallette

Project Manager, Union

Beverly Wilton

Manager, Lands Department
Union

| | |
|---------------------------|--|
| Jeff Wesley | Manager, Franchise, Municipal & Aboriginal Relations Union |
| David Simpson | Director, Acquisitions, Union |
| David Dent | Strategic Manager, Retail Energy Marketers & Power Markets Union |
| Mark Kitchen | Manager, Rates and Pricing Union |
| Richard Birmingham | Vice President, Regulatory Affairs & Economic Development, Union |
| Witnesses for SEP | |
| Matthew Kellway | Staff Specialist, Policy Society of Energy Professionals |
| Witnesses for WFIN | |
| Dean Jacobs | Chief of the Walpole Island First Nation |
| David White | Acting Director, Heritage Centre Walpole Island First Nation |

Appendix 2
Decision On Motion
RP-2005-0022



RP-2005-0022
EB-2005-0441
EB-2005-0442
EB-2005-0443
EB-2005-0473

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15 (Sched.B);

AND IN THE MATTER OF an Application by GEC Energy Centre Limited Partnership for an Order or Orders pursuant to section 90 of the *Ontario Energy Board Act, 1998* granting leave to construct a natural gas pipeline in the Township of St. Clair, Ontario;

AND IN THE MATTER OF an Application by GEC Energy Centre Limited Partnership for an Order or Orders pursuant to section 101 of the *Ontario Energy Board Act, 1998* for authorization for certain road and utility crossings required for the proposed pipeline;

AND IN THE MATTER OF an Application by GEC Energy Centre Limited Partnership for a Certificate of public convenience and necessity, pursuant to section 8 of the *Municipal Franchises Act*;

AND IN THE MATTER OF an Application by Union Gas Limited for an Order or Orders pursuant to section 90 of the *Ontario Energy Board Act, 1998* granting leave to construct a natural gas pipeline in the Township of St. Clair, Ontario.

BEFORE: Paul Vlahos
Presiding Member

Cynthia Chaplin
Member

Ken Quesnelle
Member

DECISION ON MOTION

November 7, 2005

The Proceeding

An application, dated July 20, 2005, was filed by the GEC Energy Centre Limited Partnership ("GEC") with the Ontario Energy Board under section 90 of the *Ontario Energy Board Act, 1998* for leave to construct a 2 km natural gas pipeline.

GEC plans to construct a 1005 MW gas-fired generating station in Courtright, in the Township of St. Clair, south of Sarnia, and the application requests approval for the construction of a pipeline to serve the generating station which is located in the franchise of Union Gas Ltd. ("Union").

If leave to construct the pipeline is granted, GEC also seeks an order authorizing the crossing of public roads and utilities pursuant to section 101 of the Act and a certificate of public convenience and necessity, pursuant to section 8 of the *Municipal Franchises Act*. The Board assigned File Nos. RP-2005-0022/EB-2005-0441/EB-2005-0442/EB-2005-0443 to GEC's application. The Board issued a notice of GEC's application on July 28, 2005.

Union filed an application, dated August 30, 2005, with the Board under section 90 of the Act for leave to construct a 2 km natural gas pipeline to supply gas to the generating station. Union's application represents a competing proposal to GEC's application. The Board has assigned File No. EB-2005-0473 to Union's application.

In Procedural Order No. 2, issued September 9, 2005, the Board ordered that the proceeding for GEC's application (RP-2005-0022/EB-2005-0441) and Union's application (EB-2005-0473) be combined and heard together in a joint proceeding.

On October 6, 2005, the Board received a Notice of Motion and Motion Record from GEC. The Notice of Motion and Motion Record were served on all the parties in the proceeding by e-mail on October 6, 2005. In the Notice of Motion, GEC seeks an order of the Board to exclude certain evidence filed on October 4, 2005, by the Society of Energy Professionals ("the Society").

In Procedural Order No. 3, issued October 12, 2005, the Board established a written process to deal with the motion and set dates for the filing of submissions by parties in the joint proceeding and the filing of reply submissions by GEC. On October 20, 2005, the Society, the Power Workers Union ("PWU"), and Union Gas Limited filed submissions on the motion. On October 24, 2005, GEC filed its reply submissions.

The Motion

In its Notice of Motion, GEC asked the Board to exclude the following documents from the Society's evidence:

- Tab 1: "Ontario Supply Mix into the Future-proposals from the Society of Energy Professionals, August 26, 2005"
- Tab 2: "Submissions Re The OPA Procurement Process. Submitted by The Society of Energy Professionals, July 29, 2005"
- Tab 3: "Letter to Mr. James O'Mara, Director, Environmental Assessment and Approvals Branch, MOE re: The Society of Energy Professionals Environmental Assessment Elevation Request, July 8, 2005"
- Tab 4: "Excerpts from GEC Energy Centre LP Environmental Review report, June 2005"
- Tab 5: "Canadian Energy Research Institute Levelized Unit Electricity Cost Comparison of Alternate Technologies for base-load generation in Ontario report, August 2004"
- Tab 7: "Canadian Council of Ministries of the Environment-Canada-Wide Standards for Particulate Matter (PM) and Ozone, June 5-6, 2000"

GEC submitted that this material is inadmissible because it is irrelevant to the proceeding and the Board's decision on the GEC application. In GEC's view the scope of the proceeding set by the Board in Procedural Order No. 1 does not

include the issues addressed by the evidence filed by the Society.

The Society also included in its evidence the Board document entitled “*OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, Fifth Edition, May 2003*” (the “Environmental Guidelines”). This evidence was not challenged by GEC, but the Board invited submissions on whether it needed to be filed as evidence, as it is a publicly available Board document.

Board Findings

In the Board’s view, the issues it needs to address are the following:

1. Procedural decisions to date
2. The Board’s consideration of the public interest
3. Cumulative environmental impacts

Procedural decisions to date

The Society argues that previous procedural documents issued by the Board on this application have already decided the issues brought forward in the Motion and that the Motion is duplicative and ought to be dismissed. The Board does not agree that the granting of intervenor status to the Society removed GEC’s right as an applicant to challenge the relevance of the Society’s evidence. In its letter of September 9, 2005 granting intervenor status to the Society, the Board did not address the request made by GEC in its letter of September 6, 2005 to limit the Society’s intervention. The Board did not limit the Society’s intervention or make an advance ruling on any evidence the Society might bring forward in part because the Society’s letter of September 1, 2005 stated that the precise nature and extent of its participation was not yet determined.

The Board always retains the authority to govern its own process, including making rulings at any point during the proceeding as to the relevance of questions asked or evidence offered. The scope of evidence the Board will hear on a matter remains within its control throughout the hearing process. Once the evidence of the Society was filed, the Board was in a better position to assess the scope of the Society's intervention. The Board will not dismiss the motion on the ground that it has already determined the issue.

The Board's consideration of the public interest

The Society's assertion that its evidence is relevant is based, to a great degree, on its interpretation of the Board's responsibilities with respect to the "public interest" and the Board's statutory objectives under the Act. In the Society's view, the Board's public interest responsibilities in this proceeding should include scrutiny of the generating station being served. The Society argued that GEC itself relies on the public interest aspect of the generating station in its evidence.

Similarly, the PWU submitted that GEC's own evidence relies on claimed electricity and environmental policy benefits and that therefore the Society's evidence should be admitted as an appropriate challenge to those claims. In the PWU's view, the proposed pipeline should not be considered in isolation from the energy and environmental policy issues that relate to the GEC project as a whole.

GEC argued in its reply submissions that the issues covered in the Society's evidence were beyond Board's jurisdiction under sections 90 and 96 of the Act, and that the use of the phrase "public interest" does not broaden the Board's jurisdiction to include an assessment of the environmental or economic impact of the use of the gas flowing through the pipeline.

The Board does not agree with the Society's view as to how the objectives contained in the Act govern the Board's consideration of leave to construct

applications. The Board agrees with GEC's submission that section 96 does not create jurisdiction but rather relates to how the Board's jurisdiction is to be exercised. In determining whether to grant a leave to construct, the Board must determine whether the pipeline itself is in the public interest, not whether facilities connected to it will be in the public interest. There are other processes in place related to the generating station, including an environmental assessment process. In considering the leave to construct application, it is not within the Board's jurisdiction to determine whether the generating station is in the public interest. For these reasons, the material at tabs 1, 2 and 5 of the Society's material is not relevant and will be excluded from the record of this proceeding.

Cumulative environmental impacts

The Society also argued that there are cumulative environmental impacts related to the pipeline and the generating station and that therefore the evidence of the station's environmental and socio-economic impacts are relevant to the proceeding. The section on cumulative effects in the Board's Environmental Guidelines refers to the additive effects of pipeline construction and other existing and future projects in the area and the interaction of pipeline construction with these projects. The Guidelines include projects beyond just pipeline projects, as demonstrated by the reference at page 38 to subdivision development, and the instruction to not restrict the study area to the pipeline easement and related work areas. However, the examples in section 4.3.13 of the Guidelines indicate that the type of cumulative impacts considered are quite narrow; largely soil, water and vegetation impacts directly resulting from construction. The materials filed by the Society at tabs 3, 4 and 7 address matters that have not yet been considered by the Board in assessing the cumulative effects of pipeline construction, such as the effect on the airshed of the activities of the end user of the gas that will flow through the pipeline. The Board has yet to be persuaded that such matters are relevant to the pipeline applications in this case.

The Board notes that the environmental report filed by the applicant Union, at page 52, refers to the cumulative effects of the construction of the power station. It appears that the scope of the Board's consideration of cumulative impacts is unclear to both applicants and intervenors. The Board will not exclude the material filed by the Society at tabs 3, 4 and 7 on the basis of the motion record. However, it remains an open question as to the appropriate use and weight to be accorded to this material during the hearing.

Conclusion and Order

The Board grants the motion from GEC to the extent of excluding the materials filed by the Society at tabs 1, 2 and 5. The material found at the remaining tabs is not excluded from the record. The use to be made of and the weight to be given to the Society's material remains an open question in the hearing.

DATED at Toronto, November 7, 2005

ONTARIO ENERGY BOARD

Signed on behalf of the Panel

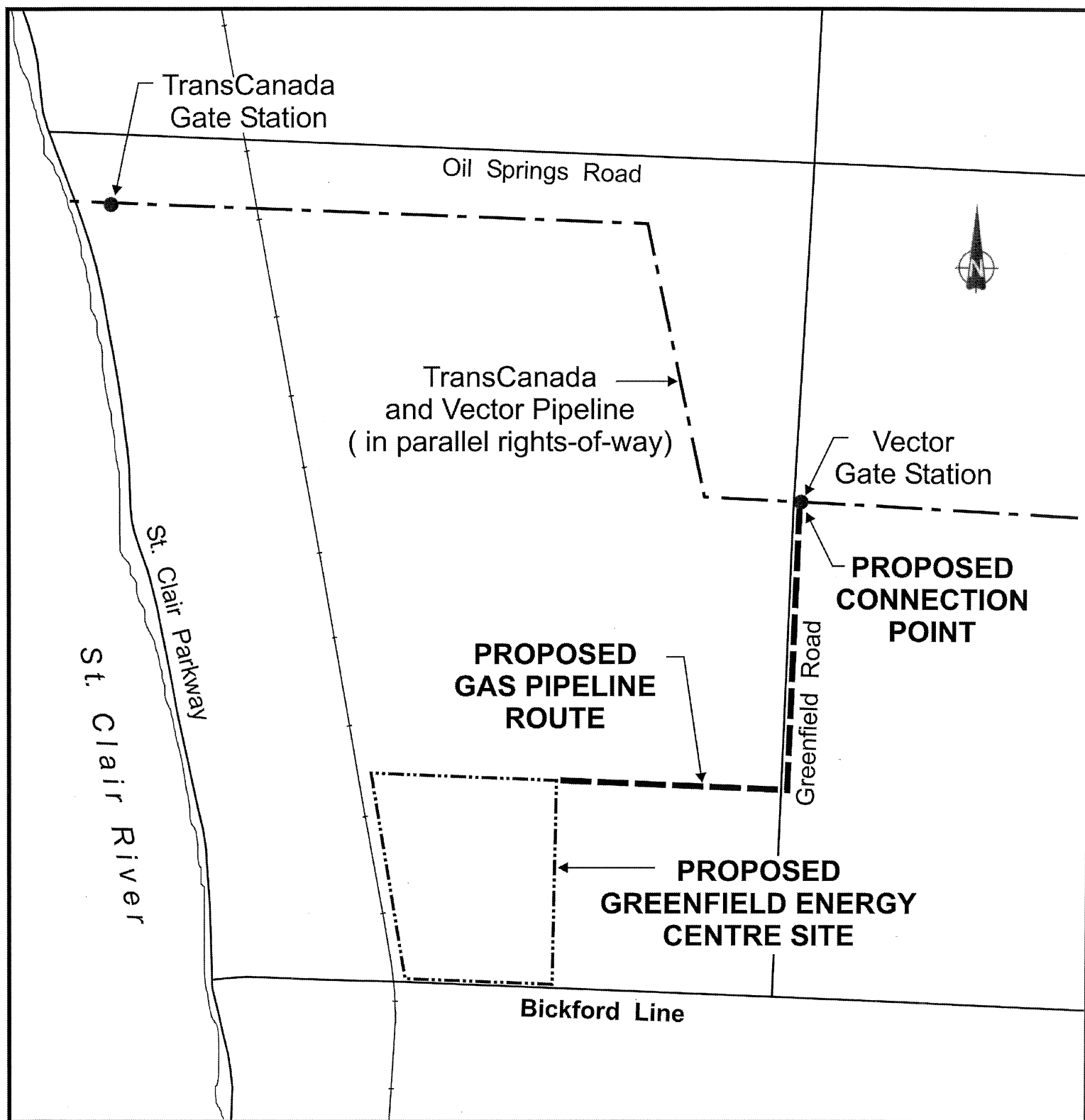
Original signed by

Paul Vlahos

Presiding Member

Appendix 3

**GEC – Proposed Route
RP-2005-0022**

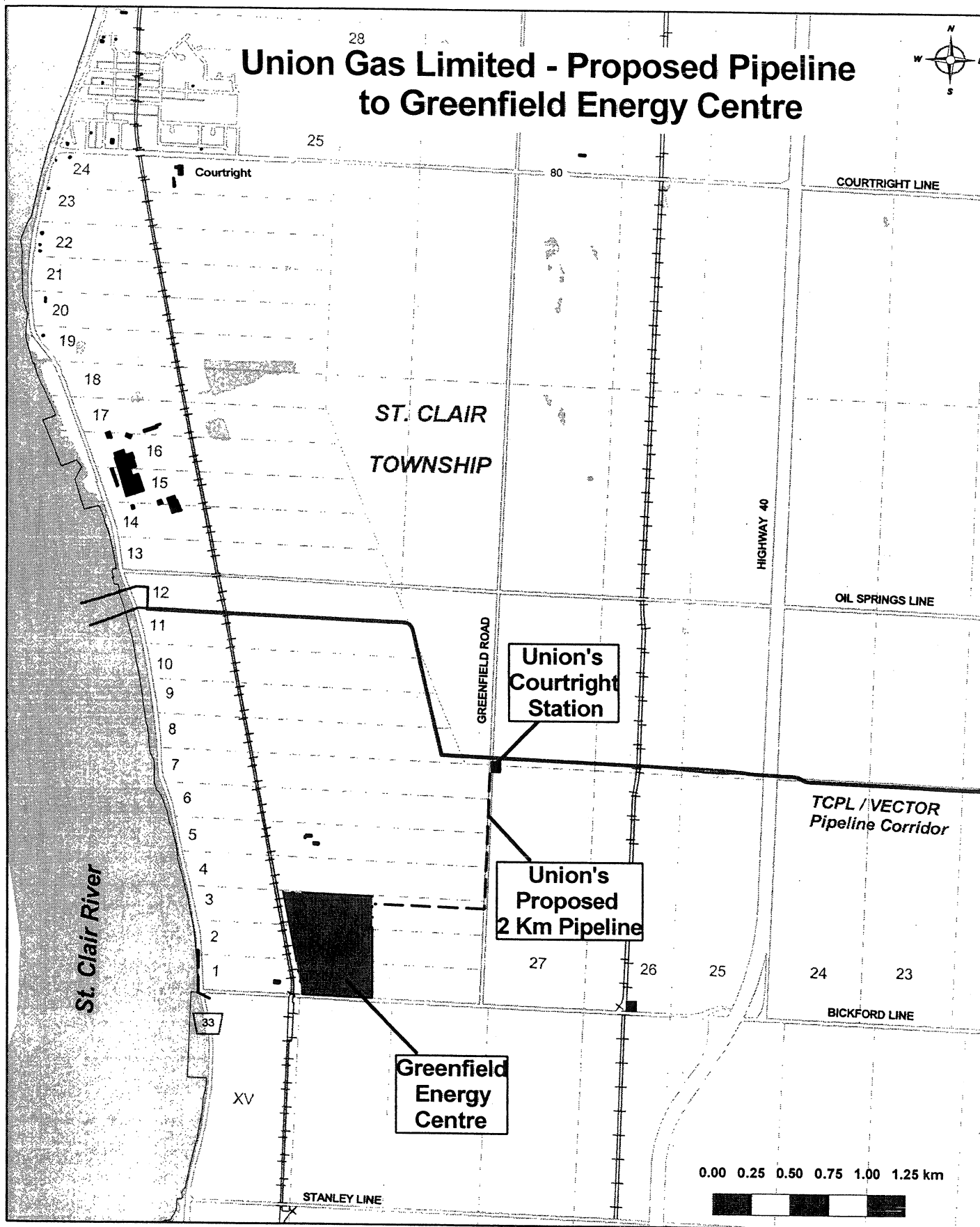


Greenfield Energy Centre LP Proposed Pipeline Route

Not To Scale

Appendix 4

**Union – Proposed Route
RP-2005-0022**



Appendix 5

CONDITIONS OF APPROVAL Leave to Construct Greenfield Energy Centre LP RP-2005-0022

1 General Requirements

- 1.1 Greenfield Energy Centre LP shall construct the facilities and restore the land in accordance with its application and evidence, except as modified by this Order and these Conditions of Approval.
- 1.2 Unless otherwise ordered by the Board, authorization for Leave to Construct shall terminate December 31, 2007, unless construction has commenced prior to then.
- 1.3 Except as modified by this Order, Greenfield Energy Centre LP shall implement all the recommendations of the Environmental Study Report filed in the evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee ("OPCC") review.
- 1.4 Greenfield Energy Centre LP shall advise the Board's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Greenfield Energy Centre LP shall not make such change without prior approval of the Board or its designated representative. In the event of an emergency, the Board shall be informed immediately after the fact.
- 1.5 A survey of water wells shall be conducted along and within 100 m adjacent to the preferred route. Water samples should be analyzed for parameters agreed with the MOE Regional Office. Monitoring of the water wells must be carried out where dewatering or work below the water table is required. Permanent water service must be restored to landowners who experience any interference or interruption to water supply due to pipeline construction.
- 1.6 Blasting will not be permitted.

2 Project and Communications Requirements

- 2.1 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Facilities.
- 2.2 Greenfield Energy Centre LP shall designate a person as project engineer and shall provide the name of the individual to the Board's designated representative. The project engineer will be responsible for the fulfilment of the Conditions of

Approval on the construction site. Greenfield Energy Centre LP shall provide a copy of the Order and Conditions of Approval to the project engineer, within seven days of the Board's Order being issued.

- 2.3 Greenfield Energy Centre LP shall give the Board's designated representative and the Chair of the OPCC ten days written notice, in advance of the commencement of the construction.
- 2.4 Greenfield Energy Centre LP shall furnish the Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the Board's Order.
- 2.5 Greenfield Energy Centre LP shall file with the Board's designated representative notice of the date on which the installed pipelines were tested, within one month after the final test date.
- 2.6 Greenfield Energy Centre LP shall furnish the Board's designated representative with five copies of written confirmation of the completion of construction. A copy of the confirmation shall be provided to the Chair of the OPCC.

3 Monitoring and Reporting Requirements

- 3.1 Both during and after construction, Greenfield Energy Centre LP shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within eighteen months of the in-service date. Greenfield Energy Centre LP shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.
- 3.2 The interim monitoring report shall confirm Greenfield Energy Centre LP's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.
- 3.3 The final monitoring report shall describe the condition of the rehabilitated land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

4 Other Approvals

- 4.1 Greenfield Energy Centre LP shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, shall provide a list thereof, and shall provide copies of all such written approvals, permits, licences, and certificates upon the Board's request.

5 Project Specific Conditions

- 5.1. In the event that Calpine Corporation and its subsidiaries will not be constructing and operating the proposed pipeline, Greenfield Energy Centre LP must file with the Board, when its plans are finalized and before construction is commenced, the name and description of the entity or entities that will construct and operate the pipeline, including the provision of emergency services. The description must be sufficient for the Board to properly assess the competence of the entities to undertake their role in the pipeline project.

Appendix 6

CONDITIONS OF APPROVAL Leave to Construct Union Gas Limited RP-2005-0022

1 General Requirements

- 1.1 Union Gas Limited shall construct the facilities and restore the land in accordance with its application and evidence, except as modified by this Order and these Conditions of Approval.
- 1.2 Unless otherwise ordered by the Board, authorization for Leave to Construct shall terminate December 31, 2007, unless construction has commenced prior to then.
- 1.3 Except as modified by this Order, Union Gas Limited shall implement all the recommendations of the Environmental Study Report filed in the evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee ("OPCC") review.
- 1.4 Union Gas Limited shall advise the Board's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union Gas Limited shall not make such change without prior approval of the Board or its designated representative. In the event of an emergency, the Board shall be informed immediately after the fact.
- 1.5 A survey of water wells shall be conducted along and within 100 m adjacent to the preferred route. Water samples should be analyzed for parameters agreed with the MOE Regional Office. Monitoring of the water wells must be carried out where dewatering or work below the water table is required. Permanent water service must be restored to landowners who experience any interference or interruption to water supply due to pipeline construction.
- 1.6 Blasting will not be permitted.
- 1.7 Union Gas Limited shall involve a representative designated by the Walpole Island First Nation in the stage 2 archaeological assessment of the pipeline route. Union Gas Limited shall also provide to the Board the results of the stage 2 assessment and indicate that there are no outstanding matters in respect of that assessment.

2 Project and Communications Requirements

- 2.1 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Facilities.
- 2.2 Union Gas Limited shall designate a person as project engineer and shall provide the name of the individual to the Board's designated representative. The project engineer will be responsible for the fulfilment of the Conditions of Approval on the construction site. Union Gas Limited shall provide a copy of the Order and Conditions of Approval to the project engineer, within seven days of the Board's Order being issued.
- 2.3 Union Gas Limited shall give the Board's designated representative and the Chair of the OPCC ten days written notice, in advance of the commencement of the construction.
- 2.4 Union Gas Limited shall furnish the Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the Board's Order.
- 2.5 Union Gas Limited shall file with the Board's designated representative notice of the date on which the installed pipelines were tested, within one month after the final test date.
- 2.6 Union Gas Limited shall furnish the Board's designated representative with five copies of written confirmation of the completion of construction. A copy of the confirmation shall be provided to the Chair of the OPCC.

3 Monitoring and Reporting Requirements

- 3.1 Both during and after construction, Union Gas Limited shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within eighteen months of the in-service date. Union Gas Limited shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.
- 3.2 The interim monitoring report shall confirm Union Gas Limited's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the

long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.

- 3.3 The final monitoring report shall describe the condition of the rehabilitated land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

4 Other Approvals

- 4.1 Union Gas Limited shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, shall provide a list thereof, and shall provide copies of all such written approvals, permits, licences, and certificates upon the Board's request.

5. Project Specific Conditions

- 5.1 Union Gas Limited must be under contract to provide service to the GEC plant whether owned by GEC or another entity, and the power plant must be in the same location and require the same proposed pipeline, both in terms of size and route. Union Gas Limited shall file with the Board a copy of the contract as soon as it becomes available.

Appendix 1

Active Participants and Witnesses RP-2005-0022

Applicants

Counsel or Representative

Greenfield Energy Centre Limited
Partnership ("GEC")

Patrick Moran
Ogilvy Renault LLP

Union Gas Limited

Gordon Cameron
Blake, Cassels & Graydon LLP

Active Intervenors

Counsel or Representative

Aiken & Associates

Randy Aiken

Canadian Manufactures &
Exporters ("CME")

Brian Dingwall
Barrister & Solicitor

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Robert Warren
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Helen Newland
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Senior Archaeological Field Director
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Laura Callingham

Team Leader, Financial Analysis
Union

Larry Hyatt

Manager, System Planning
Union

David Wesenger

Senior Project Manager
Stantec Consulting Ltd.

Douglas Schmidt

Principal Technical Specialist, Construction
Permitting, Union

Gerard Mallette

Project Manager, Union

Beverly Wilton

Manager, Lands Department
Union

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| Jeff Wesley | Manager, Franchise, Municipal & Aboriginal Relations Union |
| David Simpson | Director, Acquisitions, Union |
| David Dent | Strategic Manager, Retail Energy Marketers & Power Markets Union |
| Mark Kitchen | Manager, Rates and Pricing Union |
| Richard Birmingham | Vice President, Regulatory Affairs & Economic Development, Union |
| Witnesses for SEP | |
| Matthew Kellway | Staff Specialist, Policy Society of Energy Professionals |
| Witnesses for WFIN | |
| Dean Jacobs | Chief of the Walpole Island First Nation |
| David White | Acting Director, Heritage Centre Walpole Island First Nation |

Appendix 2
Decision On Motion
RP-2005-0022



RP-2005-0022
EB-2005-0441
EB-2005-0442
EB-2005-0443
EB-2005-0473

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15 (Sched.B);

AND IN THE MATTER OF an Application by GEC Energy Centre Limited Partnership for an Order or Orders pursuant to section 90 of the *Ontario Energy Board Act, 1998* granting leave to construct a natural gas pipeline in the Township of St. Clair, Ontario;

AND IN THE MATTER OF an Application by GEC Energy Centre Limited Partnership for an Order or Orders pursuant to section 101 of the *Ontario Energy Board Act, 1998* for authorization for certain road and utility crossings required for the proposed pipeline;

AND IN THE MATTER OF an Application by GEC Energy Centre Limited Partnership for a Certificate of public convenience and necessity, pursuant to section 8 of the *Municipal Franchises Act*;

AND IN THE MATTER OF an Application by Union Gas Limited for an Order or Orders pursuant to section 90 of the *Ontario Energy Board Act, 1998* granting leave to construct a natural gas pipeline in the Township of St. Clair, Ontario.

BEFORE: Paul Vlahos
Presiding Member

Cynthia Chaplin
Member

Ken Quesnelle
Member

DECISION ON MOTION

November 7, 2005

The Proceeding

An application, dated July 20, 2005, was filed by the GEC Energy Centre Limited Partnership ("GEC") with the Ontario Energy Board under section 90 of the *Ontario Energy Board Act, 1998* for leave to construct a 2 km natural gas pipeline.

GEC plans to construct a 1005 MW gas-fired generating station in Courtright, in the Township of St. Clair, south of Sarnia, and the application requests approval for the construction of a pipeline to serve the generating station which is located in the franchise of Union Gas Ltd. ("Union").

If leave to construct the pipeline is granted, GEC also seeks an order authorizing the crossing of public roads and utilities pursuant to section 101 of the Act and a certificate of public convenience and necessity, pursuant to section 8 of the *Municipal Franchises Act*. The Board assigned File Nos. RP-2005-0022/EB-2005-0441/EB-2005-0442/EB-2005-0443 to GEC's application. The Board issued a notice of GEC's application on July 28, 2005.

Union filed an application, dated August 30, 2005, with the Board under section 90 of the Act for leave to construct a 2 km natural gas pipeline to supply gas to the generating station. Union's application represents a competing proposal to GEC's application. The Board has assigned File No. EB-2005-0473 to Union's application.

In Procedural Order No. 2, issued September 9, 2005, the Board ordered that the proceeding for GEC's application (RP-2005-0022/EB-2005-0441) and Union's application (EB-2005-0473) be combined and heard together in a joint proceeding.

On October 6, 2005, the Board received a Notice of Motion and Motion Record from GEC. The Notice of Motion and Motion Record were served on all the parties in the proceeding by e-mail on October 6, 2005. In the Notice of Motion, GEC seeks an order of the Board to exclude certain evidence filed on October 4, 2005, by the Society of Energy Professionals ("the Society").

In Procedural Order No. 3, issued October 12, 2005, the Board established a written process to deal with the motion and set dates for the filing of submissions by parties in the joint proceeding and the filing of reply submissions by GEC. On October 20, 2005, the Society, the Power Workers Union ("PWU"), and Union Gas Limited filed submissions on the motion. On October 24, 2005, GEC filed its reply submissions.

The Motion

In its Notice of Motion, GEC asked the Board to exclude the following documents from the Society's evidence:

- Tab 1: "Ontario Supply Mix into the Future-proposals from the Society of Energy Professionals, August 26, 2005"
- Tab 2: "Submissions Re The OPA Procurement Process. Submitted by The Society of Energy Professionals, July 29, 2005"
- Tab 3: "Letter to Mr. James O'Mara, Director, Environmental Assessment and Approvals Branch, MOE re: The Society of Energy Professionals Environmental Assessment Elevation Request, July 8, 2005"
- Tab 4: "Excerpts from GEC Energy Centre LP Environmental Review report, June 2005"
- Tab 5: "Canadian Energy Research Institute Levelized Unit Electricity Cost Comparison of Alternate Technologies for base-load generation in Ontario report, August 2004"
- Tab 7: "Canadian Council of Ministries of the Environment-Canada-Wide Standards for Particulate Matter (PM) and Ozone, June 5-6, 2000"

GEC submitted that this material is inadmissible because it is irrelevant to the proceeding and the Board's decision on the GEC application. In GEC's view the scope of the proceeding set by the Board in Procedural Order No. 1 does not

include the issues addressed by the evidence filed by the Society.

The Society also included in its evidence the Board document entitled “*OEB Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, Fifth Edition, May 2003*” (the “Environmental Guidelines”). This evidence was not challenged by GEC, but the Board invited submissions on whether it needed to be filed as evidence, as it is a publicly available Board document.

Board Findings

In the Board’s view, the issues it needs to address are the following:

1. Procedural decisions to date
2. The Board’s consideration of the public interest
3. Cumulative environmental impacts

Procedural decisions to date

The Society argues that previous procedural documents issued by the Board on this application have already decided the issues brought forward in the Motion and that the Motion is duplicative and ought to be dismissed. The Board does not agree that the granting of intervenor status to the Society removed GEC’s right as an applicant to challenge the relevance of the Society’s evidence. In its letter of September 9, 2005 granting intervenor status to the Society, the Board did not address the request made by GEC in its letter of September 6, 2005 to limit the Society’s intervention. The Board did not limit the Society’s intervention or make an advance ruling on any evidence the Society might bring forward in part because the Society’s letter of September 1, 2005 stated that the precise nature and extent of its participation was not yet determined.

The Board always retains the authority to govern its own process, including making rulings at any point during the proceeding as to the relevance of questions asked or evidence offered. The scope of evidence the Board will hear on a matter remains within its control throughout the hearing process. Once the evidence of the Society was filed, the Board was in a better position to assess the scope of the Society's intervention. The Board will not dismiss the motion on the ground that it has already determined the issue.

The Board's consideration of the public interest

The Society's assertion that its evidence is relevant is based, to a great degree, on its interpretation of the Board's responsibilities with respect to the "public interest" and the Board's statutory objectives under the Act. In the Society's view, the Board's public interest responsibilities in this proceeding should include scrutiny of the generating station being served. The Society argued that GEC itself relies on the public interest aspect of the generating station in its evidence.

Similarly, the PWU submitted that GEC's own evidence relies on claimed electricity and environmental policy benefits and that therefore the Society's evidence should be admitted as an appropriate challenge to those claims. In the PWU's view, the proposed pipeline should not be considered in isolation from the energy and environmental policy issues that relate to the GEC project as a whole.

GEC argued in its reply submissions that the issues covered in the Society's evidence were beyond Board's jurisdiction under sections 90 and 96 of the Act, and that the use of the phrase "public interest" does not broaden the Board's jurisdiction to include an assessment of the environmental or economic impact of the use of the gas flowing through the pipeline.

The Board does not agree with the Society's view as to how the objectives contained in the Act govern the Board's consideration of leave to construct

applications. The Board agrees with GEC's submission that section 96 does not create jurisdiction but rather relates to how the Board's jurisdiction is to be exercised. In determining whether to grant a leave to construct, the Board must determine whether the pipeline itself is in the public interest, not whether facilities connected to it will be in the public interest. There are other processes in place related to the generating station, including an environmental assessment process. In considering the leave to construct application, it is not within the Board's jurisdiction to determine whether the generating station is in the public interest. For these reasons, the material at tabs 1, 2 and 5 of the Society's material is not relevant and will be excluded from the record of this proceeding.

Cumulative environmental impacts

The Society also argued that there are cumulative environmental impacts related to the pipeline and the generating station and that therefore the evidence of the station's environmental and socio-economic impacts are relevant to the proceeding. The section on cumulative effects in the Board's Environmental Guidelines refers to the additive effects of pipeline construction and other existing and future projects in the area and the interaction of pipeline construction with these projects. The Guidelines include projects beyond just pipeline projects, as demonstrated by the reference at page 38 to subdivision development, and the instruction to not restrict the study area to the pipeline easement and related work areas. However, the examples in section 4.3.13 of the Guidelines indicate that the type of cumulative impacts considered are quite narrow; largely soil, water and vegetation impacts directly resulting from construction. The materials filed by the Society at tabs 3, 4 and 7 address matters that have not yet been considered by the Board in assessing the cumulative effects of pipeline construction, such as the effect on the airshed of the activities of the end user of the gas that will flow through the pipeline. The Board has yet to be persuaded that such matters are relevant to the pipeline applications in this case.

The Board notes that the environmental report filed by the applicant Union, at page 52, refers to the cumulative effects of the construction of the power station. It appears that the scope of the Board's consideration of cumulative impacts is unclear to both applicants and intervenors. The Board will not exclude the material filed by the Society at tabs 3, 4 and 7 on the basis of the motion record. However, it remains an open question as to the appropriate use and weight to be accorded to this material during the hearing.

Conclusion and Order

The Board grants the motion from GEC to the extent of excluding the materials filed by the Society at tabs 1, 2 and 5. The material found at the remaining tabs is not excluded from the record. The use to be made of and the weight to be given to the Society's material remains an open question in the hearing.

DATED at Toronto, November 7, 2005

ONTARIO ENERGY BOARD

Signed on behalf of the Panel

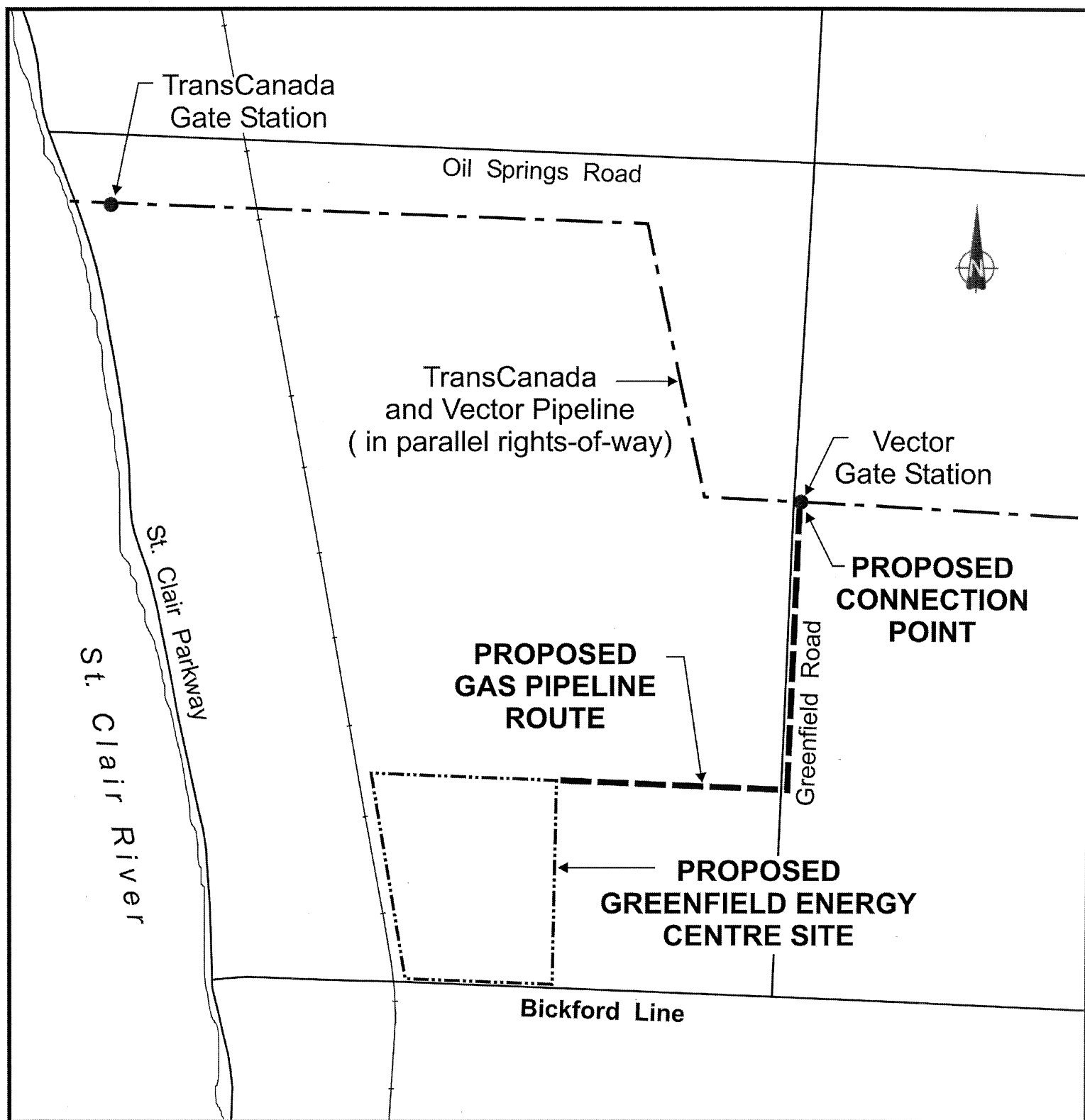
Original signed by

Paul Vlahos

Presiding Member

Appendix 3

**GEC – Proposed Route
RP-2005-0022**

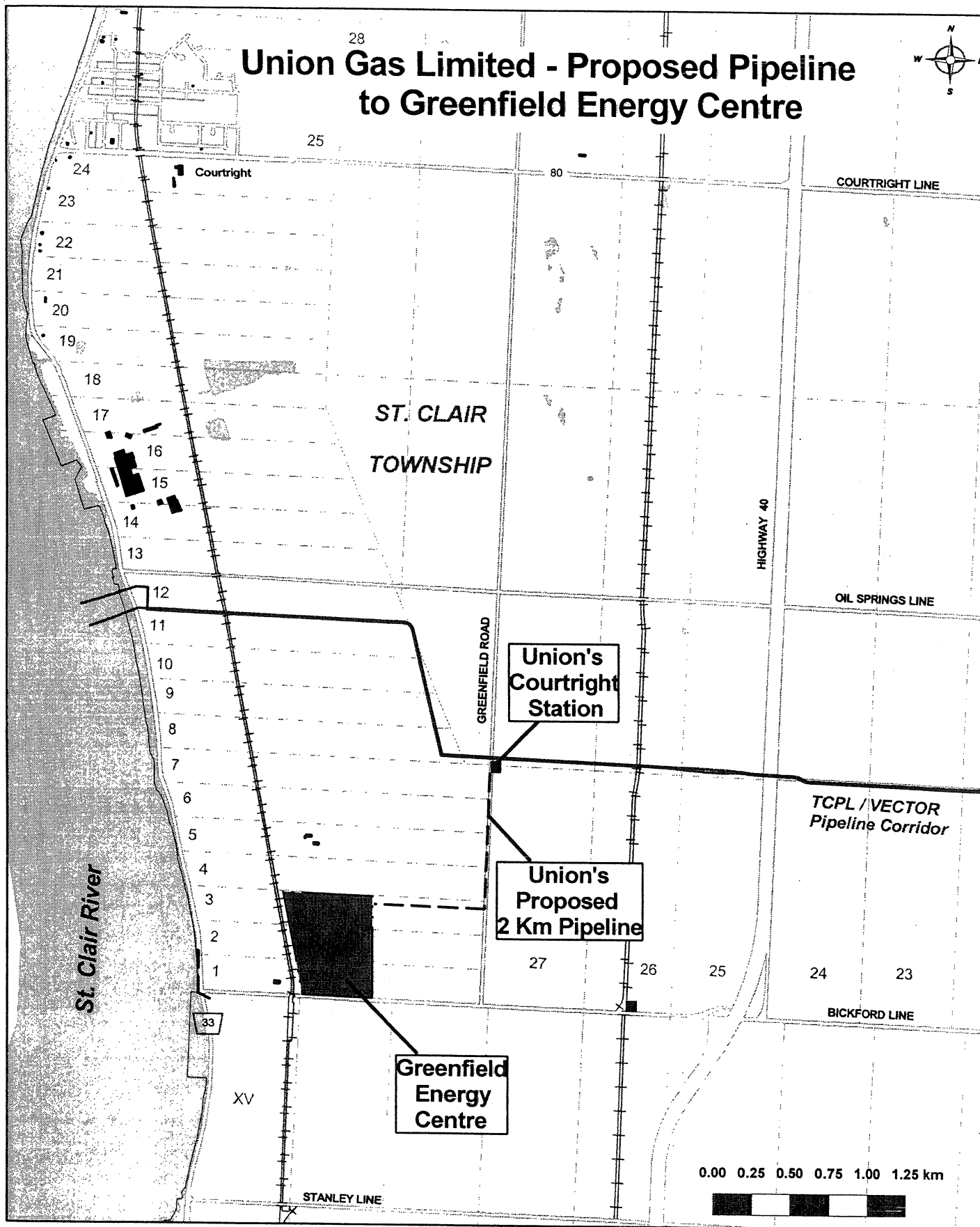


Greenfield Energy Centre LP Proposed Pipeline Route

Not To Scale

Appendix 4

**Union – Proposed Route
RP-2005-0022**



Appendix 5

CONDITIONS OF APPROVAL Leave to Construct Greenfield Energy Centre LP RP-2005-0022

1 General Requirements

- 1.1 Greenfield Energy Centre LP shall construct the facilities and restore the land in accordance with its application and evidence, except as modified by this Order and these Conditions of Approval.
- 1.2 Unless otherwise ordered by the Board, authorization for Leave to Construct shall terminate December 31, 2007, unless construction has commenced prior to then.
- 1.3 Except as modified by this Order, Greenfield Energy Centre LP shall implement all the recommendations of the Environmental Study Report filed in the evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee ("OPCC") review.
- 1.4 Greenfield Energy Centre LP shall advise the Board's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Greenfield Energy Centre LP shall not make such change without prior approval of the Board or its designated representative. In the event of an emergency, the Board shall be informed immediately after the fact.
- 1.5 A survey of water wells shall be conducted along and within 100 m adjacent to the preferred route. Water samples should be analyzed for parameters agreed with the MOE Regional Office. Monitoring of the water wells must be carried out where dewatering or work below the water table is required. Permanent water service must be restored to landowners who experience any interference or interruption to water supply due to pipeline construction.
- 1.6 Blasting will not be permitted.

2 Project and Communications Requirements

- 2.1 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Facilities.
- 2.2 Greenfield Energy Centre LP shall designate a person as project engineer and shall provide the name of the individual to the Board's designated representative. The project engineer will be responsible for the fulfilment of the Conditions of

Approval on the construction site. Greenfield Energy Centre LP shall provide a copy of the Order and Conditions of Approval to the project engineer, within seven days of the Board's Order being issued.

- 2.3 Greenfield Energy Centre LP shall give the Board's designated representative and the Chair of the OPCC ten days written notice, in advance of the commencement of the construction.
- 2.4 Greenfield Energy Centre LP shall furnish the Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the Board's Order.
- 2.5 Greenfield Energy Centre LP shall file with the Board's designated representative notice of the date on which the installed pipelines were tested, within one month after the final test date.
- 2.6 Greenfield Energy Centre LP shall furnish the Board's designated representative with five copies of written confirmation of the completion of construction. A copy of the confirmation shall be provided to the Chair of the OPCC.

3 Monitoring and Reporting Requirements

- 3.1 Both during and after construction, Greenfield Energy Centre LP shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within eighteen months of the in-service date. Greenfield Energy Centre LP shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.
- 3.2 The interim monitoring report shall confirm Greenfield Energy Centre LP's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.
- 3.3 The final monitoring report shall describe the condition of the rehabilitated land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

4 Other Approvals

- 4.1 Greenfield Energy Centre LP shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, shall provide a list thereof, and shall provide copies of all such written approvals, permits, licences, and certificates upon the Board's request.

5 Project Specific Conditions

- 5.1. In the event that Calpine Corporation and its subsidiaries will not be constructing and operating the proposed pipeline, Greenfield Energy Centre LP must file with the Board, when its plans are finalized and before construction is commenced, the name and description of the entity or entities that will construct and operate the pipeline, including the provision of emergency services. The description must be sufficient for the Board to properly assess the competence of the entities to undertake their role in the pipeline project.

Appendix 6

CONDITIONS OF APPROVAL Leave to Construct Union Gas Limited RP-2005-0022

1 General Requirements

- 1.1 Union Gas Limited shall construct the facilities and restore the land in accordance with its application and evidence, except as modified by this Order and these Conditions of Approval.
- 1.2 Unless otherwise ordered by the Board, authorization for Leave to Construct shall terminate December 31, 2007, unless construction has commenced prior to then.
- 1.3 Except as modified by this Order, Union Gas Limited shall implement all the recommendations of the Environmental Study Report filed in the evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee ("OPCC") review.
- 1.4 Union Gas Limited shall advise the Board's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union Gas Limited shall not make such change without prior approval of the Board or its designated representative. In the event of an emergency, the Board shall be informed immediately after the fact.
- 1.5 A survey of water wells shall be conducted along and within 100 m adjacent to the preferred route. Water samples should be analyzed for parameters agreed with the MOE Regional Office. Monitoring of the water wells must be carried out where dewatering or work below the water table is required. Permanent water service must be restored to landowners who experience any interference or interruption to water supply due to pipeline construction.
- 1.6 Blasting will not be permitted.
- 1.7 Union Gas Limited shall involve a representative designated by the Walpole Island First Nation in the stage 2 archaeological assessment of the pipeline route. Union Gas Limited shall also provide to the Board the results of the stage 2 assessment and indicate that there are no outstanding matters in respect of that assessment.

2 Project and Communications Requirements

- 2.1 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Facilities.
- 2.2 Union Gas Limited shall designate a person as project engineer and shall provide the name of the individual to the Board's designated representative. The project engineer will be responsible for the fulfilment of the Conditions of Approval on the construction site. Union Gas Limited shall provide a copy of the Order and Conditions of Approval to the project engineer, within seven days of the Board's Order being issued.
- 2.3 Union Gas Limited shall give the Board's designated representative and the Chair of the OPCC ten days written notice, in advance of the commencement of the construction.
- 2.4 Union Gas Limited shall furnish the Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the Board's Order.
- 2.5 Union Gas Limited shall file with the Board's designated representative notice of the date on which the installed pipelines were tested, within one month after the final test date.
- 2.6 Union Gas Limited shall furnish the Board's designated representative with five copies of written confirmation of the completion of construction. A copy of the confirmation shall be provided to the Chair of the OPCC.

3 Monitoring and Reporting Requirements

- 3.1 Both during and after construction, Union Gas Limited shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within eighteen months of the in-service date. Union Gas Limited shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.
- 3.2 The interim monitoring report shall confirm Union Gas Limited's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the

long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.

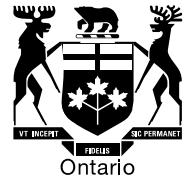
- 3.3 The final monitoring report shall describe the condition of the rehabilitated land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

4 Other Approvals

- 4.1 Union Gas Limited shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, shall provide a list thereof, and shall provide copies of all such written approvals, permits, licences, and certificates upon the Board's request.

5. Project Specific Conditions

- 5.1 Union Gas Limited must be under contract to provide service to the GEC plant whether owned by GEC or another entity, and the power plant must be in the same location and require the same proposed pipeline, both in terms of size and route. Union Gas Limited shall file with the Board a copy of the contract as soon as it becomes available.



EB-2007-0050

IN THE MATTER OF the *Ontario Energy Board Act, 1998*,
S.O. 1998, c.15 (Schedule B) (the “Act”);

AND IN THE MATTER OF an Application by Hydro One
Networks Inc. pursuant to section 92 of the Act, for an Order
or Orders granting leave to construct a transmission
reinforcement project between the Bruce Nuclear Generating
Station and Milton Switching Station, all in the Province of
Ontario.

BEFORE: Pamela Nowina
Presiding Member and Vice-Chair

Cynthia Chaplin
Member

Ken Quesnelle
Member

DECISION AND ORDER
September 15, 2008

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1. SUMMARY OF FINDINGS

Hydro One Networks Inc. (“Hydro One” or the “Applicant”) is seeking an Order of the Board for leave to construct approximately 180 kilometres of double-circuit 500 Kilovolt (“kV”) electricity transmission line adjacent to the existing transmission corridor (500 kV and/or 230 kV) extending from the Bruce Nuclear Generating Station (“NGS”) in Kincardine Township to Hydro One’s Milton Switching Station in the town of Milton. Hydro One also proposes to make modifications at the Milton, Bruce A and Bruce B transmission stations to accommodate the new transmission lines.

In examining whether or not a leave to construct application is in the public interest, the Ontario Energy Board (the “Board”) is governed by Section 96(2) of *Ontario Energy Board Act*, 1998, S.O. 1998, c.15, Schedule B (the “OEB Act”) which states that:

In an application under section 92, the Board shall only consider the interest of consumers with respect to prices and the reliability and quality of electricity service when, under subsection (1), it considers whether the construction, expansion or reinforcement of the electricity transmission line or electricity distribution line, or the making of the interconnection, is in the public interest.

While the Board considers alternatives to the project, those alternatives are assessed in the context of the specific factors listed in Section 96(2) of the OEB Act. These factors do not include the impact on individual landowners, except to the extent that the impact could materially affect the prices, reliability and quality of electricity service to consumers generally. The environmental and socio-economic impacts of alternative routes are considered in the Environmental Assessment (“EA”) process required under the *Environmental Assessment Act*. Individual land rights are considered in the context of a proceeding under the expropriations process.¹

Given the outline of the Board’s test and in the context of this application, the main issues for the Board are as follows:

¹ OEB Act, Section 99

- I. Is the proposed project needed?
 - What is the likelihood of the construction of the 700 MW of committed wind generation and completion of the refurbishment of the 4 Bruce A Units?
 - What is the likelihood that Bruce B will be refurbished and that 1000 MW of planned wind generation will be developed?
 - Should the transmission need be based on the maximum capacity rating of the generation or on some other level related to the expected operating capacity factor?
- II. Is the proposed project economically superior to the alternatives and are the potential rate impacts reasonable?
- III. What is the impact on system reliability related to the project? How does this compare to the alternatives?
- IV. If the proposed project is approved, what are the appropriate conditions of approval?²
- V. Are the Forms of agreements offered by Hydro One to the landowners appropriate?
- VI. Have appropriate consultation and if necessary, accommodation been made with affected Aboriginal peoples?

The Board examines each of these issues in detail in this Decision and Order.

In summary, the Board approves Hydro One's application for leave to construct approximately 180 kilometres of double-circuit 500 Kilovolt ("kV") electricity transmission extending from the Bruce NGS in Kincardine Township to Hydro One's Milton Switching Station in the town of Milton with conditions.

The need for the project was diligently contested by the intervenors. In particular, the Ontario Power Authority's ("OPA")'s forecast of wind generation and nuclear generation which would be served by the new line was challenged. The Board finds that the forecast for wind generation is reasonable. The Board also finds that the Project is

² Draft Conditions of Approval were filed by Board staff during the proceeding, Exhibit K9.10, May 13, 2008

economic whether or not the Bruce B units at the Bruce NGS are refurbished or new nuclear development at the Bruce NGS occurs. The Board finds that the Project is economic over the long term when compared with the primary alternative put forward by intervenors, namely the installation of series capacitors, and use of generation rejection.

The Project also meets the reliability standards of the industry and is consistent with the government's policy on land use.

The Board approves the Forms of agreement as provided by Hydro One.

For the purpose of this application, the Board finds that consultation with Aboriginal groups has been sufficient.

The Board's approval is subject to a number of conditions (see Appendix C). Most notable among these is compliance with the *Environmental Assessment Act*.

The Board's detailed reasons follow in this document.

2. INTRODUCTION

This section provides an overview of the application, the stages of the proceeding and a background to the project

2.1 The Application

Hydro One is seeking an Order of the Board for leave to construct approximately 180 kilometres of double-circuit 500 Kilovolt (“kV”) electricity transmission line adjacent to the existing transmission corridor (500 kV and/or 230 kV) extending from the Bruce NGS in Kincardine Township to Hydro One’s Milton Switching Station in the town of Milton. Hydro One also proposes to make modifications at the Milton, Bruce A and Bruce B transmission stations to accommodate the new transmission lines.

The original application was filed on March 29, 2007; an amended application was filed on November 30, 2007. The Application was given Board file No. EB-2007-0050. A map filed by Hydro One on November 30, 2007 as part of their amended application showing the location of the project is shown in Figure 1.

Hydro One submitted that the project is required to meet the increased need for transmission capacity associated with the development of wind power in the Bruce area and the return to service of nuclear units at the Bruce NGS. Hydro One proposed an in-service date of Fall 2011 for the new 500 kV transmission line and related facilities. The estimated cost of the transmission project is \$635 million.

Bruce to Milton Transmission Reinforcement Project **Potential Route Refinements in Brockton/Hanover/West Grey area, Camp Creek and Halton Hills**

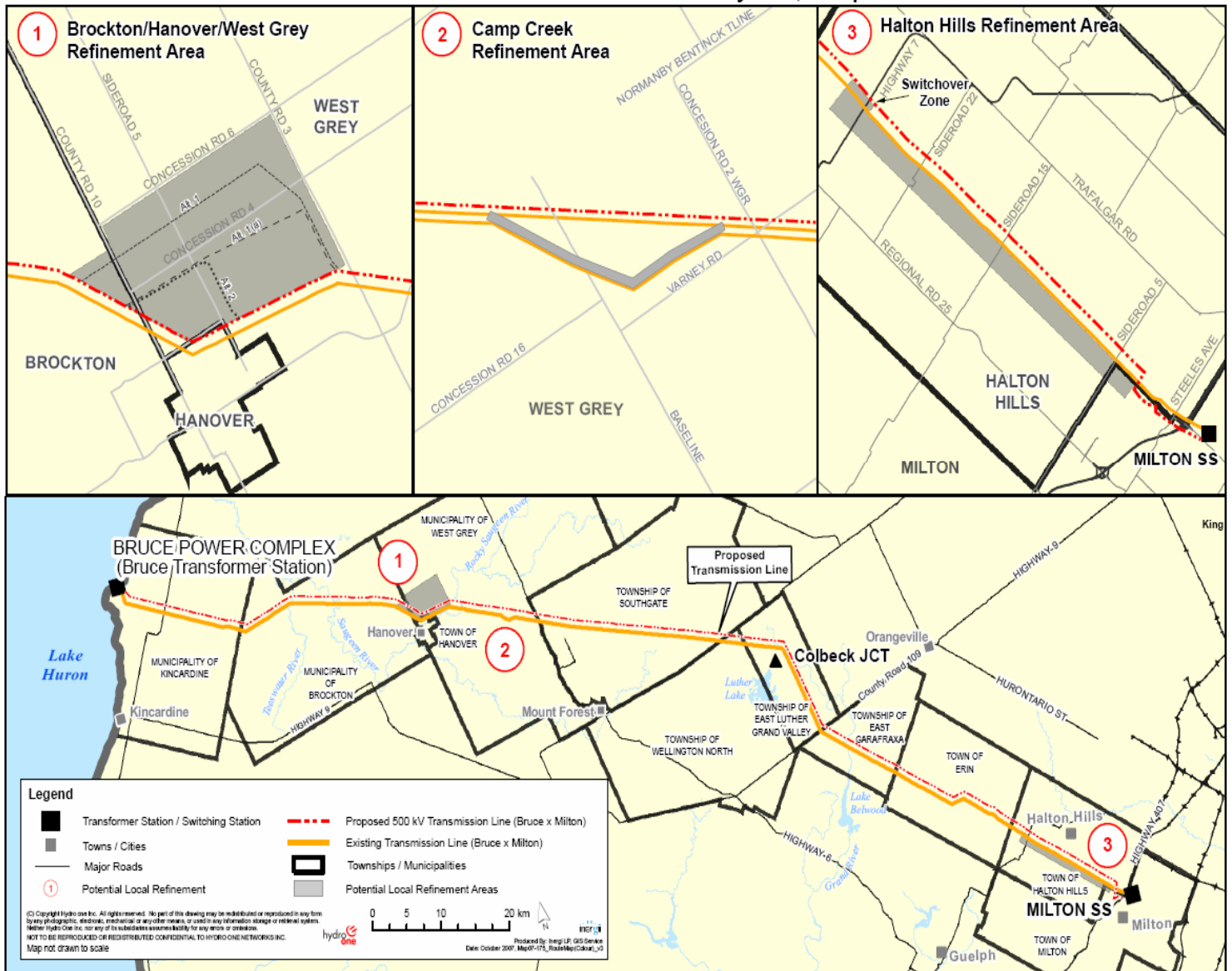


Figure1

2.2 The Proceeding

The Notice of Application for the Leave to Construct Application and the Notice of Amended Application were published in various newspapers and were served on all directly affected landowners. A complete list of participants, including registered intervenors, is attached as Appendix A to this decision.

The Board issued eleven procedural orders in this proceeding. Appendix B of this decision provides details on procedural matters, including list of witnesses, in the hearing.

The oral hearing commenced on May 1, 2008, and concluded on June 11, 2008.

Hydro One filed its argument in chief on June 23, 2008. Board staff filed its submissions on July 2, 2008. Intervenors filed their arguments by July 4, 2008. On July 17, 2008, the record of the proceeding was completed with the Applicant's filing of reply argument.

2.3 Background

2.3.1 Description of the existing Power System – Transmission and Generation

The existing transmission system consists of six 230 kV circuits and four 500 kV circuits, all of which transmit the generation output from the currently in service nuclear units at Bruce NGS, in addition to existing wind farms in the Bruce Area. The six 230 kV circuits transmit power to load centres including Hanover, Orangeville and Owen Sound. Two of the four 500 kV circuits connect the Bruce NGS to the Milton Switching Station, near the town of Milton, and the other two 500 kV circuits connect the Bruce NGS to the Longwood Transformer Station near the city of London.

The existing transmission system presently has a transfer capability of approximately 5,000 MW, which is less than its historic capability because the load flow has changed along the 500 kV system which connects the Bruce Area to the provincial transmission system. The power flow pattern is now from South-Western Ontario towards the Greater Toronto Area ("GTA") i.e. west to east. In the past at the time that the Ontario

transmission system was enhanced for the Bruce NGS, there was significant local load in the Bruce Area and the power flow in Ontario was typically from GTA to the west in support of power exports. This change in power flow is attributed to an existing predominant pattern of importing electricity from Michigan and New York during peak demand in Ontario and the increasing demand, in the GTA during the peak summer season.

2.3.2 Project Description - near term, interim measures and proposed Project

To meet the total electricity generation expected to be in the Bruce area by 2015, Hydro One proposed near-term measures, interim measures, and the proposed Bruce to Milton 500 kV double-circuit transmission line to meet the noted system requirements.

The near-term measures are currently being implemented and include installation of dynamic and static reactive resources at various transformer stations and upgrading the 230 kV transmission line from Hanover to Orangeville.

The interim measures consist of generation rejection and, if needed, series capacitors. The generation rejection is provided by a proposed expansion of the Bruce special protection system ("BSPS") to increase the transfer capability out of the Bruce area until the proposed project is in service. Hydro One indicated that if the Project does not go into service and the use of the BSPS accordingly intensifies, then the reliability of the system will be compromised.

The proposed project is approximately 180 kilometres of double-circuit 500 kV transmission line adjacent to the existing transmission corridor (500 kV and/or 230 kV) extending from the Bruce NGS to the Milton Switching Station in the town of Milton. Hydro One proposes an in-service date of Fall, 2011 for the new 500 kV transmission line and related facilities.

2.3.3 Roles of Hydro One, OPA and IESO

Hydro One was responsible for the pre-filed evidence including evidence prepared by the Ontario Power Authority ("OPA"), and the Independent Electricity System Operator ("IESO"). The pre-filed evidence included the need for the project, the proposed alternatives, and the economic benefits of the project.

OPA's mandate under the Electricity Act, 1998 (the "Electricity Act") requires it to perform long-term power system planning for the Province. The OPA provided evidence in this case addressing various key areas including the forecast of generation resources over a study horizon up to 2030, and developed an economic model to evaluate the cost of bottled energy under various scenario assumptions during the proceeding.

The IESO's role includes directing the operation and maintaining the reliability of the IESO-controlled grid; working with the responsible authorities outside Ontario to co-ordinate the IESO's activities with their activities; and establishing and enforcing standards and criteria relating to the reliability of transmission systems. The IESO provided evidence in this case addressing key areas including comprehensive "System Impact Assessment" reports dealing with the proposed project and responding to interrogatories by simulating alternative scenarios during the proceeding.

2.3.4 Application in relation to Environmental Assessment and other permitting processes

The Board recognizes that in addition to this Leave to Construct approval, an approval pursuant to the EA approval is required before the project may proceed. The Board,³ has already decided in interlocutory proceedings that neither process is completely dependent upon the other.

Hydro One has acknowledged that the Board's leave to construct orders are conditional on the procurement of all necessary permits and authorizations including a completed EA. In this way, the Board ensures that the project cannot proceed without regard to requirements of the EA process, while it considers the matters falling within its jurisdiction in a timely fashion.

The Board, however, satisfied itself that the two processes were not significantly out of step, by ensuring that the approved Terms of Reference for the EA were in place⁴, prior to commencement of the oral phase of the hearing which started on May 1, 2008⁵. This is relevant as the Board's mandate is to assess the proposal in terms of prices,

³ Board Decision and Order on Motion, issued on July 4, 2007, page 5

⁴ On April 4, 2008 the Ministry of Environment issued Approval of the Terms of Reference for the EA

⁵ Letter from Hydro One to the Board and circulated to all parties, dated April 10, 2008, page 2, advising that on April 4, 2008 the Minister of Environment issued its "Terms of Reference – Notice of Approval".

reliability and quality of electricity service and part of that assessment involves an analysis of alternatives. It was therefore important to ensure that to the extent that alternatives raised in the EA process are relevant and material to the comparison of alternatives in terms of prices, reliability and quality of electricity service, that those alternatives are appropriately considered in the Leave to Construct application.

It should be noted that environmental and socio-economic impacts of alternative routes are considered in the EA process. Individual land rights are considered in the context of a proceeding under the expropriations process as outlined in section 99 of the Act.

3. PROJECT NEED AND JUSTIFICATION

3.1 Introduction

Hydro One submitted that the current transmission system has a transfer capability of 5,000 MW, and the forecast requirement for the year 2015 is 8,100 MW. This increase of 3,100⁶ MW is driven by a generation forecast with the following components:

- 1,500 MW of refurbished nuclear generation – when all Bruce NGS units are in service in 2013
- 700 MW of committed wind generation
- 1,000 MW of planned wind generation (700 MW from large wind projects, 300 MW from the Standard Offer Program)
- Refurbishment of Bruce B (or new build) such that generation from the Bruce NGS is maintained at about 6,300 MW over the long-term.

Hydro One provided the following chart to show the generation profile over time and the level of transmission capability provided by the proposed Bruce to Milton line.

⁶ Incremental requirements are about 3200 MW, but the current capability of 5000 MW exceed current requirements. The net incremental requirements are 3100 MW

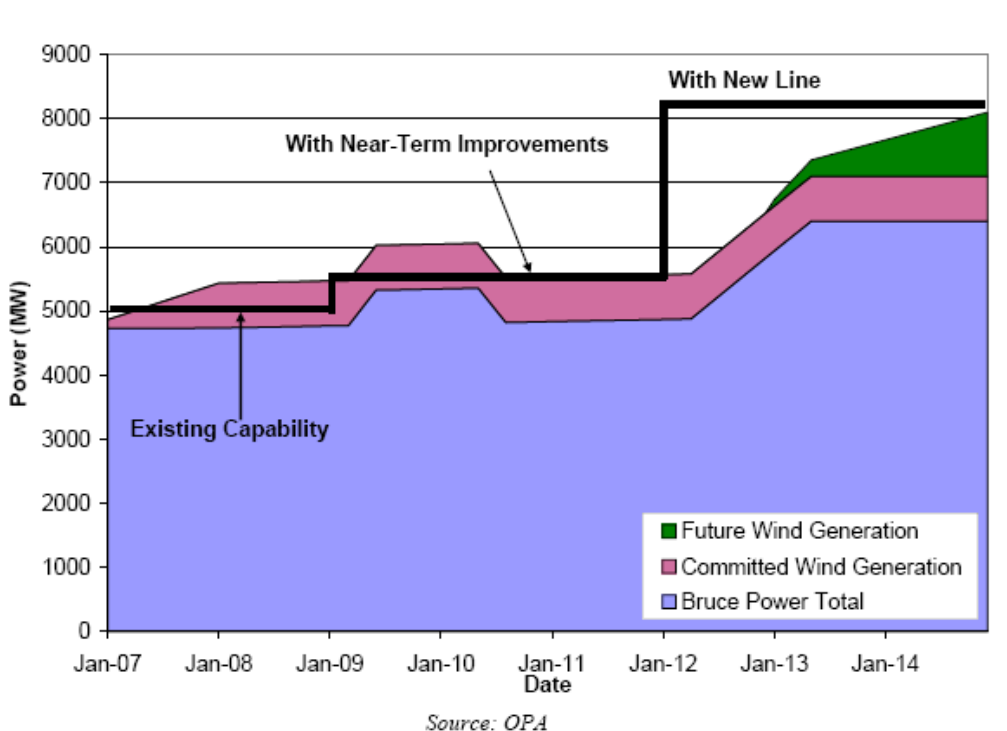


Figure 2 Source: Exhibit B/Tab 3/Schedule 1/p.2, depicting "Bruce Area Available Generation and Transmission Capacity (2007-2014)"

Hydro One submitted that including the committed wind (700 MW) and committed Bruce A (1,500 MW) amounts in the forecast were not controversial. Board staff agreed with this characterization. No intervenor took issue with these components of the generation forecast. With respect to the 1,000 MW of planned wind, the 300 MW from the SOP was not challenged given the evidence that the program is already oversubscribed.

Two components of the generation forecast were contentious: the 700 MW from planned large wind projects and the forecast generation of 6,300 MW from the Bruce NGS. Another area of dispute was the practice of planning transmission capacity to meet the simultaneous Maximum Capacity Rating ("MCR") of all generation, the so-called "planning to nameplate capacity".

Some intervenors, particularly the Saugeen Ojibway Nations ("SON"), raised broader questions with respect to the generation forecast, and specifically the relationship between the generation forecast (and the project generally) and the IPSP.

This section is organized as follows:

- The forecast of planned large wind generation
- The forecast of generation from Bruce NGS
- Planning transmission for total nameplate generation capacity
- The relationship between the application and the IPSP

3.2 The Forecast of Planned Large Wind Generation

Hydro One argued that the current IESO queue for wind generation (which includes 813 MW in projects which have their System Impact Assessment (“SIA”) on hold and almost 1,500 MW in additional projects) supports the generation forecast. Hydro One also submitted that the generation forecast was reasonable in light of the August 27, 2007 Ministerial Directive⁷ which requires 2,000 MW of renewable generation in Ontario by 2015 and the OPA’s intention to satisfy one-third of that requirement from large wind in the Bruce area given its relative proximity to the Province’s major load centre and the amount of wind potential in that area. That procurement must be done by 2011 to meet the 2015 date.

Hydro One argued that the 700 MW was a conservative forecast from several perspectives: it represents 50% of the wind potential in the area, 60% of the wind generation in the IESO queue for the area, and 35% of the renewable generation the OPA has been directed to procure. The SON position was that there was uncertainty related to the wind development in the Bruce area. Hydro One argued that the Board must determine whether the OPA’s forecast is more credible than SON’s views regarding the risk that projects in the queue will result in less than 700 MW being installed.

We address two sub-issues:

1. The August 2007 Ministerial Directive
2. The level of certainty

⁷ Exhibit C/Tab 11/Sch. 1/Attachment 1

3.2.1 The August 2007 Ministerial Directive

Hydro One submitted that no further approval is required for the contracts entered into under the August 27, 2007 Ministerial Directive in advance of the IPSP and that the Ministerial Directive is unambiguous and is not a guideline. In Hydro One's view, it is sensible to source 35% of this requirement from the abundant wind source in the Bruce area, given this is an accessible area, especially given the queue.

The OPA noted that its forecast for large wind projects was not dependent upon any Board approval, including approval of the IPSP. The OPA is directed and authorized to acquire 2,000 MW of renewable generation under the August 2007 Ministerial Directive.

The Ross Firm Group ("Ross Group") argued that Hydro One was relying on a very narrow reading of the directive and noted that the directive calls for renewable generation, not just wind generation and that it indicates the generation is to be sourced province wide, not just in the Bruce area. The Fallis Group of Landowners ("Fallis Group") made similar submissions.

3.2.2 Board Findings

The Board concludes that the question of the interpretation of the August 2007 Ministerial Directive is not a consideration in our determination of the reasonableness of the wind generation forecast. It is true the directive refers to renewable generation and does not specify wind generation, but it is a pre-IPSP Directive and the OPA has the authority to decide how the requirements of the directive are to be met. It is not the Board's role to assess the OPA's plans for how to meet the requirement specified in the directive. The Board accepts the OPA's testimony that it intends to acquire an additional 700 MW of wind generation in the Bruce area to meet the requirements of the August 2007 Ministerial Directive.

3.2.3 Level of Certainty

SON submitted that there was substantial uncertainty about the amount and timing of the planned wind generation with respect to:

- willingness of developers to participate in bidding

- qualifications of wind developers
- the actual signing of contracts
- delays and challenges around site acquisition, environmental assessments, financing, equipment acquisition, and the need for additional facilities.

Hydro One submitted that the OPA has the authority to plan in the absence of certainty and to act as counter-party for procurement. Therefore certainty is not required before approval is given to transmission reinforcement. Hydro One summarized its view as follows:

What more indicators of certainty should the OPA reasonably require before allocating 700 MW of the directed 2,000 MW renewable energy procurement to Bruce Area wind generation? It has government direction to procure the wind without further authorization; a short deadline; a rich wind resource; proximity to load and strong commercial interest already as shown by the IESO queue.⁸

The OPA submitted that by only including 50% of the Bruce area large wind potential in the generation forecast, it has substantially mitigated any development uncertainties. Power Workers Union ("PWU") and Canadian Wind Energy Association ("CanWEA") took the same position. The OPA also noted that it has taken steps to procure 500 MW through its June 5, 2008 draft Request for Proposal.

Board staff noted that no contracts have been executed for the planned large wind projects; no formal discussions appear to be underway with potential developers; and no counterparties have been identified. Board staff suggested that, depending upon the level of uncertainty, the Board could approve the application, but condition the approval in a way which addresses the level of uncertainty.

Hydro One responded that it would be inappropriate to impose conditions of approval that had not been put to the witnesses. Hydro One argued that to require any greater certainty would be unreasonable and does not recognize the urgency of the project.

⁸ Hydro One, Argument in Chief, p. 15

3.2.4 Board Findings

The OPA's intentions are clear and unequivocal: it intends to procure 700 MW of wind generation from large projects in the Bruce area. The evidence in support of this forecast is strong:

- The OPA has the authority, under the August 2007 Ministerial Directive, to procure wind generation in the short term.
- The studies of wind potential in the area indicate a potential of 1,400 MW – twice the level of the forecast.
- The IESO already has projects in its queue which, in total, exceed the 700 MW forecast.

The uncertainty arises from the fact that the OPA has not yet entered into contracts to procure this wind generation.

In natural gas transmission system reinforcement projects, the Board generally expects to see contractual commitments related to the usage of the capacity if the growth is related to demand beyond the distribution area. In electricity transmission reinforcement applications, however, the Board has not typically required that there be signed contracts to substantiate the need forecast. However, this application is the first instance of a major generation-driven network reinforcement and as such can be distinguished from other recent transmission expansion applications.⁹

The issue is whether the generation forecast is sufficiently certain to support a project of this magnitude in the absence of signed contracts. The total wind generation forecast is 1,700 MW, of which 1,000 MW is effectively committed and therefore there is little risk with respect to that amount. The Board concludes that there is also little risk associated with the wind generation forecast for the remaining 700 MW: the OPA has already begun the procurement process with its draft Request for Proposal and there are a substantial number of projects in the IESO queue. The Board notes that 400 MW of the 1,400 MW Bruce area wind potential is located north of Owen Sound, and that there is likely higher uncertainty associated with this generation for a number of reasons,

⁹ EB-2006-0215 and EB-2006-0242 both related to load growth on the system. EB-2004-0476 related to congestion relief and increased imports (but was not related to specific generation projects) and the Board noted in its final decision that the determination of whether Hydro One should be permitted to recover the project costs from customers would take place in a rates application at which time Hydro One would have to demonstrate the financial benefits of the project.

including environmental issues. However, the Board is satisfied that the OPA has mitigated the risks involved by assuming that only 50% of the potential in the Bruce area will be developed. The Board also notes that the forecast covers a broad geographic region and that there are many potential wind developers. This further reduces the risk of the forecast as compared to a forecast that was based on a narrow area or a single generation developer. The Board concludes that the forecast of large wind generation is reasonable and that therefore the need for 1,700 MW of incremental transmission capability to serve wind generation in the Bruce area has been substantiated.

3.3 The Forecast of Generation from Bruce Nuclear Generating Station

There was no substantive dispute amongst the parties regarding the forecast of generation from the Bruce NGS between now and 2018/2019. The issue is with respect to generation from Bruce NGS beyond 2018/2019, the year in which Bruce B units begin to reach their projected end of life. The OPA's forecast is that generation from Bruce NGS will remain at the level of 6,300 MW beyond 2018, either through refurbishment of Bruce B or the building of new nuclear capacity.

Hydro One submitted that absolute certainty was not an appropriate standard by which to assess the forecast. According to Hydro One, the standard should be whether the forecast is reasonable. Hydro One submitted that the OPA's nuclear generation forecast is reasonable because:

- The Supply Mix Directive includes nuclear base-load at 14,000 MW.
- There is existing grid access and infrastructure at the Bruce NGS
- There is support in the Bruce community for continued generation.
- The Bruce operator has expressed interest in continuing to operate in the context of refurbishment or new build.

Energy Probe submitted that if the line is built and Bruce B is not refurbished, then the line will only be useful for 5 years, after which time it will be stranded because the

existing network would be capable of carrying all of the remaining nuclear capacity. Energy Probe submitted that if a lower cost alternative is available, it should be implemented at least until a decision is made on the future refurbishment of Bruce B.

The Ross Group submitted that there is no evidence the refurbishment will take place; no directive for OPA to enter into negotiations with Bruce Power; no evidence of discussions on an official level. Pollution Probe made similar submissions and concluded that only a binding directive or contract would justify an analysis of the project which ignored the otherwise certain decline in generation with the retirement of Bruce B.

IESO submitted even if Bruce B is not refurbished, the units could be extended beyond the current assumed end of life of 2015-2020.

SON and Pollution Probe submitted that the Supply Mix Directive clearly stipulates that the *maximum* generation from nuclear is to be 14,000 MW and that the OPA was misinterpreting or misconstruing the directive. The Ross Group made similar submissions and noted that the directive does not identify the location of the nuclear generation. Hydro One responded that the OPA had not misinterpreted the Supply Mix Directive; in Hydro One's view, the OPA testimony is that maintaining nuclear generation at 14,000 MW is the most reasonable assumption.

Board staff noted a recent Government announcement, which contained the following statement:

*As part of Ontario's energy plan to maintain 14,000 MW of nuclear generation capacity, the Bruce site will continue to provide approximately 6,300 MW of base-load electricity through either refurbishment of the Bruce B units or new units at Bruce C. A joint assessment will be undertaken to determine which option delivers the best value for Ontarians.*¹⁰

Bruce Power submitted that the Board, as an expert panel, is entitled to take notice of this announcement without further evidence. Bruce Power argued that, as with the Supply Mix Directive, the announcement regarding 6,300 MW at Bruce reflects

¹⁰ June 16, 2008 Announcement by Infrastructure Ontario "Phase 2 of Nuclear Replacement Step in Ontario's 20-year plan to bring clean, affordable and reliable electricity to Ontario"

government policy and is not dependent upon approval of the IPSP. APPrO supported Bruce Power's submissions.

Pollution Probe submitted that the Board should give very limited or no weight to the recent announcement as it is in no way binding nor refers to anything which is binding. In Pollution Probe's view it is, at best, a signal of an intention by the government to negotiate with Bruce Power.

Board staff suggested that there were two options to address the uncertainty:

- The Board could find that there was some uncertainty regarding the refurbishment of Bruce B, in which case the Board could deny the application or could approve the application conditional on some demonstration of a commitment to refurbishment.
- The Board could find that, as Hydro One argued, the need for the project is not affected by the decision to refurbish Bruce B.

Energy Probe concluded that the Board should approve the application subject to two conditions (in addition to those proposed by staff):

- The Ontario government ordering either the refurbishment of Bruce B or the construction of new units at Bruce C
- Bruce Power successfully completing the Environmental Assessment and licensing process

Hydro One responded that it would be inappropriate for the Board to impose conditions that were not put to its witnesses but argued that conditions were unnecessary in any event given the robustness of the OPA's generation forecast.

3.3.1 Board Findings

Hydro One maintained that the OPA forecast was more robust than any put forth by an opposing party. The Board notes, however, that there is no requirement for an intervenor to put forth a "better" forecast. The onus is on Hydro One to substantiate the forecast it relied upon. The Board was greatly assisted by the intervenors' thorough testing of the OPA forecast.

The Board concludes that there is significant uncertainty regarding the future level of generation from the Bruce NGS. In some respects, the evidence indicates that the OPA forecast is reasonable:

- Bruce Power has indicated its interest in refurbishment or new build and it has initiated the environmental assessment process associated with new build on the site.
- The Supply Mix Directive calls for nuclear generation for base-load purposes up to 14,000 MW.
- If Bruce B is not refurbished, the units would likely be run beyond 2018.

However, other evidence points to substantial uncertainty:

- There is no contract in place for the generation in question, nor a directive to enter into a contract.
- Unlike for wind generation, the OPA does not have authority currently to procure the generation in question.
- The IPSP proceeding will examine the plan to use nuclear generation to meet base-load requirements for economic prudence and cost effectiveness.
- While the recent press announcement may be an indication of the government's intentions it is not a formal expression of government policy.

The Board's conclusion is that given the level of uncertainty related to nuclear generation at Bruce NGS, the Board must evaluate the Bruce to Milton project in terms of price and reliability impacts under two scenarios:

1. Assuming nuclear generation continues at a level equivalent to eight units in operation
2. Assuming Bruce B is retired and there is no new build

The results of that analysis will determine how significant the uncertainty regarding future generation levels at Bruce NGS is to the Board's determination of this application and whether the Board should consider conditioning any approval of the project as proposed by Energy Probe. The Board addresses these issues in detail in as part of Financial Evaluation in Section 5.

3.4 Planning Transmission For Total Nameplate Generation Capacity

Hydro One argued that it was appropriate to conduct transmission planning on the basis of nameplate capacity for a number of reasons:

- Planning for less than nameplate generation capacity (e.g. planning based on operating history or forecast capacity) would be contrary to government policy to promote renewables and reduce congestion and puts the system at greater risk with respect to reliability; it would also be contrary to the goal of cleaner generation if the constrained generation is replaced with gas-fired peak generation.
- Planning for maximum output is a longstanding practice, and is in line with design standards; planning for less than maximum output would be planning for congestion.
- Planning for congestion would stifle wind development by asking wind developers to bear the diversity risk.
- Congestion reduction is cost effective because the OPA analysis shows that over time the project is the preferred option on an economic basis.

There are two components to this issue:

1. Congestion and the Supply Mix Directive
2. Planning Standards and related Planning alternatives (using historical or forecast capacity factors)

3.4.1 Congestion and the Supply Mix Directive

The OPA argued:

it is not a valid objection for intervenors to argue that the OPA should plan transmission to constrain some wind and nuclear resources in the Bruce area because it would be cost effective to do so; in fact, it would not be as shown by the OPA financial evaluation comparing the project to the proposed alternatives. But, more importantly, to do this would be antithetical to the government policy directives which the OPA is bound to follow in planning Ontario's power system. Specifically, it would contravene the spirit of these policy directives if the OPA were to plan transmission in a

*manner that would constrain the clean and emission-free wind (and nuclear) resources that the government directed the OPA to procure.*¹¹

The PWU made similar submissions.

Pollution Probe submitted that cost effectiveness is a key part of the meaning of the Supply Mix Directive in respect of congestion reduction. The directive reads:

6. *Strengthen the transmission system to:*

*Promote system efficiency and congestion reduction and facilitate the integration of new supply, all in a manner consistent with the need to cost effectively maintain system reliability.*¹²

Pollution Probe submitted that system reliability would be maintained under the alternative using series capacitors and the Bruce Special Protection System (“BSPS”), and given that it would be lower cost, the option is the more consistent with the Supply Mix Directive and is in the interests of electricity ratepayers.

SON submitted that the directive is clear that congestion reduction is to be done within the context of cost effectiveness. In SON’s view, “building transmission capacity to meet 100% of installed generation capacity will always act to reduce congestion, but may risk dramatic and costly overbuild.”¹³

3.4.2 Board Findings

The Board finds that government policy (in the form of the Supply Mix Directive) in support of renewable generation and congestion reduction does not in and of itself automatically justify the planning of a transmission project to meet nameplate generation capacity. Considerations of cost effectiveness are relevant, and indeed are specifically referenced in the Supply Mix Directive. With respect to strengthening the transmission system, the requirement is to “promote system efficiency and congestion reduction and facilitate the integration of new supply, all in a manner consistent with the

¹¹ OPA, Argument, p. 15.

¹² June 13, 2006 Directive (Ex. B, tab 6, schedule 5, appendix 7)

¹³ SON, Argument, p. 18.

need to cost effectively maintain system reliability.”¹⁴ Therefore the Board must consider the appropriateness of the planning standard in the context of this application.

3.4.3 Planning Standards and related Planning alternatives (using forecast or actual capacity factors)

Pollution Probe submitted that just because nameplate capacity was the planning assumption in the past does not mean that it continues to be a good practice, particularly since this application is the first major instance of including wind generation in network transmission planning.

Hydro One responded that planning to nameplate capacity is appropriate because it is consistent with standard planning practices of the OPA and IESO and the generation mix reflects policy choices by the province, and recognizes the particular characteristics of the supply mix in the Bruce area.

Pollution Probe argued that given the low likelihood of the simultaneous operation of all generation at full nameplate capacity, planning the line to meet that requirement would overstate the actual need. With respect to wind, Pollution Probe argued that due to spatial diversity it was unlikely that all wind generation units would be running at full capacity at the same time. With respect to nuclear generation, Pollution Probe noted that Bruce NGS’ historic operation has been in the range of 60-80%. In Pollution Probe’s view,

*it may be more efficient from a societal perspective to simply pay for any locked-in energy during those odd times when the transmission system is running at full capacity than to build an expensive transmission line that would not be needed most of the time.*¹⁵

Pollution Probe argued that if the more realistic capacity factors of 95% for nuclear and 50% for wind are used, then the proposed line provides substantial additional capacity that would not be needed if the series capacitor/BSPS alternative were used instead – whether or not Bruce B is refurbished. Pollution Probe provided the following chart to demonstrate this point.

¹⁴ Exhibit B/Tab 6/Sch. 5/Appendix 7(Directive-Integrated Supply Plan)/page 2/Item 6

¹⁵ Pollution Probe, Argument, p. 14.

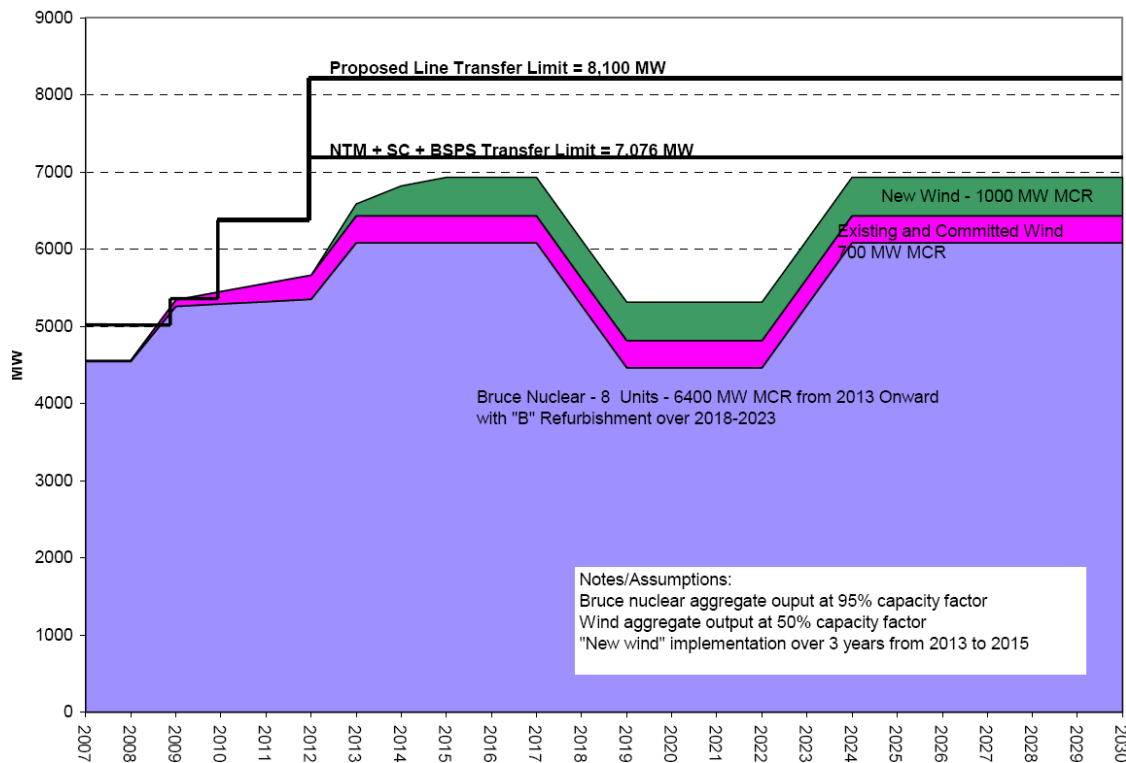


Figure 3 Alternative Assumptions: Depiction of Need for Bruce Area Line Using Bruce Nuclear Station Aggregate CF = 95% and Wind Aggregate CF = 50%

SON noted that the substantive issue of how to treat intermittent wind and other renewable resources from a transmission system planning perspective will be investigated in the IPSP. A decision to approve the project based on the assumption of planning for full wind capacity will influence the nature and scope of investigation of this issue in the IPSP.

The Ross Group submitted that there was no evidence about international standards of planning for wind generation or the reasonableness of Hydro One's reliance on nameplate capacity for transmission planning purposes. Hydro One replied that none of the intervenor witnesses could offer evidence that different planning standards for wind were applied in Texas, Alberta or California.

Pollution Probe questioned the IESO's reliance on the NPCC criterion as the basis for justifying planning to nameplate capacity. The criterion reads: "Transfer capability

studies shall be based on the load and generation conditions expected to exist for the period under study”.¹⁶ In Pollution Probe’s view, the phrase “generation conditions expected to exist for the period under study” is inadequate justification for expensive capacity which will be unused most of the time.

Hydro One agreed that it is relying on the reference to “generation conditions expected to exist for the period” and submitted that given the Supply Mix Directive the OPA plans to obtain the full capacity of the wind generation. Hydro One maintained that the plan to accommodate wind generation, despite its intermittent nature, was based on clear government policy, and that

*Once the choice is made to plan to accommodate all available generation, the applicable NPCC standard requires that transmission capable of transferring the planned-for generation be put in place.*¹⁷

3.4.4 Board Findings

Planning transmission capability to meet nameplate capacity for an intermittent resource is potentially costly. The Board notes that there was simultaneous peak generation from 6 Bruce units and 3 large wind projects on 37 days in 2007. While this represents about 10% of the year when expressed in days, the incidence of simultaneous peaks in terms of hours was presumably substantially less as it is unlikely that there was simultaneous peak wind generation over the entire day for those 37 days. This is reflected in the evidence which was filed showing hourly production on two separate days¹⁸. There is no evidence to suggest that the incidence of simultaneous peak generation will be higher with the addition of more nuclear and wind generation; indeed the incidence may well be lower.

The OPA’s witness agreed that in some circumstances it might not be economic to plan the system to deliver all generation. However, Hydro One testified that the policy framework (which calls for congestion reduction and additional renewable generation) underpins the planning assumption for this application and that the financial impact is only one consideration and is not necessarily the most important consideration. The

¹⁶ Exhibit K5.6/Page 2/section 2.1/Paragraph 2/Second sentence

¹⁷ Hydro One, Reply Argument, p. 14.

¹⁸ Exhibit K1.1

Supply Mix Directive does call for the strengthening of the transmission system, and the Board accepts that planning for an amount less than nameplate capacity is planning for some level of potential congestion.

The Board notes that the evidence is not that the NPCC standard explicitly requires planning to full nameplate capacity; rather, the NPCC standard is that the system meets the planned generation capacity. The evidence is unclear whether the standard would be met if the OPA *planned* for less than 100% of the nameplate wind generation, and planned the transmission system accordingly.

The Board would have been assisted had Hydro One provided more evidence regarding wind generation and system planning in other jurisdictions. While Hydro One argued that the intervenor witnesses did not provide evidence of different planning practices, Mr. Brill (on behalf of the Fallis Group) testified that Florida Light & Power does not plan the transmission system to nameplate wind capacity

The Board does not consider the evidence to be sufficient to make a determination on the appropriateness of planning to full nameplate capacity. The question is whether it must do so in order to decide this application. The Board concludes it does not. Consideration of this issue is connected to the financial evaluation of the project. The financial evaluation is based on a net present value determination of transmission losses and Locked-In Energy. The Locked-In Energy costs are derived from reliability and generation production projections. The question of whether or not to plan for full nameplate capacity is not a determinative factor in the comparative financial analysis. If the conclusion of the financial evaluation was that an alternative was superior from a financial perspective, then the Board would need to assess the merits of the planning approach to determine what weight to give that factor in the overall assessment of the project. As set out later in this decision, however, the Board finds that the project is the preferred alternative from a financial perspective, and therefore an assessment of the planning approach is not necessary.

The IPSP may well examine the planning methodology. The Board's determinations in this application do not pre-judge that examination.

3.5 The Relationship between this Application and the IPSP

SON submitted that the project should not be approved in advance of the IPSP. SON argued that the application is seeking pre-approval of the IPSP because it includes 1,000 MW of planned wind and the refurbishment or replacement of Bruce B, which are core elements of the IPSP. In SON's view, it will be the IPSP, if approved, which will provide the strategic level certainty about generation that will be necessary to substantiate transmission projects, including any transmission project in the Bruce area.

SON argued that Hydro One could have implemented the near term and interim measures, to address the immediate need for enhanced transmission, so that it was not necessary to make this application in advance of the IPSP. SON submitted that because Hydro One chose to proceed with the application,

*it was incumbent upon them [Hydro One] to establish a full case for the inclusion of the future generation elements, including sufficient evidence respecting OPA's planning work to allow this Board to fully assess that work according to the standards required for the review of such work in the context of the IPSP review.*¹⁹

SON concluded that the evidence provided regarding the generation forecast was insufficient, and submitted that the Board "should not approve the current application based on the paucity of evidence respecting related forecasting and planning work."²⁰

Hydro One responded that "the manner in which the OPA carries out pre-IPSP Directives is not subject to Board approval either within the IPSP or outside the IPSP process."²¹

3.5.1 Board Findings

The Board does not agree with SON that Hydro One had an obligation to provide greater evidence related to OPA's forecasting and planning work. The Board is not examining the underlying planning undertaken by the OPA except to the extent it informs the determination of the reasonableness of the generation forecast and the

¹⁹ SON, Argument, p. 15.

²⁰ *Ibid.*

²¹ Hydro One, Reply Argument, p. 26.

economic evaluation of the project. For example, the scope of this proceeding does not extend to broader planning considerations such as the tradeoffs between generation and conservation and between different types of generation. The IPSP proceeding will deal with those issues.

With respect to the reasonableness of the generation forecast, the scope of this proceeding does not extend to a consideration of the merits of the generation itself (i.e. whether or not 700 MW of large wind *should* be procured).

The August 2007 Ministerial Directive is a pre-IPSP directive, and therefore the OPA has authority to procure the 2,000 MW of renewable generation identified in the directives whether or not the IPSP is approved. The OPA has indicated that it intends to procure 700 MW from large wind projects in the Bruce area. No further Board approval is required in that regard. Therefore, the Board's determination of the reasonableness of the wind generation forecast does not pre-judge the IPSP.

There are a number of issues for review in the IPSP proceedings that relate to nuclear generation for base-load requirements. However, in its decision on the IPSP issues, the Board noted that "many of the most significant decisions regarding nuclear power have been made, or will be made, outside this proceeding."²² In addition, the Board has already determined that it must assess this application under two nuclear scenarios: with continued generation from eight units at Bruce NGS on the one hand, and with Bruce B retirement and no new build on the other. Therefore, the Board is satisfied that its decision in this proceeding does not pre-judge the determination of future generation at the Bruce NGS or the Board's consideration of base-load nuclear generation in the IPSP.

3.6 Is the Project Non-Discretionary?

The Board's *Filing Requirements for Transmission and Distribution Applications* (the "Filing Requirements") include provisions whereby the applicant is to identify whether the proposed project is discretionary or non-discretionary. Hydro One submitted that the project was non-discretionary because Ministerial directives require the procurement of new generation and drive the need for the project: to minimize congestion, to maintain nuclear base-load, and to increase generation from renewables.

²² EB-2007-0707, *Decision with Reasons*, March 26, 2008, p. 23.

The Ross Group maintained that the project was discretionary because the witnesses acknowledged that the project accomplished the purposes listed under discretionary projects in the Filing Requirements, and did not testify that it met the requirements under the non-discretionary category. The Ross Group argued that because it is a discretionary project, the evidence in support of the project must be comprehensive and concluded that Hydro One had failed to meet the evidentiary burden in the application.

Hydro One responded that in its cross-examination, the Ross Group had omitted to identify the most important criteria for a non-discretionary project, namely “Projects that are required to achieve Government objectives that are prescribed in governmental directives or regulations.”

The Fallis Group submitted that the rules contained in the Filing Requirements require the Board to determine whether the project need is determined beyond the control of the Applicant or is determined at the discretion of the applicant. In the Fallis Group’s view, a non-discretionary project is one for which “the need is determined beyond the control of the Applicant”, and this means that some party external to Hydro One should have ordered or directed Hydro One to make the application. The Fallis Group argued that the project is, by definition, discretionary, because Hydro One had the discretion not to make the application. The Fallis Group submitted that because the project is discretionary, the Board can examine it through its overall legislative objectives.

Hydro One responded that the Fallis Group argument that Hydro One was not compelled to apply for the Project was largely irrelevant.

The Fallis Group also submitted that the project should be considered in the same way as the Consolidated Hearing Board determined transmission issues previously, including an assessment of alternative technologies. The Fallis Group also submitted that the Board cannot render a final decision in advance of the EA approval and a development permit under the Niagara Escarpment Planning and Development Act.

3.6.1 Board Findings

The Board finds that the project can be categorized as non-discretionary because the need for the project has been determined beyond the control of Hydro One. Specifically, the need for the project has been determined by the OPA in its role as

system planner which is required to achieve Government objectives that are prescribed in directives or regulations.

In any event, the Board concludes that little turns on the project categorization. With respect to the Ross Group argument that Hydro One's evidence was insufficient the Board notes that issues regarding the sufficiency of Hydro One's evidence are addressed throughout the decision. The Board disagrees with the Fallis Group submission that an external party would have had to order or require Hydro One to make the application. There is no support in the Filing Requirements for that interpretation. The Board notes that regardless of the categorization, the Board's legislative objectives are relevant to the consideration of the application.

Further, the Board notes that it is clear in the Board's Filing Requirements (and in its past practice with all leave to construct applications) that it will test a proposal against the reasonable alternatives. The only difference in filing requirements for a non-discretionary project²³ is that the applicant need not evaluate the alternative of doing nothing.

Finally, contrary to the view of the Fallis Group, the Board has the authority to render a final decision in this application, in advance of the EA and Niagara Escarpment processes, provided such approval is conditional on the successful completion of those processes.

3.7 Evaluation Criteria and Identification of Alternatives

Hydro One identified that the project and any reasonable alternatives would need the following essential attributes:

- Meets the required transmission capability
- Has limited effect on other paths
- Uses proven technology
- Is constructed at a reasonable cost
- Is consistent with land use policy

In Hydro One's view, only its proposal meets these essential criteria.

²³ Filing Requirements for Transmission and Distribution Applications, November 14, 2006, section 5.3.2

Hydro One reviewed a number of potential alternatives and reached the following conclusions in respect of each:

1. “Do nothing”: the Ontario power system has changed since the time when the transmission system had sufficient capability for the eight nuclear units. The heavy water plant has closed; load patterns have changed; wind is an additional generation resource; the province has an established “off-coal” policy.
2. Use of higher capacity conductor (e.g. ACCR technology): it would require 15 years and \$1.8 billion to achieve the same capability as the project.
3. High Voltage Direct Current (“HVDC”) options: “HVDC Lite” is not a proven technology; HVDC 500 KV was screened out on basis of cost.
4. Bruce to Essa and Bruce to Longwood: neither line could accommodate the 1,000 MW planned wind.
5. Bruce to Kleinburg and Bruce to Crieff: significantly greater land use requirements from new corridors.
6. Longwood to Middleport: this proposal by Pollution Probe does not meet the need (only provides 7,025 MW), and the evidence is that it would cost more than the proposed project.

We address the following four sub-issues:

1. Sufficiency of the evidence
2. Interpretation of the land use policy
3. Scalability and uncertain generation
4. Near term and interim measures

3.7.1 Sufficiency of the Evidence

The Fallis Group submitted that the Board determined at Motions Day that it would not consider route selection or route alternatives, thereby resulting in insufficient evidence and examination of the costs and adequacy of the various transmission route alternatives.

The Fallis Group also submitted that the more advanced conductor technology is superior to the Aluminum Conductor Steel Reinforced (“ACSR”) proposed to be used in the project and is therefore a reasonable alternative for which Hydro One did not

provide adequate comparative evidence. The Fallis Group maintained that the cost estimates provided by Hydro One for this alternative were unsubstantiated and subjective.

Mr. Chris Aristides Pappas, an individual intervenor, submitted that Hydro One had not met the Filing Requirements because it had not examined in sufficient detail new conductor technologies, Flexible Alternating Current Transmission Systems, commonly called “FACTS” technologies, series compensation, etc. He further submitted that the proposed project presents significant risk to the system due to, among other things, the continued use of the BSPS.

SON submitted that by fixing the transmission transfer requirement at 8,100 MW, Hydro One “short-circuited” the evaluation of the alternatives by refusing to consider alternatives associated with less generation or alternatives which provide flexibility to accommodate uncertainty with respect to generation: series capacitors; Bruce to Essa; and Bruce to Longwood to Middleport. Therefore, the Board cannot conclude that Hydro One has considered all reasonable alternatives.

3.7.2 Board Findings

The Fallis Group submission with respect to Motions Day is incorrect. The Board decided that it would not consider route *refinements* within the applied for corridor – it was open to intervenors to explore the various route alternatives in order to test Hydro One’s proposal and there was cross-examination on these alternatives.

The Board notes that Hydro One’s evidence with respect to evaluation criteria and alternatives was not as good as it could have been, but the Board has sufficient evidence to make its determination. Much of the key evidence regarding comparison of the project to the alternatives was developed through intervenor interrogatories, cross-examination, and intervenor evidence. It would have been helpful to have had more analysis in the application itself, even if Hydro One was of the view that an alternative was not worthy of further consideration. As an example, Hydro One’s evidence on the

“conceptual alternatives” associated with alternative conductor technologies took the form of a one-page summary filed during the course of the proceeding. The Board expects that in future applications, Hydro One will take a broader view of the relevant alternatives and will provide sufficient evidence in a timely manner to assist the Board in considering alternatives.

3.7.3 Interpretation of the Land Use Policy

Hydro One’s position was that the proposal was consistent with provincial land use policy.

The Provincial Policy Statement (“PPS”) reads:

*The use of existing infrastructure and public service facilities should be optimized, wherever feasible, before consideration is given to developing new infrastructure and public service facilities.*²⁴

The Ross Group submitted that the PPS should be interpreted in the following way:

- The use of “should” indicates a desire, not a legal obligation or imperative;
- Optimizing the existing corridor does not recognize that additional land acquisition is required for the proposed project as well as the two rejected alternatives.
- “Infrastructure” doesn’t include the existing corridor as no specific reference to transmission corridor is made in the definition, whereas there is specific reference to transit and transportation corridors in the definition
- “Feasible” should be defined as “suitable” and should be assessed in terms of the risk of a single corridor and the adverse impact on Camp Creek Lowlands and the Niagara Escarpment.

²⁴ Exhibit B/Tab 6/Sch. 5/Page 10/Section 1.6.2

3.7.4 Board Findings

The Board concludes that the PPS is clearly directed toward the intensified use of existing infrastructure, including infrastructure corridors. In that context the Board concludes that intensified use of an existing corridor is preferred to an expanded corridor, and an expanded corridor is preferred to a greenfield corridor.

3.7.5 Scalability and Uncertain Generation

SON, Energy Probe and the Ross Group all argued that the proposed project was not suitably scalable. SON argued that total committed generation in 2013 will be about 7,100 MW, but that generation beyond that time could be substantially higher or substantially lower depending upon the outcomes of the IPSP, regulatory approvals, development decisions and competitive procurements:

- Generation production could be as low as 6,250 MW in 2018 if Bruce B begins retirement and if planned wind is not fully realized, generation could drop to 3,700 MW in 2022.
- Alternatively, generation production could reach higher than 8,100 MW if there is both refurbishment at Bruce B and new nuclear build and/or if wind generation beyond the current forecast of 1,700 MW is achieved.

A number of intervenors submitted that the project should be downwardly scalable given the uncertainties related to generation and noted that the Hydro One project is not downwardly scalable.

Hydro One submitted that scalability is achieved through the near-term and interim measures and maintained that there is no reasonable possibility of declines in generation in the Bruce area.

3.7.6 Board Findings

The Board concludes that scalability is an important consideration, particularly given that the project is based on a generation forecast and is not underpinned by contractual commitments. The evidence is clear that the project is designed for 8,100 MW and is not scalable to either lower or higher levels of generation. Hydro One did not take

adequate account of this factor in its analysis of the project and the alternatives. However, the Board finds that this deficiency in the application is not sufficient reasoning to reject the project. In future applications, the Board expects Hydro One to assess how sensitive its analysis of alternatives is to variations in capability requirements.

3.7.7 Near Term and Interim Measures

Hydro One identified two near-term measures which increase transfer capability by 400 MW: upgrading the 230 kV Hanover to Orangeville line by 2009 and adding dynamic and static reactive resources to the transmission system in southwestern Ontario. Hydro One also identified two interim measures: expanding the BSPS; and, installing series capacitors if the project were to be delayed beyond the end of 2011. In addition the OPA will maintain the Orange Zone (which prevents the connection of further renewable generation in the Bruce area);

Hydro One argued that these near-term and interim measures do not meet the forecast need over the long term, noting that more transmission capability is needed by 2009 for both committed wind generation and Standard Offer Program wind generation. Hydro One submitted that the interim measures also cannot be considered as an alternative to the project because longer term use of generation rejection in normal conditions breaches reliability standards.

Hydro One submitted that a combination of generation rejection and series capacitors was also not a reasonable alternative. Hydro One stated that the resulting transmission capability of 7,076 MW is insufficient for the forecast need, and series compensation presents operational challenges and cannot be implemented until 2011 given the studies which are necessary (as identified by Hydro One's external consultant) to ensure reliability on the complex Bruce system.

Board staff noted that there is uncertainty around the timing of the approvals process (the Environmental Assessment) and when generation will be committed. Board staff questioned whether the interim measures (including series capacitors) would be appropriate to maintain transmission capability to meet the generation requirements in the Bruce area in the event the proposed line is delayed.

Pollution Probe submitted that a combination of series capacitors and generation rejection is a reasonable alternative which is both viable and reliable:

- Series capacitors are a mature and reliable technology, which Hydro One could implement by the end of 2011.
- The BSPS has been used for decades, which indicates its viability and reliability, and it would still be used if the new line is built.
- The BSPS should be armed more frequently to allow greater optimization of the existing system, in line with land use policy.

Pollution Probe submitted that transmission capability would be 7,076 MW with series capacitors and generation rejection, noting that Mr. Russell testified that the limit could be further increased to 7,176 MW or even 7,400 MW. Pollution Probe submitted that this alternative cannot be rejected as not meeting the need when more realistic capacity factors are used and when one considers the cost effectiveness analysis.

3.7.8 Board Findings

Hydro One screened out the project alternatives based on its criteria, and with the exception of the series capacitor/generation rejection alternative, there was limited dispute about Hydro One's analysis. The Board accepts the evidence that the Longwood to Middleport alternative would provide less transmission capability at higher cost than the proposed project.

However, the series capacitor/generation rejection alternative appears to have some merit based on the uncertainty in the generation forecast and the limited scalability of the proposed project. The series capacitor/generation rejection alternative offers the potential for greater scalability. This alternative would also be consistent with the government's land use policy in that it would result in more intensive use of the existing corridor.

The Board notes that there appear to be limited incentives for Hydro One to optimize its assets. The Board observes that Hydro One was slow to offer evidence on the comparison with "conceptual alternatives" but quick to highlight the "complexity" of series capacitors. Hydro One (and the IESO and the OPA) displayed a definite hesitancy to extend or stretch system capabilities.

It would have been more helpful to the Board if Hydro One's evidence in this area had been more comprehensive. Therefore the Board assesses the proposed project against the alternative of series capacitors/generation rejection in the next two sections: the Financial Evaluation; and the Reliability Evaluation.

The Board is indebted to the intervenors for their rigorous examination of the series capacitors/generation rejection alternative and the testing of this alternative against Hydro One's proposal.

4. FINANCIAL EVALUATION

4.1 Introduction

Hydro One explained that the Locked-In Energy (“LIE”) analysis provides an estimate of the cost to Ontario consumers if the proposed facilities are not built and thus inadequate transfer capability resulted:

Model results depict the cumulative net present value of costs, including transmission losses and locked in energy, both for the applied-for facilities and those associated with other alternatives. Graphs depicting these results were submitted in evidence and show “cross-over points” where the costs of one option rise above those of the other being considered. Cross-over points of the cumulative cost of an alternative expressed on a NPV basis demonstrate which alternative has a higher or lower cost in the long-term.²⁵

The OPA estimated the cumulative net present value (“NPV”) of the locked-in energy costs to be \$1.3 billion based on the costs of the locked-in energy and losses and the BSPS upgrade costs, and assuming the near term measures have been installed.²⁶ If series capacitors are included the cumulative NPV of the costs falls to \$917 million (the costs of the series capacitors are more than offset by the reduced locked-in energy).²⁷ Both of these values are well in excess of the project cost of \$635 million.

Hydro One provided the graph below which depicts the cumulative NPV of costs over time for the Bruce to Milton project and the series capacitor alternative under the assumption that Bruce B is refurbished or replaced. This graph shows the cross-over point of 2019, demonstrating that while the series capacitor alternative is less expensive in the early years, its cost exceeds that of the project over the long term.

²⁵ Hydro One, Argument in Chief, p. 25.

²⁶ Exhibit C/Tab 2/Schedule 10

²⁷ Exhibit C/Tab 2/Schedule 11

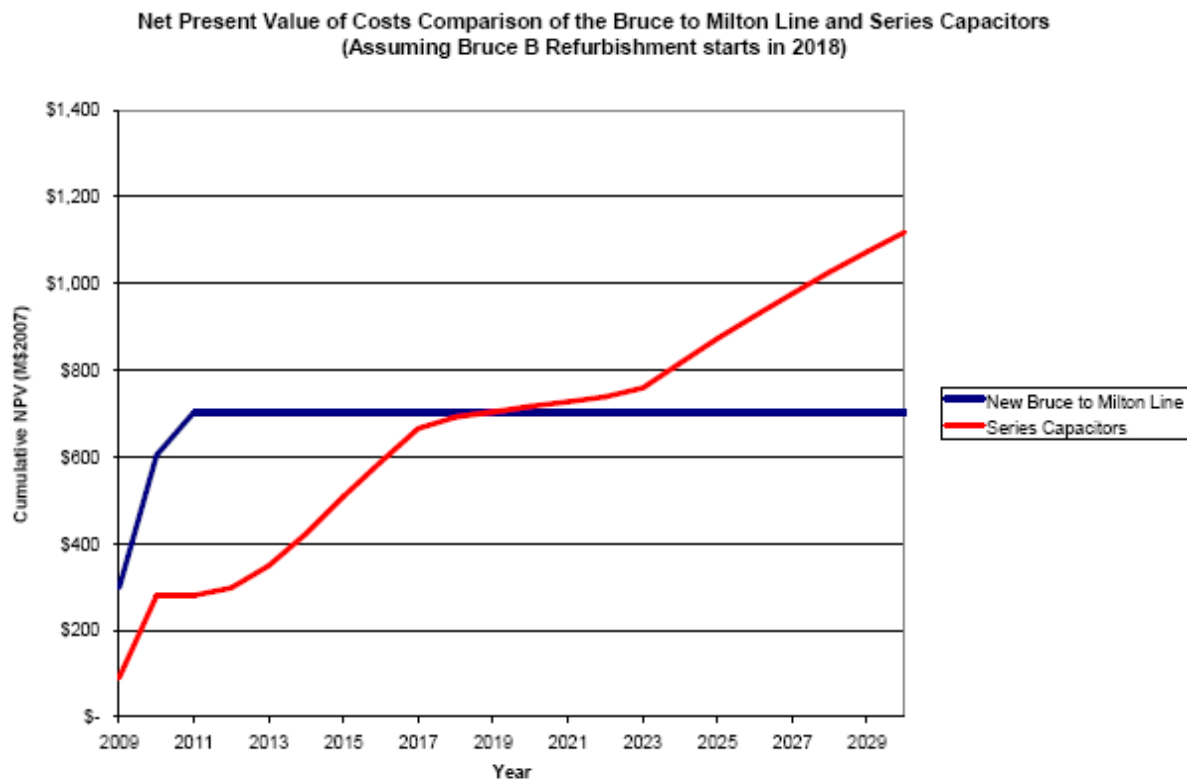


Figure 4 Source: Exhibit K.3.2, slide 1

Hydro One also provided the following graph which shows the results of the same analysis but under the assumption that Bruce B is retired. The cross-over date is unchanged, and although the costs of the series capacitor alternative level off, they remain higher than the proposed project.

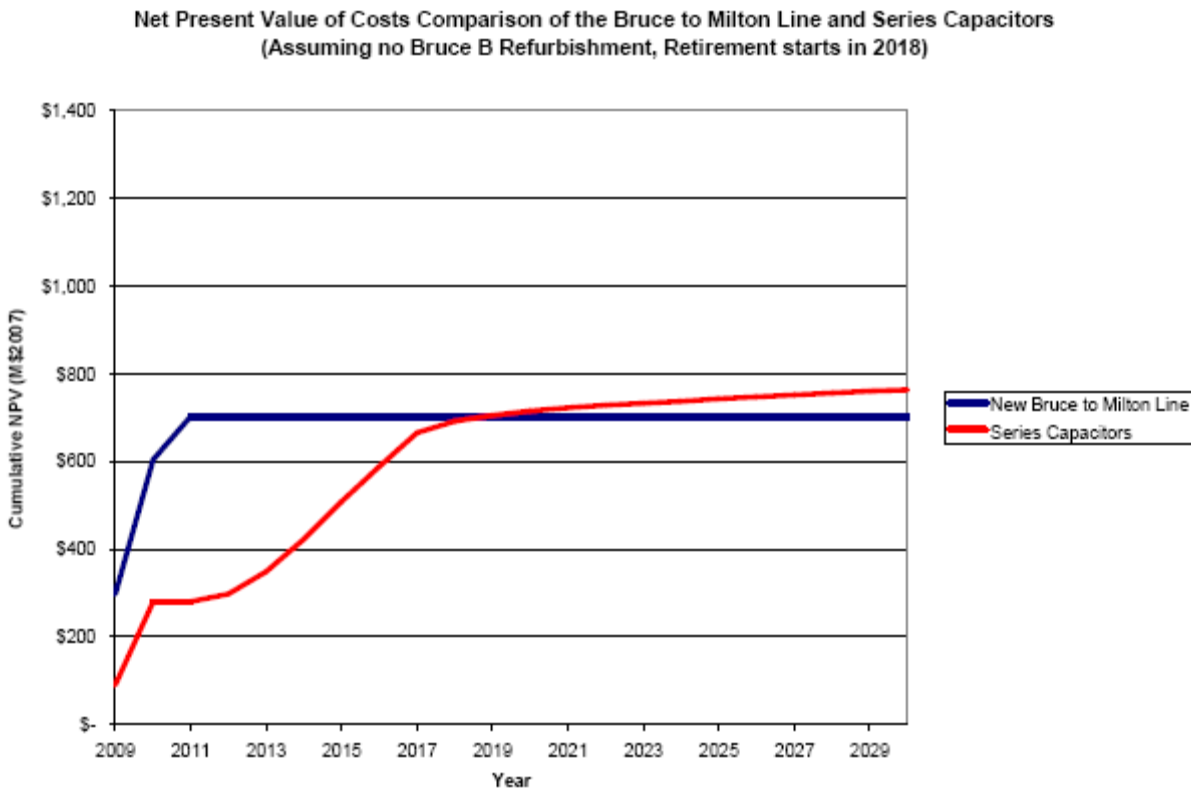


Figure 5 Source: Exhibit K3.2, slide 2

The PWU submitted that the locked-in energy analysis was irrelevant

because it presupposes that the task for the Board is to determine the financially optimal combination of generation and transmission resources, regardless of all other factors that make the proposed project a non-discretionary and pre-IPSP project that is recommended by the authorities mandated to do so. Such an exercise would be inconsistent with the authorities of the various entities involved in the electricity sector.²⁸

4.1.1 Board Findings

The Board disagrees with the PWU. This locked-in energy analysis is not irrelevant. The Board must assess the application in terms of prices, reliability and quality of electricity service. This financial analysis is the best means by which the Board can

²⁸ PWU, Argument, p. 25, paragraph 54.

assess the public interest in respect of price. This is particularly important given the uncertainties associated with the generation forecast and the OPA's approach of planning transmission capability to meet full nameplate generation even though the simultaneous maximum generation from all sources can be expected to occur infrequently.

The Board notes that the intervenors have made a significant contribution to the testing and assessment of the locked-in generation analysis and the series capacitors/generation rejection alternative. First, we examine the Pollution Probe analysis, and then we review the SON analysis.

4.2 Pollution Probe (Fagan/Lanzalotta) Analysis

4.2.1 The Approach to the Analysis

Mr. Fagan and Mr. Lanzalotta, witnesses for Pollution Probe, claimed there were a number of flaws in the OPA model and developed an alternative analysis by which to assess the project. Pollution Probe submitted that the Fagan/Lanzalotta analysis should be accepted over that of Hydro One, and concluded that the proposed line does not make economic sense compared to the alternative (series capacitors/generation rejection), whether or not Bruce B is refurbished.

Hydro One took the position that the adjustments made in the Fagan/Lanzalotta model (namely to use average capacity factors for nuclear generation for the winter/summer and shoulder periods, average capacity factors for wind, and monthly average transmission penalties) were inappropriate for the following reasons:

- Using monthly capacity factors for wind and nuclear underestimates locked-in energy: "using capacity factors as a proxy for the generation profile will under-estimate the amount of generation that is produced, and under-estimate the amount of locked-in energy, where the generation profile is variable, as in the case of wind." (p.29) The OPA convolution of wind and nuclear data captures the detailed generation profiles.
- There is minimal operating flexibility for the CANDU reactors. The OPA approach reflects actual output with more real-time precision than the Fagan/Lanzalotta approach.

- There is no substantiation for the claim of spatial diversity of wind in the Bruce area. The AWS Truewind report of October 2006 refers to spatial diversity, not the April 2007 report which OPA used. (The 2006 report uses 10 minute mast data at sites across Ontario; the 2007 report provides hourly data based on simulated aggregate generation of three “virtual” wind farms in the Bruce area based on 20 years of climate data.) The Pollution Probe approach results in a flat profile (40% for winter and shoulder and 20% for summer); the OPA’s approach provides greater precision.
- Deriving the reduction in transmission system capability due to outages (the “transmission penalty”) based on monthly averages does not capture real-time effects of congestion: for example, the coincidence of strong wind blowing for three hours at the same time that an unexpected transmission outage occurs. The result is that locked-in energy is underestimated in the Fagan/Lanzalotta model.
- There is no statistical analysis to demonstrate a pattern of transmission outages in shoulder time periods. The OPA testified as to why outages cannot reasonably be expected to be scheduled during shoulder period on a consistent basis.

More specifically with respect to the nuclear generation profile, Hydro One maintained that the two-state model used by the OPA is the most appropriate approach. Hydro One pointed to the chart²⁹ which presents the nuclear distribution curves for 2007 and submitted that the charts demonstrate that for each unit most of the time is spent either off or generating at maximum capacity. In Hydro One’s view,

*The [OPA] model takes the frequency with which each unit is actually on or off into account with the probabilistic generation profiles, based on three years of historic operating data. As a result, and because the model does not assume that every unit at the Bruce complex generates all the time, Pollution Probe’s concern that the model does not reflect aggregate generation of the Bruce nuclear complex is satisfied.*³⁰

Hydro One acknowledged that the OPA model does ignore the approximate 5% of total time at which the unit operates between zero and MCR less 50MW: half would be represented by zero production and half would be represented by full production in the

²⁹ Exhibit. K13.1, p.1

³⁰ Hydro One, Reply Argument, p.16.

OPA model. While the OPA could have used a three-state model, Hydro One maintained that the minimal improvement in the model would have necessitated an “exponential increase” in its complexity.

4.2.2 Board Findings

The Board’s conclusion is that the Fagan/Lanzalotta analysis has identified some areas of the OPA model which would benefit from further analysis and/or sensitivity analysis, but their model does not provide a superior way of analyzing the project. The Board would like to note, however, that it finds the presentation of alternative approaches to be particularly helpful. The Board understands the data and time restrictions intervenors face when undertaking such analysis and does not expect that such analysis would provide a complete substitute for the applicant’s analysis. The Board sees the primary purpose of intervenor expert analysis to be a means of testing the robustness of the applicant’s approach and presenting alternative approaches which may be appropriate for the applicant to adopt.

The Board agrees that the greater level of detail in the OPA approach is superior to the Fagan/Lanzalotta reliance on monthly capacity data. The Board also agrees with Hydro One that the OPA’s approach to modelling nuclear generation based on a two-state model is superior to the Fagan/Lanzalotta monthly capacity approach in most respects. The Board accepts that the OPA approach appropriately captures the aggregate generation from the Bruce NGS, and that capturing the small amount of time during which there is partial generation from each of the units would result in minimal improvement to the model.

With respect to spatial diversity of wind, the Board notes the concern expressed in the 2006 GE Energy/AWS Truewind Report³¹, referenced by Fagan/Lanzalotta, that the data may not adequately capture spatial diversity. The report observes that as a result, “the wind generation profiles produced probably overstates the variability of the combined output of the wind projects.”³² However, this comment is made in the context of the 10-minute data. The report goes on to state

³¹ *Final Report to: OPA, IESO, CanWEA for Ontario Wind Integration Study*, October 6, 2006, attached to the Supplemental Direct Evidence of Robert M. Fagan and Peter J. Lanzalotta, filed May 15, 2008.

³² *Ibid.*, p. 3.5.

On the other hand, over periods of several hours or more, wind fluctuations tend to be more correlated between projects spaced as many as hundreds of kilometers apart. On such time scales, the lack of geographic diversity in the data probably makes little difference to the overall variability of the combined plant output.³³

The OPA relied upon an AWS Truewind report of April 2007. This study simulates production at specific project sites (rather than specific masts) and therefore addresses the issue of spatial diversity within a wind farm project. The OPA took the data from three sites in this study and scaled the results to the forecast total wind capacity of 1700 MW. Although the OPA did not specifically address whether this direct scaling was appropriate or whether additional consideration of spatial diversity across the region was warranted, the Board notes the earlier observation that over longer time periods, the lack of spatial diversity in the data probably makes little difference. The Board concludes that spatial diversity is unlikely to be a significant factor in the context of the OPA model.

Fagan/Lanzalotta have also identified that there is at least apparent seasonality to nuclear production and transmission capacity. It may be that this aggregate pattern has limited impact on the OPA model results given the OPA model is based on a finer temporal level (hourly rather than monthly); however the OPA did not appear to give this serious consideration. The credibility of any model is enhanced if it successfully mimics real-world experience. Hydro One criticizes Fagan/Lanzalotta for not providing statistical analysis of this apparent seasonality. While such an analysis would have strengthened the Fagan/Lanzalotta position, the observation of the pattern alone has some merit.

The Board notes that the IESO did testify that there were attempts made in real operating circumstances to coordinate nuclear and transmission outages, to the extent possible, in the shoulder period.³⁴ In the Board's view, it is the responsibility of Hydro One (and by extension, the OPA) to consider such circumstances and assess more thoughtfully whether the model could or should be enhanced. The Board expects Hydro One and the OPA to address this issue in the context of any future reliance on the model before the Board

³³ *Ibid.*, p. 3.5.

³⁴ Transcript Volume 7/pp. 129-130

4.2.3 The Results of the Analysis

The results of the Fagan/Lanzalotta analysis can be summarized as follows:

- If Bruce B is not refurbished, there will be significant excess transmission capacity when the nuclear units reach the end of their life, beginning around 2017. Fagan/Lanzalotta estimated that \$245 million would be saved by using the alternative instead of the proposed line.
- If Bruce B is refurbished, the aggregate generation from the Bruce area could be transmitted almost all of the time. Fagan/Lanzalotta estimated that at least \$72 million would be saved in this scenario by using the alternative instead of the proposed line.

Pollution Probe argued that in either case the savings would be even higher than estimated because of the conservative assumptions made regarding nuclear capacity factors and the low assumed transmission limit of 7,076 MW. Pollution Probe also maintained that the cost of series capacitors (\$91 million) should not be included in the analysis because of other long term benefits of this technology (higher transfer capability in the event of a contingency). If the costs were included, the net savings would still be substantial in the scenario where Bruce B is not refurbished and still likely to outweigh the costs if Bruce B is refurbished.

Hydro One submitted that Fagan/Lanzalotta used the wrong data set in their analysis. They used the OPA scenario "C" (which includes series capacitors) for the comparison, whereas using scenario "B" (which does not include series capacitors) would have been more appropriate, in Hydro One's view, and would have resulted in much higher locked-in energy:

*Pollution Probe's assertion that \$245 million would be saved by using series capacitors instead of building the line cannot by definition be correct. Mr. Fagan's results do not show the value of the line compared with series capacitors; they show the incremental value of the line after series capacitors are built. Not surprisingly, based on this approach the NPV Mr. Fagan derives is considerably lower than a proper analysis would show.*³⁵

³⁵ Hydro One, Reply Argument, p.19.

Hydro One maintained that the OPA's analysis, which indicates net benefits of \$700 million from construction of the line, is the analysis upon which the Board should rely.

4.2.4 Board Findings

Hydro One maintained that the Fagan/Lanzalotta analysis was flawed because it used scenario "C" (which includes the near term measures, the BSPS and series capacitors) for comparison purposes rather than scenario "B" (which only includes the near term measures and the BSPS). The Board does not agree. The Fagan/Lanzalotta analysis is attempting to measure the cost of locked-in energy in the series capacitor/generation rejection alternative; the analysis is not attempting to measure the incremental improvement offered by the Bruce to Milton alternative. However, given the other limitations of the Fagan/Lanzalotta approach discussed above, the Board concludes that the results cannot be relied upon to assess the project.

The Board concludes that based on the OPA analysis, the benefits of the project in comparison to the series capacitors/generation rejection alternative exceed the costs. The benefits are substantially larger than the costs if Bruce B is refurbished or replaced around 2018. This is shown in Figure 4 where the cumulative costs of the alternative are significantly higher over time than the cumulative costs of the project. If Bruce B is retired and not replaced, the cumulative costs of the alternative are still higher over time than the costs of the project, although the difference is much smaller. This is shown in Figure 5. However, the Board accepts that if Bruce B is to be retired, then it is quite likely that the plant would run beyond its current retirement date, thereby increasing the difference in cost between the two alternatives. For example, Figure 6 below shows the comparison assuming Bruce B begins to be retired in 2020 (as opposed to 2018).

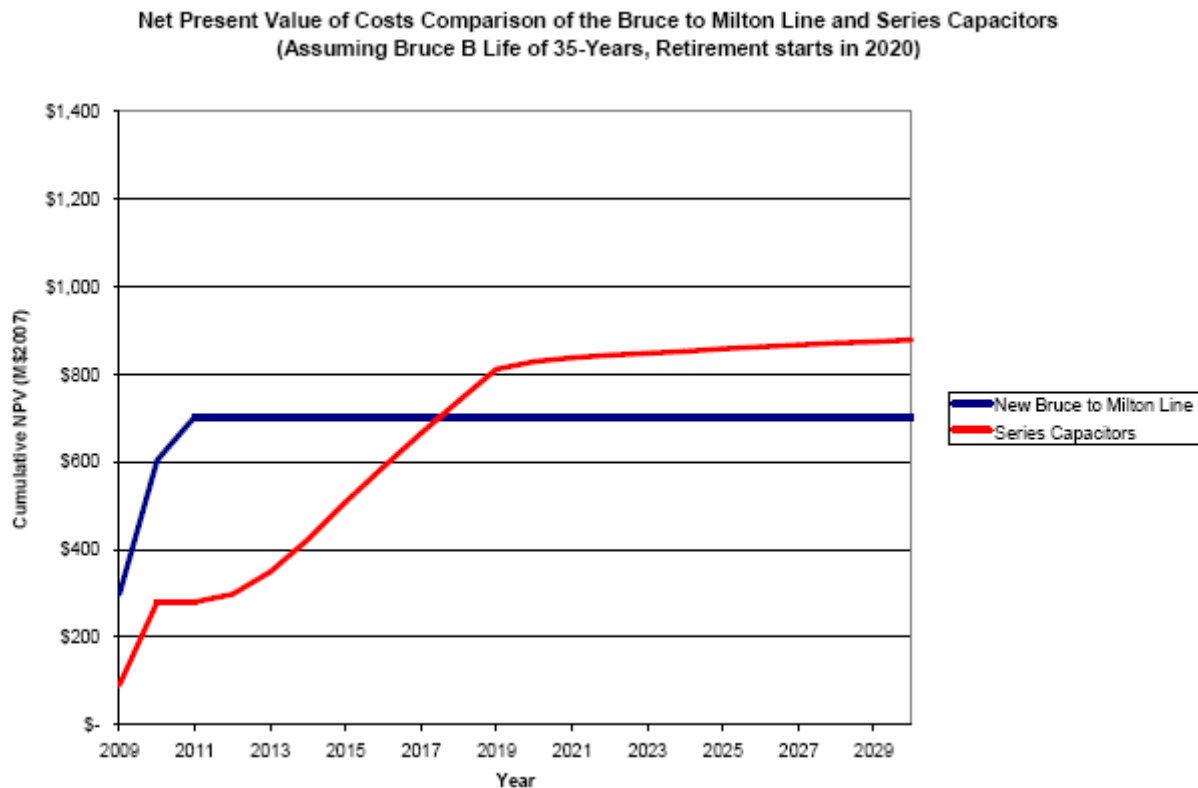


Figure 6 Source: Exhibit K3.2, slide 4

4.3 SON (Russell) Analysis

4.3.1 The Approach to the Analysis

SON submitted that the OPA NPV cost analysis cannot be used to demonstrate the comparative values of various alternatives and is of doubtful reliability given various flaws and assumptions. In particular, the model does not include:

- the annual savings associated with delaying capital costs associated with the project
- the on-going value of series capacitors and its upward scalability

Hydro One responded that the annual revenue requirement is not an appropriate proxy for the avoided costs associated with delaying the line and that delaying the line leads

to a net loss, because the line has a positive net present value. Hydro One also submitted that if series capacitors are installed and the line is subsequently built, then the series capacitors will become redundant unless the generation installed surpasses 8,100 MW.

SON further submitted that the OPA model contains the following flaws:

- Does not accurately measure the avoided costs when wind generation is locked-in, and the avoided cost data is low and outdated
- Does not include losses or outages of enabler lines
- Does not include costs for future switchgear upgrades
- The discount rate should be 10%, not 4%

(SON also submitted that the OPA model did not take account of spatial diversity or the seasonal pattern to transmission derating. The Board has addressed these criticisms in the prior section.)

Hydro One responded that:

- If the most recent avoided cost data were used, the result would make SON's alternative less attractive because the avoided costs have risen.
- Reducing the avoided costs by the cost of the wind generation fails to recognize the Market Rules and Ontario policy.
- Enabler lines are not part of the project and many wind farms in the IESO queue would not require an enabler line, and any alternative would be subject to the same circumstances.
- Expected future upgrades to the Milton station, beyond those included as part of this project, are not related to the project.
- It is appropriate to use a real social discount rate, not a utility-specific nominal rate, when discounting unescalated non-utility cashflows.

SON concluded the OPA model was not a viable system planning tool. Hydro One responded that the model is not intended to be a system planning tool; it complements and confirms the nameplate planning methodology.

4.3.2 Board Findings

The Board's findings in respect of Mr. Russell's analysis are largely the same as for the Fagan/Lanzalotta analysis: namely that Mr. Russell's analysis provides useful insights and valuable testing of the OPA model, but ultimately Mr. Russell's approach cannot be relied upon to evaluate the project. The Board would like to note that it was greatly assisted by the testimony of Mr. Russell.

As with Pollution Probe, SON and Mr. Russell have raised legitimate challenges to the OPA analysis. The Board has already addressed the issues of seasonality in transmission capability and spatial diversity for wind in the prior section of this decision.

The Board does not agree with SON's criticisms with respect to the avoided costs, losses on the enabler lines, and the costs of switchgear upgrades. The Board accepts Hydro One's position that the switchgear upgrades are outside the scope of the analysis and that losses on enabler lines would be common to any of the alternatives being analyzed. With respect to the avoided cost data, the Board notes that the current Navigant data is higher than that used by the OPA and hence the OPA analysis understates the costs of locked-in energy.

The Board does not agree with SON that a 10% discount rate is appropriate. No evidence was lead in support of this level and the Board notes that 10% is substantially in excess of the discount rate set out in the Board's Transmission System Code for economic evaluation of connections. That discount rate is the transmitter's after-tax cost of capital, which in the case of Hydro One is a nominal rate of 5.47%. The Board accepts the use of a real discount rate of 4% in these circumstances.

The Board also disagrees with SON's argument that the savings from locking-in higher cost wind energy should be included. The Board agrees with Hydro One that it would be inappropriate to reduce the avoided costs by the amount of the avoided wind generation costs. First, the Market Rules are such that wind generation is the last to be curtailed, and standard offer wind is not curtailed. Second, if wind generation were to be subject to curtailment, then the wind developers will factor that into their bids in response to the OPA's procurement process. Third, the model uses Navigant's estimates of avoided costs (developed for purposes of evaluating conservation and demand management programs), which are possibly lower than the costs which would

actually be paid for replacement generation using the IESO's Hourly Ontario Energy Price ("HOEP").

With respect to voltage support costs, the Board finds that while there is substantial dispute as to the level of these costs, it would not be appropriate to assume these costs are zero.

Based on these findings, the Board concludes that Mr. Russell's scenarios which show cross-over points beyond approximately 2024 are not relevant.

Although the Board accepts the assumptions used by the OPA, it would be helpful for future evaluations if the OPA were to conduct some sensitivity analysis around these key variables.

4.3.3 The Results of the Analysis

SON argued that the series capacitor/generation rejection alternative would provide 87%-91% of the full nameplate capacity of OPA's assumed 8,100 MW of generation for \$535 million less than the cost of the project. SON maintained that Hydro One's own evidence is that this alternative would support a minimum of 7,076 MW (under stressed conditions) up to 7,476 MW (with voltage support). SON maintained that this alternative would provide a lower cost option for meeting committed requirements and allow a staged approach to planning for future requirements given the current uncertainties around wind and nuclear generation.

SON's expert, Mr. Russell, used the OPA's model to analyze a variety of scenarios with Bruce B retirement and with Bruce B refurbishment and with and without voltage support costs. Based on this analysis, the cross-over dates of the cumulative cost NPV varied from 2018 to beyond 2030. SON concluded that these dates suggest that Hydro One could install the series capacitor/generation rejection alternative and have a large window of opportunity to determine whether and to what extent future transmission upgrades are necessary based on actual generation from the Bruce area.

Hydro One acknowledged that the inclusion of voltage support at a cost of \$70 million extends the cross-over point, but argued that the evidence is that the cost estimate was likely low and therefore the analysis could not be relied upon. Hydro One asserted that

using a voltage support cost of \$105 million would bring the cross-over point forward in time. SON responded that neither Hydro One, nor the OPA, nor the IESO had studied the actual costs of voltage support and that the evidence Hydro One relied on for a higher estimate came from a study developed for a different purpose. Hydro One replied that it was meeting the Filing Requirements by not analyzing options that did not meet IESO reliability standards and did not meet the need identified by the OPA.

With respect to the analysis generally, Hydro One argued that the model cannot be used to justify a delay because it is a cumulative analysis, and not an annual analysis. The cross-over point does not show when another alternative becomes more attractive; it is the point at which the cumulative costs of the alternatives are equal. This is demonstrated by the analysis in Exhibit J14.1 which shows that the projects cannot be sequenced to minimize costs.

Hydro One concluded that a “wait and see approach” does not take proper account of the locked-in energy (due to delay) and duplicated costs, which in Hydro One’s view exacerbate price, quality and reliability risks, to the detriment of ratepayers. Hydro One maintained that this would be neither prudent nor cost effective planning and that Mr. Russell’s analysis, as presented in Exhibit J14.1, demonstrates that implementing series capacitors now and the constructing the Bruce to Milton line later is a much more expensive option than building the Bruce line now.

J 14.1 Construction on Line in 2015, Refurbish B by 2019

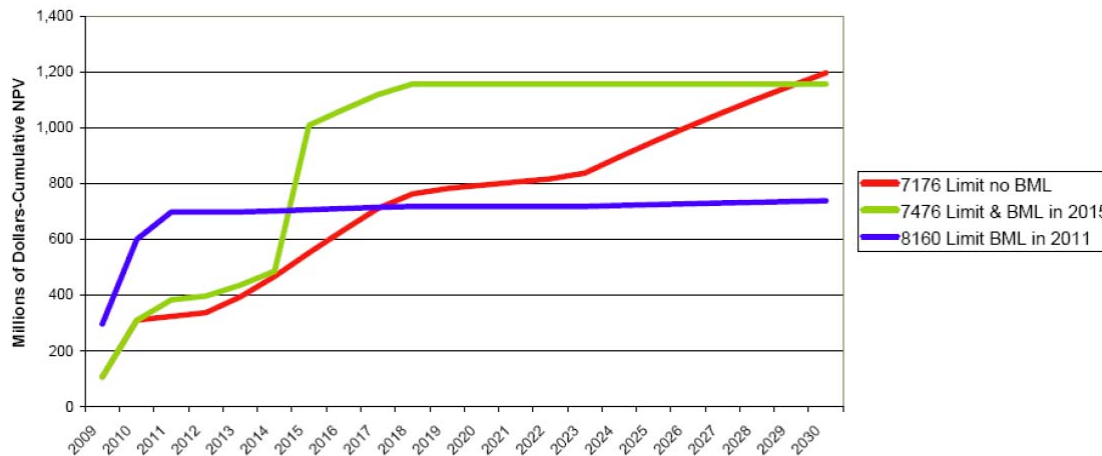


Figure 6 Source Undertaking, J14.1

Hydro One also maintained that the series capacitor/generation rejection alternative was not better from an economic perspective. Hydro One noted that the OPA analysis shows the cross-over in 2018-2019, even if Bruce B is not refurbished, with significant reliability benefits prior to the cross-over. Hydro One maintained that even under the SON alternative analysis, the furthest cross-over point is 2030, which is only 20% of the way through the expected 100 year lifespan of the project. Hydro One argued:

In most circumstances, the cross-over occurs in the 2018 or 2019, at about the anticipated commencement time of the refurbishment or retirement of the Bruce B units. This result, using Mr. Russell's own supplementary evidence, indicates that the issue of the future of Bruce B can be removed from the decision-making surrounding the line. As the evidence shows, the line is economically justified even if Bruce B is not refurbished. And if refurbishment or replacement does occur, the line provides considerable upside economic and reliability benefits.³⁶

SON characterized Hydro One's approach in the following way:

³⁶ Hydro One, Argument in Chief, p. 27.

*Hydro One suggests that the Board can approve of this Project, and the 635 million dollar expenditure, not on the basis of a current demonstrated need, but on the basis that OPA's financial model predicts a cost savings that may occur in the distant future.*³⁷

SON disagreed with this approach. In SON's view, the financial evaluation model has not been used to assess the situation where all "planned" generation is removed. In SON's view:

*The Board simply has no evidence to determine whether the applied-for project has a lower NPV than alternatives when "planned" generation of 1000 MW of wind and Bruce "B" refurbishment or replacement is removed from the analysis.*³⁸

4.3.4 Board Findings

SON and Mr. Russell's main conclusion is that the analysis supports a "wait and see" approach. Their contention is that the series capacitor/generation rejection alternative is sufficient to meet the load requirements until such time as the generation forecast becomes more certain:

- If Bruce B is neither refurbished nor replaced and depending upon the level of wind generation, then the Bruce to Milton line will not be required and Hydro One can continue to rely on the series capacitor/generation rejection alternative.
- If Bruce B is refurbished or there is new build, then the Bruce to Milton line could be installed later.

However, as Hydro One points out, the analysis is cumulative, not annual, and therefore installing both options results in significantly higher costs and reduced net benefits in the event the 8,100 MW forecast is accurate. This might be appropriate if there were the prospect of significant economic benefits from relying on the series capacitor/generation rejection alternative in the event Bruce B is retired and there is no new build. However, that is not the case. In the event there is no Bruce B refurbishment or new build, and assuming the conservative (low) estimate of voltage support costs, the NPV of costs cross-over point under Mr. Russell's analysis is in the

³⁷ SON, Argument, p. 21.

³⁸ *Ibid.*

range of 2018-2019.³⁹ As a result, there is no significant economic benefit to not having built the line because at the point when Bruce B retirement begins the cumulative value of the alternatives is the same. The Board's conclusion is that the economic analysis does not support a "wait and see" approach. The OPA analysis assuming no Bruce B refurbishment or new build also has a cross-over date of 2019.⁴⁰

While the Board agrees that the OPA analysis does not examine the impact of removing the 1,000 MW wind generation, the Board has already concluded that there is sufficient certainty regarding that aspect of the generation forecast.

4.4 Conclusions on the Financial Evaluation

The Board concludes that there are two potential shortcomings to the OPA model: the model assumes no correlation between nuclear production and transmission capability and no pattern of seasonality to either. The evidence, however, is that operators attempt to coordinate nuclear and transmission outages, and do so in the shoulder seasons. On the other hand, in some ways the OPA model has taken a conservative approach (and therefore understated the benefits of the project):

- The model does not include the "take or pay" costs associated with the Bruce A contracts, and therefore may underestimate the cost of any locked-in nuclear generation.
- The model assumes there will be the same transmission derating experience as took place from 2005 to 2007. However, under the series capacitor/generation rejection alternative, the system would be under greater stress and therefore the actual level of derating would likely be higher.
- The model uses estimates of avoided costs, which are possibly lower than the costs which would be paid for replacement generation (HOEP).

The Board finds that the OPA analysis supports the conclusion that, from an economic perspective, the proposed project is preferable to the series capacitor/generation rejection alternative, whether or not Bruce B is refurbished or replaced. The Board also finds that the benefits of the project in terms of reduced locked-in energy meet or exceed the costs of the project whether or not Bruce B is refurbished or replaced.

³⁹ Supplementary evidence of SON, Appendix A, p.2 and 4

⁴⁰ Exhibit K3.2

5. RELIABILITY EVALUATION

5.1 The Proposed Project

With respect to the Ontario transmission system operation, Hydro One submitted that it needed to de-stress an already stressed system:

*The Project will provide more of a margin for contingencies and scheduling maintenance, reduce the amount of operating reserve required during outage conditions, and have less complicated re-dispatch actions following contingencies and lower power losses.*⁴¹

Hydro One noted that the IESO, which is the standards-making body, testified that the proposed line is the best alternative that meets the need from the perspective of reliability.

Hydro One made the following submission:

*The SIA [IESO System Impact Assessment] concludes that the Project will not result in material adverse effects to the power system, subject to the installation of dynamic compensation, specified shunt capacitors banks and the enhancement of the BSPS (all of which form part of the near term and interim measures).*⁴²

Hydro One noted that the Customer Impact Assessment (“CIA”) concluded that there will not be any adverse impacts on southwestern Ontario customers.

Hydro One argued that installing more 500 kV lines on a common corridor does not breach reliability standards and that there are risk management procedures in place to address the extreme contingency of a loss of right of way. Hydro One pointed to the IESO testimony to the effect that the consequences of the loss of the right of way are assessed and are acceptable and manageable.

⁴¹ *Ibid.*, p. 24.

⁴² Hydro One, Argument in Chief, p. 61.

5.1.1 Board Findings

The Board finds that the proposed project meets all the necessary reliability requirements. Specifically, the evidence is that all of the requirements of the SIA will be met and that no adverse consequences were identified in CIA. The only substantive issue raised was the risk associated with placing the new line adjacent to an existing line. The Board accepts the evidence of the IESO that a shared right of way does not breach reliability requirements. The Board recognizes that a separate transmission corridor might provide higher reliability but notes that such an approach would entail higher costs and would not be consistent with Ontario's land use policy.

5.2 The Series Capacitor/Generation Rejection Alternative

Hydro One submitted that the transmission and reliability standards are set out in licence conditions, the Transmission System Code, the IESO's Ontario Resource and Assessment criteria ("ORAT"), and the IESO's Market Rules. Hydro One noted that series capacitors would be a new technology on a critical part of the Ontario power system but acknowledged the external consultant's conclusion that series capacitors can be installed provided necessary studies are undertaken. Hydro One expressed more concern about generation rejection and argued that the long term use of the BSPS does not accord with the Northeast Power Coordinating Council ("NPCC") and IESO reliability standards.

The IESO also submitted that long term use of series compensation and generation rejection under normal conditions was inconsistent with NPCC and IESO reliability standards.

Hydro One noted that reducing reliance on the BSPS was one of the project objectives.

Hydro One submitted that long term reliance on generation rejection through a Special Protection System ("SPS") is not permitted under ORAT. Section 3.4.1 reads:

[A]n SPS associated with the bulk power system may be planned to provide protection for infrequent contingencies, for temporary conditions such as project delays, for unusual combinations of

*system demand and outages, or to preserve system integrity in the event of severe outages or extreme contingencies.*⁴³

The section also provides further clarification that a Type 1 SPS (the Bruce SPS is a Type 1) is “reserved only for few specific conditions, including transition periods to enable new transmission reinforcements to be brought into service.”⁴⁴

The Ross Group argued that prior to March 2007 the IESO did not preclude the long-term use of SPS and that the limitation on the use of the SPS was only introduced with the fundamental change to the ORAT in February 2007. SON questioned the IESO’s authority to create the stricter reliability criteria and pointed out that Hydro One, in its response to IESO, challenged the IESO’s jurisdiction to make changes to transmission planning standards. Mr. Russell testified that the change was substantially stricter than the NERC and NPCC requirements and the prior IESO criteria.

SON concluded that even with the questionable change, the provisions do not preclude the interim use of generation rejection as part of a series capacitor alternative. When actual transmission requirements become more certain, further planning can be done: if generation declines, then the generation rejection will be armed less frequently; if generation increases, then transmission upgrades will reduce the need for arming.

Hydro One discounted the SON suggestion that IESO does not have the authority to create new reliability criteria. In Hydro One’s view, the position it expressed in 2006 is dated, and the IESO standards which have been issued are legislatively underpinned and not optional.

Hydro One submitted that the proposed expansion and intensified use of the Bruce SPS increases the operational complexity of the system and sparked NPCC concern.

NPCC is one of ten Regional Reliability Councils located throughout the United States, Canada and portions of Mexico that together make up the North American Electric Reliability Council (“NERC”). As a member of NERC, NPCC provides for its members

⁴³ Exhibit K10.2, tab 19, ORAT, s. 3.4.1.

⁴⁴ *Ibid.*

broad based industry-wide reliability standards. The NPCC developed a standard titled “Basic Criteria and Operation of Interconnected Power Systems”, which was most recently revised on May 6, 2004. The criteria described in that standard are applicable to design and operation of bulk power systems (in Ontario it is the transmission system operating at voltages above 50 kV).

SON submitted that the NPCC was asked to consider and approve an SPS expanded beyond historical levels and likely more expansive than what would be required under a series compensation alternative (since transfer capability will be increased). SON submitted that it was clear that if the series compensation alternative were pursued, a revised BPS would need to be developed and assessed for compliance with reliability criteria in the normal course, but that any conclusion as to the NPCC response would be speculation at this point.

5.2.1 Board Findings

There is no dispute that the proposed line provides a higher level of reliability than the series capacitor/generation rejection alternative. The issue is whether the series capacitor/generation rejection alternative meets the relevant reliability standards. Hydro One did not dispute that the series capacitor/generation rejection alternative would meet the relevant reliability standards if it were being used on an interim basis. The dispute arose primarily in terms of whether the series capacitor/generation rejection alternative would satisfy reliability standards if it were to be relied upon over the long-term. While SON proposed that series capacitors could be used in the “interim”, it contemplated their potential use until 2021 or later, depending upon the timing of the line installation. The Board finds that this period extends substantially beyond what could be considered an “interim” period.

Under the current IESO ORAT standard, long term use of the alternative quite clearly does not meet the standard. The intervenors did not dispute this; rather they questioned the underlying reliability standard. The Board agrees with Hydro One that the standards themselves are not an issue before the Board in the current proceeding. The current standards are in force and the Board is not in a position to substitute a different standard, even a pre-existing standard.

With respect to the NPCC standards, the Board agrees that it can only speculate as to whether a series capacitor/generation rejection alternative would be approved as a Type I SPS system.

Even if it were established that the series capacitor/generation rejection alternative could be relied upon in the long term, it is clear that the proposed project is a superior alternative in terms of reliability. Further, it has already been determined by the Board that the proposed line is also the preferred alternative from an economic perspective.

6. LAND MATTERS

In accordance with Section 97 of the OEB Act, the Board must be satisfied that Hydro One either has or will offer to each owner of land affected by the approved route an agreement in a form that it has been approved by the Board.

The approved issues list contained two issues related to land matters.

- Are the forms of land agreements to be offered to affected landowners reasonable?
- What is the status and process for Hydro One's acquisition of permanent and temporary land rights required for the project?

6.1 Forms of Land Agreements

The following forms of agreement were included in Hydro One's leave to construct application:

- Easement Agreement
- Agreement of Purchase and Sale
- Offer to Grant an Easement
- Option to Purchase
- Damage Claim Form
- Damage Release Form
- Access for Testing and Associated Access Routes Agreement
- Off-Corridor Temporary Access and Access Roads Agreement

In its submission Hydro One indicated that no party has challenged the forms of land agreements to be offered to landowners as presented in the pre-filed evidence.

Hydro One further stated that Powerline Connections as a group representing over one hundred properties that will be offered those agreements support the forms of agreement.

While the Fallis Group stated that the forms of agreement are in reasonable as far as they go, it submitted that they lacked annual perpetual recognition payments.

6.1.1 Board Findings

The Board notes that no party has raised any concern with the forms of land agreements to be offered to affected landowners. The Board approves the forms of agreement to be offered to the affected land owners.

The Fallis Group's issue related to compensation is not within the scope of this proceeding⁴⁵.

6.2 Status and Process for Acquisition of Permanent and Temporary Land Rights

Hydro One submitted that throughout this proceeding, significant time, care and attention had been placed by Hydro One on the implications that a project of this magnitude and of this size would have on individual landowners. Hydro One stated that it had been assisted by Powerline Connections in developing and addressing concerns that, in effect, fall outside of the jurisdiction of this Board, namely, the compensation for land acquisition.

Powerline Connections informed the Board by way of a letter dated April 28, 2008, that it had withdrawn its opposition to Hydro One's section 92 application. In its letter Power Line Connections referenced progress in three main areas which was cited as the reasons for this withdrawal:

- The completion of Hydro One's review of routing alternatives and the report dated March 14, 2008;
- The response of Hydro One to Powerline Connections' interrogatories which secured substantive information to its members to help out in their planning and mitigation strategies; and

⁴⁵(1) The Oral Decision: Transcript Vol. 6, May 8, 2008, pages 72-74 ;
(2) Reminder of the Oral Decision, Transcript, Vol. 9, May 13, 2008, pages 1-2 ;
(3) Issues Day Decision and Order, September 26, 2007, Appendix A, Issues List

- The release of Hydro One's land compensation principles for the Bruce to Milton line, which was based on consultation with landowners including Powerline Connection represent a significant progress and departure from previous practices by Hydro One's predecessor.

For its part, the Fallis Group submitted that the Environmental Assessment process and this Leave to Construct process are "out-of-step" and therefore there is no way to determine the status and process for Hydro One's acquisition of permanent and temporary land rights.

6.2.1 Board Findings

The Board recognizes that the need to plan for the acquisition of project associated land rights concurrently with the design stages of a project requires a measured and conditioned approach. There is a need to match the efforts in securing land rights to the certainty of the route and the obtaining of various project approvals.

The Board does not accept The Fallis Group's assertion that the status and process for Hydro One's acquisition of permanent and temporary land rights is undeterminable. The Board has already ruled on the acceptability of the sequence and timing of the two separate processes and finds that the status and process as they relate to this proceeding are readily determinable as has been demonstrated by the Powerline Connection Group.

The Board is satisfied that the steps taken by Hydro One in relation to land rights acquisitions have been commensurate with the evolutionary nature of the project.

7. ABORIGINAL CONSULTATION

7.1 Background

Issue 6.1 of the Issues List deals with Aboriginal consultation:

Have all Aboriginal Peoples whose existing or asserted Aboriginal or treaty rights are affected by this project been identified, have appropriate consultations been conducted with these groups and if necessary, have appropriate accommodations been made with these groups?

The Board also provided the following direction to parties on the final day of the oral of the hearing:

[R]egarding argument, the Board is requesting specific input in the argument on issue 6, which is in regard to Aboriginal consultation and accommodation. We ask parties to address the following questions in their argument: What Crown consultation and accommodation is required for the purposes of approving a section 92 leave-to-construct application; and what, if any, consultation and accommodation issues are within the Board's jurisdiction in this case; and has the required consultation and possibly accommodation been done.⁴⁶

Hydro One filed evidence relating to its Aboriginal consultation activities, including information detailing which Aboriginal groups were contacted, how they were selected, and an overview of the results of the consultations as of that time. All parties agreed that Aboriginal consultation for the project as a whole is ongoing and has not been completed.

No other party called evidence on Aboriginal consultation issues. MNO filed a series of documents relating generally to the Métis People and consultation for the project, which its counsel reviewed with the Hydro One witness panel.

⁴⁶ Transcript, volume 14, pp. 2-3.

7.2 The Issues

The Duty to Consult

Although there is disagreement amongst the parties regarding the Board's specific role, there appears to be broad agreement regarding the overall nature of the duty to consult.

The duty to consult flows from s. 35 of the *Constitution Act, 1982*:

35. (1) The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed.

(2) In this Act, "aboriginal peoples of Canada" includes the Indian, Inuit and Métis peoples of Canada.

(3) For greater certainty, in subsection (1) "treaty rights" includes rights that now exist by way of land claims agreements or may be so acquired.

(4) *Notwithstanding any other provision of this Act, the aboriginal and treaty rights referred to in subsection (1) are guaranteed equally to male and female persons.*

All parties made reference to the three Supreme Court cases that originally described the duty to consult.⁴⁷ These cases make it clear that the Crown has a duty to consult with Aboriginal groups prior to taking any action which may have an adverse impact on an Aboriginal or treaty right. In certain circumstances, there will also be a duty to accommodate Aboriginal interests. The duty to consult (including the duty to accommodate where appropriate)⁴⁸ arises where the Crown has knowledge, real or constructive, of the potential existence of an Aboriginal or treaty right and contemplates conduct that might adversely affect it. The extent of the duty requires a preliminary assessment and is proportionate to the strength of the case supporting the existence of the right or title in question, and to the seriousness of the potentially adverse effect upon the right or title claimed.

⁴⁷ *Haida Nation v. British Columbia (Minister of Forests)*, [2004] 3 S.C.R. 511 ("Haida"); *Taku River Tlingit First Nation v. British Columbia (Project Assessment Director)*, [2004] 3 S.C.R. 550 ("Taku"); *Mikisew Cree First Nation v. Canada (Minister of Canadian Heritage)*, [2005] S.C.C. 69 ("Mikisew").

⁴⁸ Any reference to the "duty to consult" in this decision includes the duty, where appropriate, to accommodate.

On these general points there appears to be broad agreement. In addition, no party argued that the Board itself had a duty to consult on the project. Where the parties differ is with regard to the Board's role in assessing the adequacy of the consultation.

The Board's Role

The Board's authority to approve leave to construct applications for electricity transmission projects comes from sections 92 and 96 of the *Ontario Energy Board Act*. Section 92 states:

No person shall construct, expand or reinforce an electricity transmission line or an electricity distribution line or make an interconnection without first obtaining from the Board an order granting leave to construct, expand or reinforce such line or interconnection.

Section 96(2) of the Act places certain restrictions on the scope of the Board's review:

In an application under section 92, the Board shall only consider the interests of consumers with respect to prices and the reliability and quality of electricity service when, under subsection (1), it considers whether the construction, expansion or reinforcement of the electricity transmission line or electricity distribution line, or the making of the interconnection.

An issue the Board must consider here is whether it is required to evaluate the adequacy of the consultation conducted by reference to the whole of the project and its potential impacts despite the section 96(2) restrictions on the Board's jurisdiction.

In the submissions of SON and MNO, the answer is yes. In its submissions, MNO states that the duty to consult arises from section 35 of the *Constitution Act*. It is a super-added duty that runs parallel to existing statutory and policy mandates. In other words, it cannot be legislated away. MNO submitted: "the OEB, as a statutory Crown decision-maker, whose discretionary authorization (i.e. a leave to contract [sic] order) has the potential to adversely affect Aboriginal peoples is accountable and responsible to ensure the constitutional duty has been discharged in relation to its authorization."⁴⁹

⁴⁹ MNO final argument, para. 45

MNO cited the Supreme Court decision *Paul v. British Columbia (Forest Appeals Commission)*⁵⁰ (“Paul”) in support of its contention that Crown statutory decision makers have the jurisdiction to consider Aboriginal rights related issues in the course of their decision making:

I am of the view that the approach set out in Martin, in the context of determining a tribunal’s power to apply the Charter, is the only approach to be taken in determining a tribunal’s power to apply s. 35 of the Constitution Act, 1982. The essential question is whether the empowering legislation implicitly or explicitly grants to the tribunal the jurisdiction to interpret or decide any question of law. If it does, the tribunal will be presumed to have concomitant jurisdiction to interpret or decide that question in light of s. 35 or any other relevant constitutional provisions. Practical considerations will generally not suffice to rebut the presumption that arises from authority to decide questions of law. This is not to say, however, that practical considerations cannot be taken into consideration in determining what is the most appropriate way of handling a particular dispute where more than one option is available.⁵¹
[Emphasis added by MNO]

MNO then points to s. 19(1) of the OEB Act, which states: “The Board has in all matters within its jurisdiction authority to hear and determine all questions of law and of fact.” In MNO’s analysis, this leads to the conclusion that the Board has the jurisdiction to consider questions of constitutional law and s. 35 or any other related constitutional provision in its decision making process, including Aboriginal consultation issues.

SON also cites the *Paul* case and makes a similar submission:

as a statutory tribunal, the Board must exercise its decision-making functions in accordance with the dictates of the Constitution, including s. 35(1) of the Constitution Act, 1982. The Board is therefore required to respect and honour, not ignore, the duty to consult and accommodate.⁵²

⁵⁰ [2003] S.C.J. No. 34

⁵¹ *Paul*, para. 39.

⁵² SON final argument, p. 42.

SON further submitted that the EA is an administrative and political process, and was therefore not an appropriate mechanism for making an independent determination regarding the Crown's consultation obligations.

SON concluded that, since consultation for the project is clearly not completed, the application should be denied.

Board staff adopted a different view. It was Board staff's submission that in this case the Board should only consider Aboriginal consultation issues that relate to prices, reliability and quality of electricity service. Board staff did not rule out the possibility of the Board considering broader consultation issues in some cases; it stated that where no other Crown actor had a responsibility to consider consultation issues relating to matters other than prices, reliability and quality of electricity service, the Board might have to adopt that role. However, given that Aboriginal consultation issues were being considered through the EA process, it was Board staff's view that the Board did not have to adopt that role in this case.

Hydro One submitted that the Board's s. 35 responsibilities are limited by its mandate under the OEB Act. The Board's s. 35 obligations, therefore, can relate solely to prices, reliability and quality of electricity service. Hydro One took issue with MNO's submission that the duty to consult is a super-added duty for the Board, and that it stands as an independent requirement of the Board outside of its enabling statutes. In Hydro One's view there is no authority for this proposition, and it should be rejected. In Hydro One's analysis, the *Paul* decision simply describes the nature of an administrative tribunal:

it does not stand for the proposition that Crown consultation must occur in only one venue, that the decision maker's scope of authority is expanded beyond that which is expressly provided for in the applicable legislation and that the first decision maker to consider any consultation aspects must consider all consultation aspects."⁵³

Hydro One submitted that the Board would in no way be delegating or deferring its duty to consult by leaving the issue to the EA process, because the Board has never had responsibility for any s. 35 duties relating to environmental matters. This is an

⁵³ Hydro One reply argument, p. 32.

obligation of the Minister of the Environment, and has never been an obligation of the Board. The Board's mandate is restricted to prices, reliability and quality of electricity service, even when considering Aboriginal consultation issues.

7.3 Board Findings

The Board's Jurisdiction to Consider Aboriginal Consultation Issues

It is agreed by all parties that Aboriginal consultation is required for the project as a whole. Where the parties disagree is with respect to the scope of the Board's assessment of the consultation. The issue presented by the parties was not whether the Board itself had an obligation or duty to consult but whether the Board had a duty to determine whether the Crown had engaged in adequate consultation. The Board's role, in this case, is to assess whether or not adequate consultation has taken place prior to granting an approval.

The Board is not aware of any cases in which a tribunal has been found to be responsible for either conducting Aboriginal consultation, or for making a determination as to whether or not Aboriginal consultation has been sufficient. Neither is the Board aware of any cases stating that a tribunal does not have these responsibilities. It appears that this issue has yet to be addressed by a Canadian court.

In the absence of definitive guidance from the courts, the Board must analyze the statutes and precedents that do exist and come to a reasoned conclusion.

Paul holds that tribunals that have the authority to determine questions of law have the jurisdiction to deal with constitutional issues. The Board accepts that it has the authority and duty to consider questions of law on matters within its jurisdiction.

Parties suggested that the Board should not approve the application because the consultation in the EA process is incomplete and/or inadequate, and that the leave to construct should only be granted when the Board determines that the consultation as a whole is complete and has been adequate. The Board does not agree with either proposition.

Although the Board has the authority to determine questions of law, the EA process is beyond the Board's jurisdiction and therefore the Board does not have the authority to determine whether the Aboriginal consultation in that process has been sufficient. The Board cannot assume authority over matters that are clearly within the legislated jurisdiction of the EA process. In addition, parties argued that the Board should consider the requirement for Aboriginal consultation related to the development of generation. The Board disagrees. The matter before us is the approval to construct transmission facilities. It does not include the approval of plans for, or development of, generation facilities. Therefore, it is not within the Board's jurisdiction, in this case, to consider the adverse impacts on Aboriginal peoples requiring consultation related to the development of generation.

Regardless of the issue of jurisdiction, the consultation surrounding this project as a whole is clearly not complete. The issue for the Board, therefore, is whether a leave to construct may be granted in the absence of a complete consultation.

Some parties suggest that the Board may not grant a leave to construct until the consultation for the project as a whole is complete. The Board does not think this is necessary. In a general sense this would be impractical and in this specific case it is unnecessary because the Board's leave to construct order is conditioned on completion of the EA process and the EA process will be dealing with the consultation issues raised in direct relation to this project.

There is only one Crown. The requirement is that the Crown ensure that Aboriginal consultation takes place for all aspects of the project. It is not necessary that each Crown actor that is involved with an approval for the project take on the responsibility to ensure that consultation for the entire project has been completed; such an approach would be unworkable. It would lead to confusion and uncertainty and the potential for duplication and inconsistency. It would also potentially lead to a circular situation in which each Crown actor finds itself unable to render a final finding on consultation because it is awaiting the completion of other processes. The *Paul* case directly addresses this practicality issue:

Practical considerations will generally not suffice to rebut the presumption that arises from authority to decide questions of law.

This is not to say, however, that practical considerations cannot be taken into consideration in determining what is the most appropriate way of handling a particular dispute where more than one option is available.

The *Paul* case predates the *Haida* case; however in the Board's view this principle applies equally in the consultation context. As a practical matter it is unworkable to have to separate Crown actors considering identical Aboriginal consultation issues for the same project. In fulfilling its responsibility to assess the adequacy of consultation, the Board must necessarily take responsibility for the aspects of the consultation that relate to the matter before it, but should do so with a recognition of any other forum in which consultation issues related to the project are being addressed as well.

The Evidence

Based on the evidence and argument before it, the Board is unable to identify any adverse affect on an Aboriginal or treaty right that would occur as a result of the Board's granting a leave to construct. Nor has any party identified any such issue on which there has been a failure or refusal to consult.

Neither SON nor MNO called a witness in this proceeding to address issues relating to Aboriginal consultation. MNO did file a number of documents which provided information about the Métis People. Several documents reference the asserted Métis Aboriginal right to harvest and other land related issues. For example, in a letter to HONI regarding Métis consultation on the Bruce-Milton transmission line, the MNO wrote:

*The Crown has never undertaken a Métis traditional land use study and has never provided support to the MNO to undertake such a study in order to identify Métis land use, harvesting practices, sacred places, Métis cemeteries, etc. in the region. As such, the MNO is very concerned that Métis harvesting practices or use of land in the region has not been considered in the development of the Project.*⁵⁴

⁵⁴ Exhibit K9.6- Letter dated March 31, 2008, filed in this proceeding as Tab 10 of the Evidentiary Submission filed on April 18, 2008 by the Métis Nation of Ontario

MNO also filed a map showing Métis traditional harvesting territories (which include the Bruce peninsula)⁵⁵.

In its pre-filed evidence, Hydro One filed minutes from a number of meetings between itself and SON. Counsel for SON questioned Hydro One's witnesses regarding the consultation activities it had undertaken with SON. Both the minutes from the meetings and the responses under cross examination from Hydro One witnesses reveal that SON had raised a number of concerns about the proposed project. Specific reference is made to, amongst other things, archaeological issues, biological issues, and issues relating to how the project fits in with the overall generation and transmission plans for the Bruce area. There are references to "local benefit" or economic issues, but the main thrust of the concerns relate to what can best be described as environmental or land related issues.

All of the evidence is that the consultation issues relate to the EA process and generation planning decisions. Generation planning is beyond the scope of the project and is the subject of other ongoing consultations. The Memorandum of Understanding between the Ministry of Energy and Hydro One⁵⁶ clearly sets out the Crown's acknowledgement of its duty to consult and establishes those areas where Hydro One will undertake some aspects of that consultation for this project. The EA process is a key component.

The Environmental Assessment Process

In addition to the Board's approval, Hydro One must complete the EA in order to commence building the project. The EA is conducted under the aegis of the Minister of the Environment, and the EA is not complete until it is approved by the Minister. The terms of reference ("TOR") for the EA were filed with the Board in this proceeding. The TOR includes a section relating to Aboriginal consultation. Section 8.4 of the TOR, entitled "Aboriginal Communities and Groups Engagement/ Consultation Plan", provides an overview of Hydro One's plan to ensure proper consultation and possibly accommodation takes place. The TOR states:

⁵⁵ Exhibit K9.6- Métis Traditional Harvesting Territories Map, Tab 5 of the Evidentiary Submission filed on April 18, 2008 by the Métis Nation of Ontario

⁵⁶ Exhibit K8.1

Hydro One is committed to working closely with the Crown to ensure that the duty to consult Aboriginal communities and groups is fulfilled. Hydro One's process for Aboriginal communities and groups is designed to provide information on the project to the Aboriginal communities and groups in a timely manner and to respond to and address issues, concerns or questions raised by the aboriginal communities and groups in a clear and transparent manner throughout the completion of the regulatory approval processes (e.g., the EA process).⁵⁷

In addition to section 8.4, there are numerous additional references to the consultation activities that Hydro One plans to undertake as part of the EA process. Under the heading "Traditional/Aboriginal Land Use", for example, it states:

Based on consultation with the Aboriginal communities and groups, the EA will document concerns and issues raised. The EA will also describe how Hydro One proposes to address these concerns. The EA document will describe Aboriginal communities and groups, their traditional uses of the land, and their established and asserted claims.

The EA process, which must be approved by the Minister of the Environment, is specifically charged with addressing Aboriginal consultation issues relating to the Project through its TOR. The Board disagrees with SON'S contention that the environmental assessment process is not an appropriate mechanism for making a determination regarding the Crown's consultation obligations. The duty to consult and, if necessary accommodate, is a duty owed by the Crown to Aboriginal peoples. The Crown must satisfy itself that consultation has been adequate. A determination regarding the adequacy of consultation which is made by a Minister of the Crown after having considered the record of consultation conducted as part of an Environmental Assessment is an entirely appropriate and logical means by which the Crown can assure itself that consultation has been adequate. As the Crown will be making the decision to grant the EA, and given the Crown's broad duty to ensure adequate consultation, it is reasonable to expect the Minister to consider the Crown consultations that have gone on in areas beyond the project, namely generation planning.

⁵⁷ Approved Terms of Reference of the EA dated April 4, 2008, Pages 74-75

The Board's leave to construct order is conditioned on the granting of all other necessary approvals and permits. Specifically, the Board's order is conditional on successful completion of the EA process. In this way, the Board has satisfied itself that the process of assessment of the duty to consult (including the duty to accommodate where appropriate) will be completed prior to the commencement of the project and in a practical and workable manner.

The Board's Proposed Aboriginal Consultation Policy

Both MNO and SON made reference to the Board's draft Aboriginal Consultation Policy ("ACP").

The Board issued the draft ACP for comment on June 18, 2007. A variety of stakeholders, including several Aboriginal groups, made submissions to the Board on the draft policy. Every Aboriginal group that made substantive comments on the draft, including MNO, was opposed to the ACP as drafted and asked that the Board not adopt it. To date, the Board has not adopted the ACP, and it currently has no formal policy with regard to Aboriginal consultation.

The Board has recognized that whatever consultation responsibilities it has exist irrespective of the existence of a formal consultation policy. For that reason it has considered Aboriginal consultation issues on a case by case basis as proceedings have come before the Board. In one case cited by MNO, which was released in October 2007, the Board made reference to its proposed ACP. This decision clearly identified the ACP as "proposed" as opposed to final, and should not be taken to mean that the Board has in fact adopted an ACP. In fact, the MNO appears to have recognized that the ACP was still only a draft in a letter to Hydro One dated November 27, 2007:

the Ontario Energy Board has recently issued a draft Aboriginal Consultation Policy that requires all proponents to provide information in their future applications to the Board on how the Aboriginal communities who may be affected by the projects being proposed by proponents have been consulted.⁵⁸

⁵⁸ Exhibit K9.6- Letter dated November 27, 2007 addressed to Hydro One, Tab 9 of the Evidentiary Submission filed on April 18, 2008 by the Métis Nation of Ontario

8. PRICE IMPACTS

Section 96(2) of the OEB Act states that the Board shall only consider the interests of consumer's with respect to prices and the reliability and quality of electricity service when it considers whether the construction of an electricity transmission line is in the public interest. With respect to the cost estimate and rate impact, Hydro One maintained that the \$635 million cost estimate was confirmed throughout hearing and that the resulting 9-10% increase in the Transmission Network Pool Rate and 0.45% increase in total electricity bill to a typical residential customer was acceptable. Hydro One noted that the estimated impact for a typical residential customer is \$0.50/month.

Mr. Barlow questioned the accuracy of the project budget and suggested that Hydro One should be responsible for any cost overruns.

8.1 Board Findings

The Board concludes that based on the estimates provided, the rate impact is acceptable. The Board notes, however, that Hydro One is at risk for any cost increases and that any cost overruns will be subject to a prudence review at a subsequent rate application.

9. CONDITIONS OF APPROVAL

Board staff prepared a set of standard conditions of approval. Hydro One indicated that it did not have any concerns with the conditions as proposed.

The Fallis Group submitted that if an Order is granted it should also be conditional on the issuance of a Development permit under the Niagara Escarpment Planning and Development Act.

Hydro One responded that a specific condition related to the Niagara Escarpment Planning and Development Act is not required as it is already covered in the general condition proposed by Board staff regarding other permits and approvals.

Board staff and a number of intervenors proposed conditions related to the uncertainty of the generation forecast. In its reply, Hydro One maintained that to “impose conditions in response to which Hydro One has not had the opportunity to provide evidence, would violate the principles of natural justice and fairness” (p.2).

9.1 Board Findings

The Board has determined that the forecast of wind generation is reasonable and contains very little risk. The Board has also determined that the proposed project is the preferred option from an economic point of view, regardless of whether Bruce B is retired or refurbished or replaced. Therefore, while the Board does not agree with Hydro One’s submission that imposing conditions without providing the applicant an opportunity to provide related evidence violates the principles of natural justice and fairness, conditions related to the generation forecast are unnecessary in this case.

10. COST DECISION AND ORDER

The board will issue its decision and order on cost awards shortly.

THE BOARD ORDERS THAT:

Leave to construct the transmission reinforcement project between the Bruce Nuclear Generating Station and Milton Switching Station is hereby granted to Hydro One Networks Inc. subject to the Conditions of Approval attached as Appendix "C" to this Order. The transmission reinforcement project includes making certain modifications at the Milton, Bruce A and Bruce B transmission stations to accommodate the new transmission lines.

DATED at Toronto, September 15, 2008

ONTARIO ENERGY BOARD

Original Signed By

Pamela Nowina
Presiding Member

Original Signed By

Ken Quesnelle
Member

Original Signed By

Cynthia Chaplin
Member

APPENDIX A

LIST OF PARTIES

**HYDRO ONE NETWORKS INC.
BRUCE MILTON TRANSMISSION PROJECT
DECISION AND ORDER**

EB-2007-0050

September 15, 2008

LIST OF PARTIES

Board Counsel and Staff

Michael Millar

Neil McKay
Zora Crnojackie
Nabih Mikhail

Applicant

Representative(s)

Hydro One Networks Inc.

Glen MacDonald

Applicant's Counsel

Gord Nettleton
Nicole J. MacDonald

Intervenors

Representative(s)

William H. Allen

Association of Power
Producers of Ontario
("APPRO")

Jake Brooks
David Butters
Tom Brett

Bentinck Packers Limited

Steven Lindner

Emily and Jorge Botelho

Doug, Donna, Daryl and Drew
Braithwaite

Jeff and Bonnie Bruce

Bruce Power

Brian G. Armstrong, Q.C.
George Vegh
J. Rosengarten

| | |
|--|---|
| Buffalo Sunrise Farm | Paul John Eisenbarth and Margaret Helen Cuff |
| Calldron Gas Bars Ltd. | Bob Ware |
| Canadian Wind Energy Association | Sean Whittaker |
| Gwendolyn Charlton and Alvin Mcallister | |
| Council for the Town of Erin | Kathryn Ironmonger |
| Donald A. Corbett | |
| Willis and Madeline Crane | |
| Dirk Emde | |
| Enbridge Inc. | Ron Collins Cherry Blackwood |
| Energy Probe Research Foundation | David MacIntosh Thomas Adams Peter T. Faye Dr. Kimble F. Ainslie |
| Heinrich and Theresia Eschlboeck | Anthony Wellenreiter |
| David France | |
| The Fallis Group | Peter T. Fallis |
| Keith Cressman Doris Anna Cressman Saugeen Maple Farms Ltd. Mervyn Wayne Lewis Jennifer Lynne Lewis | |

**John Leslie Flanagan
Phyllis Dianne Flanagan
Dean Alexander Flanagan
Allan Eric Foster
Karyn Foster
James Douglas Lewis
Penny Joanne Lewis
John Mulhall
Catherine Blanche Mulhall
Calvin John Hughes
Stephen Hodges
Orland Magwood
Gloria Magwood
1063755 Ontario Ltd.
James Magwood, In Trust
Andrew Magwood, In Trust
David John Milne
Mary Joan Milne
David Mervyn Rawn
Karen Ruth Rawn
Thomas William Visser
Laura Lee Heather Visser
Gwendolyn Charlton and Alvin
McAllister
Robert Watson
Sharon Kennedy Meanaul
Robert George Younger
Ron Elo**

Paul Garvey

Mike and Carolyn Giesler

Great Lakes Power Limited

Peter Bettle
Charles Keizer

J.B. Gregorovich

Sherwood and Gladys Hume

**Independent Electricity
System Operator (“IESO”)**

Carl Burrell
John Rattray

Daniel and Marjorie Kobe

Philip Lawton

Darvey and Danny Liedtke

Manfred and Luzia Lindner

Steve and Catherine Lindner

Métis Nation of Ontario Jason Madden

Allan R. McFee

The Municipality of West Grey Christine Robinson

**Thomas Murtagh
Glenis Falbo**

One Milton Trust Inc. Yadvinder S. Toor

**Ontario Federation of
Agriculture (“OFA”)** Neil Currie

**Ontario Power Generation Inc.
 (“OPG”)** Tony Petrella

Chris Aristides Pappas

Bernd and Gerd Pollex

Pollution Probe Foundation Jack Gibbons
Murray Klippenstein
Basil Alexander
David Schlissel
Peter Lanzalotta
Bob Fagan

**Power Worker's Union
("PWU")**

John Sprackett
Bayu Kidane
Judy Kwik
Richard Stephenson

Powerline Connections

Stephen F. Waqué
Frank Sperduti

**William Allison
Janet Allison
Edward Bird
Maribeth Bird
Robert Barlow
Bruce Barrett
Dave Clifford
Anne Clifford
Pat Crouse
Steve Crouse
Ralph Cunningham
Viviean Cunningham
Paul Fisher
Pat Fisher
John Hofing
John Jenkins
Julia Jenkins
Steven Joyce
Anne Joyce
Robert McClure
Susan McClure
Joseph Rice
Ivan Rice
Verna Rice
Rice & McHarg Limited
Garry Sterritt
Mary Jean Sterritt
Bonnie Neely
Perry Stuckless
Elaine Stuckless
Mark Bergermann
Janet Bergermann
Leslee Einmann
Scott Einmann
John MacLeod
Melanie MacLeod
Joanne Coletta**

**Fernando Coletta
Maria Coletta
Rosa Nucci
Vittorio Nucci
Jim Dinatale
Lisa Dinatale
Eileen Dinatale
Elda Threndyle
Dave D’Auria
Michelle D’Auria**

The Regional Municipality of Halton Peter Dailleboust

“The Ross Firm Group” Quinn M. Ross

**Dave and Martha Barrett
Jack and Hildreth Park
Lloyd Hutton
Tom Fritz
Doug Hackett
Bob and Betty Mills
Jim and Jairus Maus
Dave and Pat Woelfle
Glenn and Sandra Sawyer
Carman and Everlyn
Hodgkinson**

C.B. and L. Rutledge M. Virginia MacLean, Q.C.

Saugeen Ojibway Nations David McLaren
Art Pape
Alex Monem
Elaine Cameron
Dale Jacobs

Dieter E. and Vija M. Sebastian

Dr. James and Sandra Shaw

Mathew and Logan Smerek

**Ernest Thompson and
Catherine Dalton**

Toad Hall Farm Inc. Bryn Waern, M.D.

**TransAlta Energy Corporation
("TEC")** Sandy O'Connor

TransAlta Counsel Richard J. King

**TransCanada Energy Ltd.
("TransCanada")** Margaret Kuntz

TransCanada Energy Counsel Angela Avery

Tribute Resources Inc. Bill Blake

Tribute Resources Counsel Peter Budd

Union Gas Limited Patrick McMahon

Marinus and Patricia VanBakel

Phillip C. and C. Gale Walford

Bob Watson Bob Watson

**Herman and Berta Weller
Cedarwell Excavating Ltd.** Kevin W. McMeeken, LL.B.

Trevor M.A. Wilson

David Woelfle

APPENDIX B

**PROCEDURAL MATTERS
INCLUDING LIST OF WITNESSES**

**HYDRO ONE NETWORKS INC.
BRUCE MILTON TRANSMISSION PROJECT
DECISION AND ORDER**

EB-2007-0050

September 15, 2008

**PROCEDURAL MATTERS
INCLUDING LIST OF WITNESSES**

**EB-2007-0050
HYDRO ONE NETWORKS INC.**

BRUCE-MILTON TRANSMISSION PROJECT

As part of proceeding EB-2007-0050, the Board heard preliminary motions related to how the application should proceed. The Board held a Motions Day on June 25, 2007. The Board issued its decision on the motions on July 4, 2007. In that decision, the Board determined that the overall schedule for the proceeding should be adjusted to allow additional time to facilitate landowner participation in the proceeding and that a Technical Conference should be held.

An Issues Day was held on September 17, 2007. Following the Issues Day, the Board, on September 26, 2007 released its “Issues Day - Decision and Order” by which it approved a final list of issues (“Issues List”).

A transcribed Technical Conference was held in Toronto on October 15 and 16, 2007.

Upon receiving the Amended Application on November 30, 2007, the Board invited intervenors in to examine the Issues List and make submissions as to whether changes or additions are appropriate.

To hear the submissions on the Issues List, the Board held a second Issues Day on February 21, 2008. Several parties made submissions on the need for issues to address the relative timing of the Board’s leave to construct process and the environmental assessment process. Although the Board made no changes to the Issues List, the Board instructed Hydro One to inform the Board and other parties of the status of the environmental assessment process two weeks before the commencement of the oral hearing in this case. The Board stated it would determine at that time the need to add issues resulting from the timing of the environmental assessment process.

Procedural Order No.5 set out the schedule for interrogatories and the filing of intervenor evidence. On March 7, 2008 the Board issued Procedural Order No. 6 which addressed an issue of confidentiality related to a System Model used by the IESO allowing for Interrogatory Response to be sent to those parties that requested the confidential information on condition that those parties sign the Board's Declaration and Undertaking and files it with the Board. On April 1, 2008, the Board issued its Decision and Order on Confidentiality Matters.

A Motions Day was held on April 3, 2008 to hear submissions from various intervenors with respect to certain interrogatory answers. On April 7, 2008 the Board issued Procedural Order No. 8 requiring Hydro One to provide answers to certain interrogatories filed by intervenors. The Decision and Order on the Motion also dated April 7, 2008 required that Hydro One make its best efforts to obtain this information from Ontario Power Generation, Bruce Power, or some other body.

On April 14, 2008 the Board issued its Procedural Order No. 9, to address an issue in regard to a letter dated April 10, 2008 from the OPA requesting that certain information provided in response to certain Pollution Probe interrogatories be treated in confidence.

On April 24, 2008, Pollution Probe filed a Motion seeking specific information relating to its interrogatories regarding two matters related to the cost effectiveness of the proposed transmission line. The Board decided to conduct this Motion by way of a written proceeding. In a Procedural Order No. 10 issued on April 28, 2008 the Board invited Hydro One to respond to Pollution Probe's Motion and for Pollution Probe to reply prior to the commencement of the Oral hearing on May 1, 2008.

WITNESSES

Witnesses Supporting the Application

The following witnesses representing the Applicant, Hydro One Networks Inc. ("Hydro One"), the Ontario Power Authority ("OPA"), and the Independent Electricity System Operator ("IESO") testified at the oral hearing:

| | |
|--------------|-------------------------|
| R. Chow | OPA |
| M. Falvo | IESO |
| V. Girard | Hydro one |
| J. Sabiston | Hydro One |
| G. Schneider | Hydro One |
| D. Woodford | Expert on behalf of OPA |
| J. Lee | OPA |
| L.A. Cameron | Hydro One |
| R.Thompson | Hydro One |
| E. Cancilla | Hydro One |
| J. Sabiston | Hydro One |
| M. Falvo | IESO |

Witnesses called by Intervenors

For Pollution Probe Foundation

R. Fagan

P.Lanzalotta

For Saugeen Ojibway Nation

W.Russell

For Fallis Group

E.Brill

APPENDIX C

CONDITIONS OF APPROVAL

**HYDRO ONE NETWORKS INC.
BRUCE MILTON TRANSMISSION PROJECT
DECISION AND ORDER**

EB-2007-0050

September 15, 2008

**CONDITIONS OF APPROVAL
EB-2007-0050
HYDRO ONE NETWORKS INC.
BRUCE-MILTON TRANSMISSION PROJECT**

1 GENERAL REQUIREMENTS

- 1.1 Hydro One Networks Inc. ("Hydro One") shall construct the facilities and restore the land in accordance with its application, evidence and undertakings, except as modified by this Order and these Conditions of Approval.
- 1.2 Unless otherwise ordered by the Board, authorization for Leave to Construct shall terminate December 31, 2011, unless construction has commenced prior to that date.
- 1.3 Hydro One shall advise the Board's designated representative of any proposed material change in the project, including but not limited to changes in: the proposed route; construction techniques; construction schedule; restoration procedures; or any other impacts of construction. Hydro One shall not make a material change without prior approval of the Board or its designated representative. In the event of an emergency the Board shall be informed immediately after the fact.
- 1.4 Hydro One shall obtain all necessary approvals, permits, licences, certificates and easement rights required to construct, operate and maintain the proposed project, shall provide copies of all such written approvals, permits, licences and certificates upon the Board's request.

2 PROJECT AND COMMUNICATIONS REQUIREMENTS

- 2.1 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Facilities.
- 2.2 Hydro One shall designate a person as project engineer and shall provide the name of the individual to the Board's designated representative. The project engineer will be responsible for the fulfillment of the Conditions of Approval on the construction site. Hydro One shall provide a copy of the Order and Conditions of Approval to the project engineer within ten (10) days of the Board's Order being issued
- 2.3 Hydro One shall give the Board's designated representative ten (10) days written notice in advance of the commencement of construction.

- 2.4 Hydro One shall furnish the Board's designated representative with all reasonable assistance needed to ascertain whether the work is being or has been performed in accordance with the Board's Order.
- 2.5 Hydro One shall develop, as soon as possible and prior to start of construction, a detailed construction plan. The detailed construction plan shall cover all activities and associated outages and also include proposed outage management plans. These plans should be discussed with affected transmission customers before being finalized. Upon completion of the detailed plans, Hydro One shall provide five (5) copies to the Board's designated representative.
- 2.6 Hydro One shall furnish the Board's designated representative with five (5) copies of written confirmation of the completion of construction. This written confirmation shall be provided within one month of the completion of construction.

3 MONITORING AND REPORTING REQUIREMENTS

- 3.1 Both during and after construction, Hydro One shall monitor the impacts of construction, and shall file five (5) copies of a monitoring report with the Board within fifteen months of the completion of construction. Hydro One shall attach to the monitoring report a log of all complaints related to construction that have been received. The log shall record the person making the complaint, the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.
- 3.2 The monitoring report shall confirm Hydro One's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction and the condition of the rehabilitated land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained. Within fifteen (15) months of the completion of construction, Hydro One shall file with the Board a written Post Construction Financial Report. The report shall indicate the actual capital costs of the project with a detailed explanation of all cost components and shall explain all significant variances from the estimates filed with the Board.

4 ENVIRONMENTAL ASSESSMENT ACT REQUIREMENTS

- 4.1 Hydro One shall comply with any and all requirements of the *Environmental Assessment Act* relevant to this application.

CITATION: Pavao v. Ministry of the Environment and Climate Change, 2016 ONSC 6040
DIVISIONAL COURT FILE NO.: 430/16 and 434/16
DATE: 20160926

**SUPERIOR COURT OF JUSTICE – ONTARIO
DIVISIONAL COURT**

RE: ELAINE PAVAO, Applicant

AND:

MINISTRY OF THE ENVIRONMENT AND CLIMATE CHANGE,
FRWN LP and NR CAPITAL GENERAL PARTNERSHIP, Respondents

BEFORE: Thorburn J.

COUNSEL: *Arkadi Bouchelev*, for the Landlord/ Respondent

Geoff Hall and Kate Findlay, for the Respondent

Philip Tunley for the Ontario Energy Board

Noone appearing for the Ministry of the Environment and Climate Change

HEARD at Toronto: September 21, 2016

ENDORSEMENT

BACKGROUND

[1] The Applicant, Elaine Pavao lives with her family on a rural property in the Niagara Region. She seeks a stay of two proceedings pending judicial review of the first proceeding and appeal in the second proceeding.

[2] On May 7, 2013, the Niagara Region Wind Corporation filed an application to construct a transmission line in Haldimand County and the Niagara Region. The transmission line would carry power generated from a Niagara Region Wind Farm to the provincial electricity grid.

[3] On July 3, 2014, the Respondents FRWN LP and NR Capital General Partnership (the “Partnership”) obtained approval from the Ministry of Environment and Climate Change (MOE) and the Ontario Energy Board (OEB) to construct a transmission line to connect a Wind Farm to the electrical grid. The Board found that the Transmission Line was in the public interest.

Renewable Energy Approval amendment

[4] In early 2016, the Partnership applied to obtain expedited approval of a modification to the transmission line route. The MOE has jurisdiction over the Wind Farm project and the health hazards and environmental impact of the Transmission Line.

[5] The first modification was to reduce the Transmission Line route by approximately 300 metres in order to bypass Highway 3 and the second modification was to shorten the Transmission Line route by approximately 2.4 km in order to bypass an urban development area in Smithville.

[6] The second proposed modified route runs adjacent to the Applicant's property and crosses an unopened road allowance she and two other landowners used. It is this second modification that is at issue in these proceedings.

[7] The proposed amendment to the route was granted by the Minister's representative and published on May 6, 2016.

[8] Section 142.1(3) of the *Environmental Protection Act* provides that a person may require a hearing by the Environmental Review Tribunal within 15 days after the day on which notice of a decision is published, on the grounds that the renewable energy project will cause serious harm to human health or irreversible harm to plant life, animal life or the natural environment.

[9] On May 11, 2016, Ms. Pavao became aware of the approval of the amendment by reading the half page Notice of the Proposed Change in the newspaper. The Notice does not say that concerned citizens may require a hearing.

[10] The notice does provide that, "Information with respect to the decision on this project can be viewed on the Environmental Registry by searching EBR #012-0613". Page 2 of EBR #012-0613 provides that, "Any resident of Ontario may require a hearing by the Environmental Review Tribunal within 15 days ...by [providing] written notice."

[11] Ms. Pavao says she contacted a representative of the Partnership and was told the newspaper notice was a formality and nothing could be done to stop the application for amendment. The person to whom she claims she spoke, says she has no recollection of this conversation.

[12] Ms. Pavao claims that because of the answer she received from the Partnership representative, and what she was told by representatives of the Region, Municipality and the MOE, she believed she had no means to halt the project and took no further steps in respect of this Renewable Energy Approval amendment.

OEB Approval

[13] On June 17, 2016, the Partnership brought a motion before the OEB to approve the two modifications to the transmission line route. The Partnership requested that the Application to

Amend be considered without a hearing and on an expedited basis. The OEB can hear an application without a hearing and on an expedited basis where it is satisfied that no person is materially adversely affected by the proposed project.

[14] On July 17, 2016, Ms. Pavao received a copy of the Order of the OEB requiring the Partnership to provide her and two other landowners the opportunity to file written submissions as to whether they would be materially adversely affected by the proposed change. She and two other landowners were given 10 days from the date of service to file written submissions.

[15] Ms. Pavao claims the 10 day period within which to file submissions did not give her sufficient time to retain legal counsel.

[16] On July 25, 2016, she wrote brief submissions about potential health risks and the adverse impact on her property value and sought an adjournment to retain counsel. No adjournment was granted. Section 96(2) of the OEB Act provides that on such applications, the OEB shall only consider the consumer interest in price, reliability and quality of electricity service and, where applicable, the promotion of the use of renewable energy sources.

[17] On August 17, 2016, the OEB granted leave to construct a transmission line pursuant to ss. 92 and 96(2) of the *Ontario Energy Board Act 1998*, S.O. 1998, c. 15, Sched. B, ss. 92 and 96(2).

[18] The OEB concluded that they were not able to consider the health-related, financial and environmental concerns raised by Ms. Pavao because Section 96(2) of the Act provides that the OEB may *only* consider the interests of consumers with respect to prices and the reliability and quality of electricity service and, if applicable, the promotion of the use of renewable energy sources.

[19] The OEB noted that these issues could have been raised in the earlier MOE proceeding but were not and that decision was not appealed.

[20] The OEB also found that although section 97 of the *OEB Act* provides that, “leave to construct shall not be granted until the applicant satisfies the Board that it has offered or will offer to each owner of land affected by the approved route or location an agreement in a form approved by the Board”, Ms. Pavao was not an “affected landowner” within the meaning of the provision. As such, the Partnership was not required to enter into an approved agreement with her. The OEB points out that its *Filing Requirements for Electricity Transmission Applications* defines an affected landowner as landowners of property upon, over or under which transmission facilities are intended to be constructed.

[21] Finally, in recognition of the inconvenience that the three landowners would experience as a result of construction, the OEB ordered that the Partnership fulfill all undertakings made in relation to construction activities, and return the unopened road allowance after completion of the Smithville Bypass to a condition equal to or better than the condition it was in prior to construction.

[22] The Partnership is scheduled to electrify the transmission line by early October 2016.

RELIEF SOUGHT

[23] Ms. Pavao brings two motions to be heard together:

- a. The first is a motion to stay the Renewable Energy Approval amendment pending the hearing of the Applicant's application for judicial review.
- b. The second is a motion to stay the Decision and Order of Presiding Member and Vice Chair of the OEB pending the hearing of this Appeal.

THE TEST

[24] A stay will only be granted where:

- (a) there is a serious issue raised;
- (b) the Applicant will suffer irreparable harm if the stay is not granted; and,
- (c) the balance of convenience favours the stay.

RJR – MacDonald Inc. v. Canada (Attorney General), [1994] 1 S.C.R. 311 at para. 43.

THE APPLICANT'S POSITION

[25] The Applicant claims a stay of each of the two proceedings should be granted for the following reasons:

1. The Renewable Energy Approval Amendment Proceeding: Ms. Pavao's right to procedural fairness was denied. She was never made aware of her right to require a hearing and in fact, was advised there was nothing she could do. She was thereby denied her right to procedural fairness and was unable to raise her issues relating to human health and the natural environment as envisaged in EPA section 145.2.1 (2).
2. The OEB Proceeding: Ms. Pavao claims she should have been granted a reasonable time to make submissions and retain counsel to voice her concerns to the OEB. Moreover, she is an "owner of land affected" within the meaning of section 97 of the OEB Act and the OEB was required to approve an offer from the Partnership to her which they did not.

[26] Ms. Pavao submits these are serious issues to be tried. She also claims she will suffer irreparable harm because the proximity to the transmission lines to her family home will cause her family irreparable physical and financial harm and will irreparably harm the environment.

[27] She had several miscarriages and claims a doctor at Brantford General Hospital told her that a lot of sudden infant deaths had occurred along the transmission line corridor near her

former home. Moreover, she says her son's coroner (whose name was not provided) told her that her son suffered from Genetic Cardiac Channelopathy.

[28] She claims she has invested approximately \$200,000 into renovating the property and her property value will decrease as a result of its proximity to the transmission line. She says her home insurance has been cancelled for that reason (although there is no documentation from the insurer to suggest this is why her home insurance will be cancelled effective October 3, 2016.).

[29] Lastly she claims the construction will damage the wetlands and a colony of endangered brown bats that live in the forest on her property.

ANALYSIS AND CONCLUSION

[30] There are two proceedings that address issues related to the transmission line: the first is the Renewable Energy Approval hearing to which issues involving health and the environment may be brought, and the second is the OEB hearing to which concerns regarding consumer price, reliability and quality of the electrical service can be brought.

Renewable Energy Approval amendment

[31] Ms. Pavao had a right to a hearing before the Environmental Review Tribunal in respect of the Renewable Energy Approval amendment. The public notice did not contain any reference to this right. It did refer to an internet site where there is reference to that right on page 2. There is a 15 day timeline within which to request a hearing.

[32] Ms. Pavao did not receive reasonable notice of her right. Had she received such notice, she could have raised her concerns about health, the financial implications and the environmental concerns regarding the transmission lines. On the contrary, she claims she was told by a Partnership representative there was nothing she could do. She did not have a reasonable opportunity to exercise her right to a hearing.

[33] Her right to procedural fairness was denied. This is a serious issue.

[34] However, she has failed to demonstrate irreparable harm for the purposes of these motions as she provided no evidence before this court to corroborate her assertion that she and her family would experience harm to human health, finances, or the environment.

[35] By contrast, the Partnership provided information from Health Canada which states that there is no evidence of transmission lines of 60Hz such as these cause adverse health effects. In addition, Dr. Robert Myers, a cardiologist at Sunnybrook Health Sciences Centre opined that in his view, "There is no documented medical evidence to substantiate Ms. Pavao's claims that low frequency EMF has any impact on cardiac electrophysiology as suggested by her claim that her 8 month old son was affected by EMF from transmission line and that her (sic) and her family are at greater risk by virtue of a claimed cardiac condition."

[36] As such, Ms. Pavao's request to stay the Renewable Energy Approval amendment pending judicial review is denied.

[37] Ms. Pavao will however have the opportunity to pursue her Application for judicial review and to provide the evidence relevant to her Application for judicial review.

The OEB Decision

[38] Ms. Pavao also seeks to stay the Decision and Order of the OEB pending the hearing of her Appeal.

[39] Although Ms. Pavao did not participate in the first hearing she did participate in the second hearing before the OEB.

[40] Upon becoming aware that Ms. Pavao expressed an interest in the hearing, the OEB ordered the Partnership to provide Ms. Pavao and two other landowners the opportunity to file written submissions as to whether they would be materially adversely affected by the proposed change. They were given ten days to do so and Ms. Pavao did so without the benefit of counsel. The Appellant's submissions were considered by the OEB in rendering its decision.

[41] The concerns she articulated were about health risks, adverse impact on her property value and damage to the environment. She does not suggest there are other concerns. None of the issues she raises are concerns the OEB can consider in accordance with section 96(2) of the OEB Act.

[42] Moreover, she is not an "owner of land affected" within the meaning of section 97 of the Act so there is no offer by the Partnership to be tendered to the OEB. The OEB's *Filing Requirements for Electricity Transmission Applications* provides that an "owner of land affected" means a landowner of property upon, over or under which transmission facilities are intended to be constructed. Counsel provided no legal authority to suggest another interpretation.

[43] Where an expert tribunal such as the OEB interprets its home statute, that interpretation is entitled to deference.

[44] For these reasons, I find the OEB's interpretation of the words "owner of land affected" to be reasonable.

[45] Because the OEB Order has no jurisdiction to hear her concerns and she is not an owner of land affected within the meaning of the Act, there is no serious issue to be tried such that a stay of proceeding should be granted pending the hearing of the Appeal in this matter. For the reasons set out at paragraphs 34 and 35 above, I also find that for the purposes of this motion, Ms. Pavao has not satisfied the requirement to show irreparable harm.

Costs

[46] The Applicant did not name the OEB as a Respondent, but the Board has a statutory right to respond and it did. (See s. 33(3) of the *OEB Act and Ontario (Energy Board) v. Ontario Power Generation Inc.*, 2015 SCC 44 at paras. 52, 57 and 59).

[47] The OEB seeks no costs.

[48] The Partnership seeks costs in the amount of \$25,000. The Applicant's Bill of Costs was \$14,500.

[49] In my view there should be no costs of these motions notwithstanding that the Partnership was successful in defending these two motions. While the Applicant has not satisfied the requirement to show irreparable harm, she did establish that the Partnership failed to afford her timely and reasonable notice of her right to require a hearing and offered no explanation for its failure to inform her of this important right.

[50] She has not been afforded the opportunity to participate in a hearing to address her health and environmental concerns that are within the jurisdiction of the Environmental Review Tribunal.

Conclusion

[51] For these reasons the motion to stay pending judicial review and the motion to stay pending appeal are both dismissed without costs. The Application for judicial review is to be expedited.

Thorburn J.

Date: September 26, 2016

CITATION: Pavao v. Ministry of the Environment and Climate Change, 2016 ONSC 6040
DIVISIONAL COURT FILE NO.: 430/16 and 434/16
DATE: 20160926

2016 ONSC 6040 (CanLII)

ONTARIO
SUPERIOR COURT OF JUSTICE
DIVISIONAL COURT

BETWEEN:

ELAINE PAVAO

Applicant

AND:

MINISTRY OF THE ENVIRONMENT
AND CLIMATE CHANGE, FRWN LP and
NR CAPITAL GENERAL PARTNERSHIP

Respondents

ENDORSEMENT

Thorburn J.

Released: September 26, 2016