



EB-2005-0478

IN THE MATTER OF *the Ontario Energy Board Act, 1998, S.O. 1998, c. 15, Sched. B, section 92;*

AND IN THE MATTER OF an Application by Greenfield Energy Centre Limited Partnership, for an order or orders granting leave to construct a 230kV transmission line in the Township of St. Clair.

BEFORE: Paul Vlahos
Presiding Member

Cynthia Chaplin
Member

Ken Quesnelle
Member

DECISION AND ORDER

Background and Application

Greenfield Energy Centre Limited Partnership (the "Applicant" or "GEC LP") filed an application, dated September 1, 2005, with the Ontario Energy Board (the "Board") under section 92 of the *Ontario Energy Board Act, 1998, S.O. 1998, c.15,*

Schedule B, (the “Act”) seeking an Order of the Board granting leave to construct electricity transmission facilities. The Application was assigned Board File Number EB-2005-0478.

The Applicant is constructing a 1005 MW electricity generation facility called the Greenfield Energy Centre (the “GEC” or the “GEC plant”) in the Township of St. Clair. The purpose of the application is to obtain leave from the Board to construct electricity transmission facilities to connect the GEC to the transmission facilities of Hydro One Networks Inc. (“Hydro One”).

The proposed facilities involve the construction of two 3.5 km 230kV transmission circuits on a single set of towers, from a new switchyard owned by the Applicant to the connection points with Hydro One’s circuits at its Lambton Switchyard near the Lambton Generating Station (the “Lambton GS”). The Applicant plans to run the two circuits in a right-of-way which is primarily adjacent to the right-of-way for the existing 345 kV lines.

The Board issued a Notice of Application and Hearing on November 2, 2005 in which it indicated that it may hold a written or an oral hearing, and prospective intervenors were requested to indicate their preference. The Board received requests for intervenor status from the Independent Electricity System Operator (the “IESO”), Ontario Power Generation (“OPG”), Union Gas Limited, Hydro One, the Power Workers’ Union (the “PWU”), the Society of Energy Professionals (the “SEP”) and the Clean Affordable Energy Alliance (the “CAE”). Although GEC LP challenged the intervenor status of the SEP and the PWU, the Board ultimately granted intervenor status to all parties that requested it. No intervenor requested an oral hearing.

The CAE submitted a letter of comment and requested an opportunity to make an oral presentation to the Board as contemplated in Rule 24.02 of the Board’s *Rules of Practice and Procedure*. The Board determined that the CAE may file any supplementary comment, or the written content of its presentation, by way of written submission at the time that submissions were to be made by intervenors.

The Board determined that it would proceed by way of written hearing and made provision for interrogatories and the filing of evidence and submissions.

Subsequently the Applicant filed amendments to the application, including a route change. The Board directed that all landowners and intervenors and certain other parties be notified of the amendments, and invited submissions on the amendments. No submissions were received in respect of the new information.

On February 10, 2006, the PWU filed a Notice of Motion with the Board, seeking to have certain supplementary interrogatories answered by the IESO or the Applicant and to have additional evidence accepted, namely the IESO's February 2, 2006 report *The Ontario Reliability Outlook*. The Board heard the motion on February 17, 2006 and admitted the IESO report into evidence. Some of the original interrogatory answers which gave rise to the motion were clarified to the satisfaction of the PWU; the balance of the motion (the remaining supplementary interrogatories) was denied. The Board's decision on the motion is available at the Board's office, as is the entire record of this proceeding.

The PWU and the SEP filed final submissions, as did the Applicant. The CAE made no submissions beyond its initial letter of comment.

Evidence

The Applicant is a successful proponent in the Ministry of Energy's *Request for Proposals for 2,500 MW of New Clean Generation and Demand Side Projects* dated September 13, 2004 and has entered into a 20-year energy supply contract with the OPA to supply electricity from a proposed 1,005 MW combined cycle generation facility in St. Clair Township.

The Applicant filed a copy of the Statement of Completion which had been filed with the Ministry of the Environment. The Statement indicated that an Environmental Review

Report had been prepared, that requests to elevate the matter to an Individual Review had been received by the Ministry of the Environment, that those requests were reviewed by the Ministry of the Environment and were denied by its Director, that the Director's decision was subsequently appealed to the Minister of the Environment, and that the Minister ultimately confirmed the Director's decision. The Applicant also confirmed that the amendment to the proposed route neither impacted the information in the Environmental Review Report nor invalidated its Statement of Completion in respect of the proposed facilities.

The Applicant filed a form of easement agreement and later confirmed that the agreement had been offered to all parties with whom an easement agreement is required, with the exception of OPG. OPG required the Applicant to use a different form of easement agreement, a copy of which was provided to the Board.

The Applicant filed the IESO System Impact Assessment ("SIA"), dated December 6, 2005, and a letter from the IESO granting conditional approval to connect the proposed project to the IESO-controlled grid and indicating that final approval would be granted upon, amongst other things, satisfactory completion of the requirements set out in the SIA.

Numerous draft Customer Impact Assessment ("CIA") reports were provided by Hydro One, with the latest being an "Updated Draft", dated November 2, 2005. The overall findings of this CIA concluded that customers need to review the significant change in fault levels on their facilities, that there is no material adverse supply reliability impact on existing customers in the Lambton area, and that GEC will be required to comply with any recommendations stemming from the IESO's SIA report and the final Hydro One CIA report, when it becomes available.

On March 13, 2006, the Applicant filed a letter with the Board indicating that the final CIA would be delayed due to changes in the connection location of the St. Clair Energy Centre which may in turn impact the CIA for the GEC. This Applicant also indicated that

the IESO would be issuing an addendum to the SIA due to the change of the St. Clair connection location and another functional requirement.

Board Findings

The issues for the Board that arise from the application are as follows:

1. Has the need for the proposed facilities been demonstrated?
2. Should the Board review the environmental and socio-economic aspects of the proposed facilities and of the generating station?
3. What impact will the proposed facilities have on reliability of supply?
4. Are the costs for the proposed facilities appropriately assigned as network or as connection?
5. What impact will the proposed facilities have on consumer prices?
6. Are the proposed facilities in the public interest?
7. What are the appropriate conditions of approval?

Has the need for the proposed facilities been demonstrated?

The SEP has made the argument that, in considering whether to grant leave to construct the transmission line, the Board's consideration is inseparable from considerations of the need for the GEC itself. The SEP argued that GEC LP's case for need is predicated on the perceived need for supply created by the closure of Lambton GS and that this closure is uncertain. The Applicant replied that the proposed facilities are needed to connect the GEC, and that the need for the GEC and the merits of the government's coal replacement plan are beyond the scope of this proceeding.

The Board does not agree with the SEP. Over the last few years there has been significant attention paid by Government, industry, and the public to concerns about the adequacy of available generation to maintain electrical supply to Ontario consumers. To

this end the Government of Ontario created the OPA which has among its objects: “to engage in activities in support of the goal of ensuring adequate, reliable and secure electricity supply and resources in Ontario.” The Applicant was a successful proponent in the Ministry of Energy’s *Request for Proposals for 2,500MW of New Clean Generation and Demand Side Projects*, dated September 13, 2004. GEC has entered into a 20-year Clean Energy Supply contract with the OPA to construct and operate a new 1005 MW natural gas-fired power plant.

The purpose of the proposed transmission line is to connect the GEC GS to the IESO-controlled grid. The Board is satisfied that the need for the proposed transmission facilities has been demonstrated based on the contractual arrangements between the Applicant and the OPA.

Should the Board review the environmental and socio-economic aspects of the proposed facilities and of the generating station?

The SEP argued that the following environmental and socio-economic impacts, which it alleges arise from the transmission facilities and the GEC, have not been addressed: adverse impact on air quality and water quality; loss of jobs; effects on business operations that rely on competitively priced electricity; loss of population for affected communities; reduced property values; loss of municipal tax base; changes to school viability; and loss of OPG and employee sponsorships and donations.

The SEP argued that Subsection 96(2) of the Act requires that the Board distinguish between the interests of electricity and gas consumers in considering the public interest but that it does not otherwise limit the Board’s duty to consider what is in the public interest, nor the Board’s statutory objectives in sections 1 and 2 of the Act.

The Applicant opposed the SEP position and submitted that the SEP’s interpretation of the words “the Board shall only consider...” as non-restrictive distorts the plain meaning of subsection 96(2). The Applicant concluded that the SEP submissions regarding

environmental and socio-economic matters, which are outside of the considerations of the interests of consumers with respect to prices and the reliability and quality of electricity service, should be disregarded by the Board.

The Board does not agree with the SEP's interpretation of the Board's mandate in respect of leave to construct applications for transmission lines. The Board is required to consider whether the construction of the proposed transmission facilities is in the public interest. The Act provides additional guidance as to what, specifically, the Board will consider in evaluating whether the proposal is in the public interest. That guidance is provided at subsection 96(2), which specifically requires that the Board consider only the interests of consumers with respect to prices and the reliability and quality of electricity service.

Section 96 of the Act reads as follows:

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. [Emphasis added]

(2) 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, is in the public interest. [Emphasis added]

Rather than distinguishing the interests of electricity consumers from those gas consumers, this subsection 96(2) serves to restrict the criteria that the Board may use in determining the public interest for the construction, expansion or reinforcement of electricity transmission lines. This interpretation of subsection 96(2) is consistent with a plain reading of the objectives that relate to the Board's mandate with respect to electricity found in Section 1(1) of the Act which reads in part as follows:

1(1) The Board, in carrying out its responsibilities under this or any other Act in relation to electricity, shall be guided by the following objectives:

1. To protect the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service.
2. To promote economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and demand management of electricity and to facilitate the maintenance of a financially viable electricity industry.

The Board concludes that its public interest mandate outlined broadly in subsection 96(1) is circumscribed by clear language in subsection 96(2) when it is reviewing proposals for the construction, expansion or reinforcement of electricity transmission lines. The Board has therefore limited its considerations in this application to the interests of consumers with respect to prices and the reliability and quality of electricity service.

It flows from this conclusion that the Board's mandate does not include a review of any environmental issues or perceived or potential adverse environmental effects associated with the transmission line. The SEP has asserted not only that the Board's public interest mandate in the review of the proposed transmission facilities includes a review of the environmental and socio-economic concerns associated with the proposal, but also that the transmission line and the generating station are interlinked, such that they must be considered together for the purposes of the environmental review.

On a plain reading of the statute, the Board is of the view that its public interest mandate is clear and that such mandate, as restricted by subsection 96(2) of the Act, specifically precludes the Board from considering environmental issues associated with the construction, expansion or reinforcement of a transmission line.

This view was been expressed by the Board in previous proceedings. In EB-2004-0476, which was an application for leave to construct an electricity transmission reinforcement project in the Niagara Peninsula area, the Board stated:

The Board does not have jurisdiction over environmental matters in leave to construct applications and will not interfere with the results of, or duplicate, the environmental assessment process. (Decision, page 5)

In EB-2005-0315, a decision related to the Board's authority to direct certain utilities to undertake certain work to address the York Region electricity supply problem, the Board stated:

As is clear from the Board's legislative mandate, and as has been confirmed by the Board on a number of occasions, the Board does not have the legal authority to review environmental issues in considering the approval of electricity projects. The environmental issues are entirely within the authority of the Ministry of Environment under the *Environmental Assessment Act*. (Decision, page 13)

The Board is without the authority to review environmental issues for electricity transmission line projects or for electricity projects as a whole. It is therefore clear that the Board does not have the jurisdiction over environmental matters relating to the construction of new generation facilities. In fact proponents are not required to apply to the Board for any approvals associated with the construction of a generating station. Therefore, the Board has no inherent jurisdiction to review any aspect of the construction of the GEC, including a review of the environmental impacts, if any, associated with the construction of the GEC.

Given then that the Board has no jurisdiction to conduct an environmental review of the transmission line and has no jurisdiction to review any part of the construction of the GEC, it follows that the Board is without the jurisdiction to conduct a combined review of the potential adverse environmental impacts of both the transmission line and the plant.

What Impact will the proposed facilities have on reliability of supply?

The Applicant pointed to the *Conditional Approval of Connection Proposal* issued by the IESO on December 6, 2005 in which the IESO stated that it has determined that the GEC will have no adverse effect on the reliability of the IESO-controlled grid, assuming that the IESO requirements detailed in the SIA are met. The Applicant indicated that it will adopt

the IESO's requirements set out in the SIA and that it expects that any leave to construct will be conditional upon that requirement.

The PWU's submissions were filed before its Motion was heard and decided. The PWU submitted that the application should be assessed and decided by the Board in a manner that preserves the greatest possible flexibility for Ontario's electricity system, including the possibility that the GEC will operate together on an indefinite basis with the OPG Lambton GS and the St. Clair Energy Centre (another project being proposed by another proponent and the subject of a 20-year OPA Clean Energy Supply contract). The PWU relied on a number of reports which were provided in evidence, each of which contemplates the continued operation of coal-fired generation stations, generally, and Lambton GS specifically.

As an indication that simultaneous operation of the GEC, Lambton GS and St. Clair may not be achievable, the PWU pointed to thermal limitations that would prevent the simultaneous dispatch of all three plants under certain conditions. The PWU submitted that the Board should ensure that simultaneous dispatch is accommodated under these conditions, and the Board should require additional work if necessary. It was subsequently clarified as part of the PWU's Motion materials that the "certain conditions" referred to hot, windless conditions. The Board concluded, when deciding the Motion, that additional studies to determine what would be required to permit continued simultaneous dispatch under these conditions was beyond the scope of the proceeding.

The Board is satisfied with the evidence contained in the SIA and the draft CIA reports that the proposed facilities will have no detrimental effect on the reliability of the grid system. The Board also accepts the evidence of the IESO that it is possible for the GEC plant to operate simultaneously with the St. Clair and all four Lambton GS units, up to their full rating and under normal conditions. The Board concludes that this provides sufficient flexibility for the overall system in light of the concerns raised by the PWU.

The CAE opposed the application because, in its view, the Lambton GS closure is premature until the broader coal replacement strategy has been fully investigated, including “clean coal” technologies. The CAE also submitted that the vulnerability of gas supply, related to aging infrastructure, security concerns associated with liquefied natural gas, and a single major pipeline supply of gas, must be considered when determining reliability for consumers. The Board reiterates that it is satisfied with the evidence contained in the SIA and the draft CIA reports that the proposed facilities will have no detrimental effect on the reliability of the grid system.

Are the costs for the proposed project appropriately assigned as network or as connection?

The Applicant has confirmed that it will bear the connection costs of the project. Changes that are required in the Lambton switching station, and at other locations, to accommodate the GEC and other plants will be borne by Hydro One as network costs, as prescribed in the Transmission System Code.

The Board is satisfied that, on the basis noted above, costs are appropriately allocated.

What impact will the proposed Facilities have on consumer prices?

The Applicant indicated in its evidence that the construction of the proposed facilities will be paid for and owned by the Applicant, and will therefore have no impact on transmission rates in Ontario.

The CAE submitted that the closure of Lambton GS and its replacement with two natural gas fired plants will cause consumers in Ontario to face significant rate increases due to the high and volatile cost of gas and the replacement of publicly owned and operated low cost coal fired generation assets with “for profit” plants. The CAE went on to argue that the price effect will be felt most severely by those on fixed and lower incomes. The SEP made similar submissions and pointed to evidence of a likely increasingly volatile gas

market, partially due to the additional consumption of gas by the GEC and other plants, and consequential upward pressure on electricity prices to consumers.

The Applicant opposed the SEP's assertion that the Board should consider the relative price of the commodity that will flow across the proposed facilities (i.e. coal vs. gas-fired generated electricity) and submitted that this ignores the plain meaning of subsection 96(1), which the Applicant interprets as requiring that the Board consider only that "... the construction ... of the proposed work is in the public interest ...". GEC also submitted that relative price is beyond the scope of this proceeding, and that it falls within the purview of the OPA, with whom the Applicant has a 20-year contract for the supply of power.

The Board agrees with the Applicant that the relevant consideration is the impact on electricity transmission rates due to the construction of the proposed facilities. In this proceeding, the Board is not concerned with the net impact on the electricity commodity cost, which in any event is highly speculative. The Board is satisfied that there will be no inappropriate adverse impact on transmission rates, due to the allocation between network and connection costs described in the previous section, the need for the project, and the impact on system reliability.

Are the proposed facilities in the public interest?

Having satisfied itself that there is a need for the project, that the interests of consumers with respect to prices and the reliability and quality of electricity service will not be adversely impacted as a result of the proposed facilities and that costs of the project are appropriately assigned, the Board finds that the proposed facilities are in the public interest.

What are the appropriate conditions of approval?

The Board's standard conditions of approval were not opposed by the Applicant and will be adopted. However, changes to the nearby St. Clair project have necessitated a

revision to the SIA and CIA, although the Applicant has provided evidence that the changes to the Applicant's proposal are likely minimal. The Board will therefore add a further condition of approval requiring the Applicant to file the final SIA and CIA documents and to implement any recommendations arising from those reports. The conditions of approval are attached as Appendix A to this Decision and Order.

THE BOARD THEREFORE ORDERS THAT:

1. Leave to construct 3.5 km 230 kV transmission circuits on a single set of towers to connect the Greenfield Energy Centre to the transmission facilities of Hydro One Networks Inc. in the Township of St. Clair is hereby granted to Greenfield Energy Centre Limited Partnership, subject to the Conditions of Approval attached as Appendix "A" to this decision and order.
2. Greenfield shall pay the Board's costs for these proceedings immediately upon receipt of the Board's invoice.

Dated at Toronto on March 29, 2006

ONTARIO ENERGY BOARD

Original signed by

Peter H. O'Dell
Assistant Board Secretary

APPENDIX A

TO THE DECISION AND ORDER

Conditions of Approval

Greenfield Energy Centre Limited Partnership

EB-2005-0478

March 29, 2006

APPENDIX A

Conditions of Approval

Greenfield Energy Centre Limited Partnership.

EB-2005-0478

1. General Requirements

1.1 Greenfield Energy Centre Limited Partnership ("GEC") 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 July 31, 2007, unless significant construction has commenced prior to that date.

1.3 GEC 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; any other impacts of construction or any other changes that may have an impact upon the interests of consumers with respect to prices or the reliability or quality of electricity service such as, but not limited to, changes to the SIA or CIA. GEC shall not make a material change without prior approval of the Board or its designated representative.

2 Project and Communications Requirements

2.1 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Licensing and Facilities.

2.2 GEC 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. GEC shall provide a copy of the Order and Conditions of Approval to the project engineer, within seven (7) days of the Board's Order being issued.

2.3 GEC shall give the Board's designated representative ten (10) days written notice in advance of the commencement of construction.

2.4 GEC 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 GEC 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 shall be discussed with affected transmission customers before being finalized. Upon completion of the detailed plans, GEC shall provide five (5) copies to the Board's designated representative.

2.6 GEC 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 System Impact Assessment

GEC shall implement all the recommendations of the Independent Electricity System Operator ("IESO"), as set out in the IESO System Impact Assessment and including any subsequent revisions to the SIA for this Project made by the IESO.

4 Customer Impact Assessment

GEC shall obtain a final version of the Customer Impact Assessment and submit it to the Board, and implement all the recommendations of Hydro One, as set out in the

Hydro One CIA and including any subsequent revisions to the CIA for this Project made by Hydro One.

5 Monitoring and Reporting Requirements

5.1 Both during and after construction, GEC 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. GEC 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.

5.2 The monitoring report shall confirm GEC'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.

6 Easement Agreements

GEC shall offer the form of agreement approved by the Board to each landowner, as may be required, along the route of the proposed work. GEC shall obtain all necessary easement rights, authorizations and licences prior to commencement of construction.

7 Ontario Energy Board Licences

GEC shall obtain a Generator licence prior to construction of the transmission facilities.

8 Other Approvals

GEC shall obtain, prior to commencement of construction, all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project.