

Ontario Energy
Board

Commission de l'énergie
de l'Ontario



EB-2008-0272

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

AND IN THE MATTER OF a review of an application filed by
Hydro One Networks Inc. under section 78 of the *Ontario
Energy Board Act, 1998*, seeking changes to the uniform
provincial transmission rates.

BEFORE: Cynthia Chaplin
Presiding Member

Paul Vlahos
Member

Ken Quesnelle
Member

DECISION WITH REASONS

DECEMBER 16, 2009.

1. INTRODUCTION

1.1 BACKGROUND

On September 30, 2008, Hydro One Networks Inc. ("Hydro One") filed an application with the Ontario Energy Board (the "Board") under section 78 of *Ontario Energy Board Act, 1998* (the "Act"). The application sought approval for changes to the uniform provincial transmission rates that Hydro One charges for electricity transmission to be effective and implemented on July 1, 2009. The Board assigned the application file number EB-2008-0272.

The Board issued its Decision with Reasons on May 28, 2008. In its decision the Board did not approve four of the Network Capital Projects (labeled in the application as D7, D8, D9 and D10). However, the Board indicated that it would leave this part of the application open to provide Hydro One with the opportunity to file supplemental evidence on the projects.

On September 4, 2009 Hydro One filed supplementary evidence with the Board on projects D7 and D8, both of which have planned in-service dates in 2010. Hydro One advised that projects D9 and D10 would not be in-service in 2010, and therefore were not included in the supplementary material. Approval of projects D7 and D8 would increase the previously approved capital program by \$82.7 million to a total of \$936.5 million in 2009 and by \$62.0 million to a total of \$1,057.6 million in 2010. The resulting impact on the 2010 revenue requirement was estimated to be \$7.1 million.

1.2 PROCEDURAL MATTERS

On September 18, 2009 the Board issued Procedural Order No.6 providing for interrogatories and requesting that parties advise the Board if they intended to submit evidence and if they preferred a written or oral hearing. No party indicated it intended to provide evidence and no party expressed a preference for an oral hearing. The Board proceeded by way of a written hearing.

Board Staff and intervenors filed submissions in October and Hydro One filed its reply submission on November 2, 2009.

2. THE APPLICATION

Project D7 involves the installation of Static Var Compensators at Porcupine TS and Kirkland Lake TS. The planned in-service date is November 2010, and the estimated cost is \$109 million.

Project D8 involves the installation of series capacitors at Nobel Switching Station. The planned in-service date is December 2010 and the estimated cost is \$47 million for the project.

In its original application Hydro One had indicated that projects D7 and D8 were required to relieve congestion on the North-South Interface in order to access available northern generation and to enable incorporation of additional committed and planned renewable generation in northern Ontario. The OPA had recommended that Hydro One proceed with the projects on May 20, 2008. Its recommendation was based on its forecast of 900 MW of new generation resources coming into service in Northern Ontario by 2013. The new resources included 500MW of hydroelectric generation that had been the subject of a Ministerial Directive issued to the OPA on December 20, 2007. The supplemental application included further information and explanation in support of the projects.

Hydro One provided tables which set out summaries of the comparative costs for the project and the alternatives. These are reproduced below:

Project D7

Alternative	Cost	Capacity Added on Flow South Interface	In service date
Do nothing	0	0	N/A
Install Mechanically Switched Capacitor Banks	Lower Costs than D7	Not Viable per ORTAC	2010
Install Series Capacitor on Porcupine TS to Hanmer TS 500kV Circuit	Lower Costs than D7	None	2010
New parallel Single Circuit 500kV line from Pinard TS to Hanmer TS	About \$1B	300 MW	2015
Project D7	\$109 M	160 MW	2010

Project D8

Alternative	Cost	Capacity Added on Flow South Interface	In service date
Do nothing	0	0	N/A
Build a New 500kV Switching Station	Approx same Cost as D8	About 100MW	Beyond 2010
Build a New Single Circuit 500kV Line to the GTA	About \$1B	1500MW	2015
Project D8	\$47m	340MW	2010

Hydro One identified two particular areas where there has been change since May 2009 when the original decision was issued.

First, Hydro One provided the OPA's updated forecasts of committed and other near-term generation projects. The forecasted capacity has risen from 380 MW to 762 MW. Hydro One submitted that the additional resources further support the need to increase the capability of the North-South tie.

Second, Hydro One maintained that the enactment of the *Green Energy and Green Economy Act* (the “GEA”) establishes a new regulatory environment that fundamentally alters the manner in which infrastructure projects will be planned for and the manner in which transmission and distribution companies will seek approval from the Board for those projects. It also noted that the launch of the Feed in Tariff (“FIT”) program has increased the expectation for renewable generation development across the Province including Northern Ontario.

4. POSITIONS OF THE PARTIES

4.1 PARTIES OPPOSED

Board staff submitted that Hydro One is required to provide an economic evaluation, including a quantitative justification where projects are discretionary, arguing that while the connection of generation projects are mandated and do not require further justification, this characterization does not necessarily extend to transmission projects to accommodate the connection of that generation. Board staff argued that any reinforcements to reduce congestion or alleviate bottled energy must be supported by quantitative evaluation. It further argued that the onus rests on Hydro One to comply with the Board’s filing requirements for transmission projects, and that if this is not done the Board could appropriately deny recovery of costs.

The Association of Major Power Consumers of Ontario (“AMPCO”) concurred with Board staff’s submission that the two projects are not generation connection facilities and do not fall within the immediate scope of the directives from the Minister and government objectives with respect to the connection of renewable generation, and hence ought to be justified in a manner similar to other category 2 projects.

AMPCO also expressed concern with in-service dates. It argued that, just as transmission facilities that are not in place when needed strand generation assets, the converse is also true, that transmission assets that are put in place before they are used and useful are also stranded assets.

AMPCO further argued that the reliability consideration for customers north of New Liskeard is not new and a resolution is not urgent until 2014.

The School Energy Coalition (“SEC”) submitted that projects D7 and D8 should not be viewed as non-discretionary, that Hydro One did not file a cost benefit analysis as requested, and therefore there is inadequate supporting evidence to approve the projects.

The Vulnerable Energy Consumers Coalition (“VECC”) argued that the incremental capacity provided by the projects is not all required in 2010 and that the only rationale for proceeding with project D7 at this time appears to be concerns about the reliability of supply to customers north of New Liskeard. In VECC’s view the projects are discretionary and, therefore, an economic justification is required since there are alternatives, e.g. congestion already exists on the North-south interface and is managed by the IESO through constrained dispatch. VECC submitted that a broad interpretation of what is non-discretionary will severely limit the Board’s role and obligation to ensure that investments in the transmission system and the resulting rates are prudent.

VECC submitted that the OPA’s recommendation to include costs for mitigation of the impact of delays to transmission projects, by targeting for the projects to come into service in advance of when generation projects would require the capacity, is inappropriate. If therefore the Board decided to provide recovery of the costs it should be by way of a deferral/variance account to protect customers in the event that the OPA’s concerns are proved out and the facilities are not completed in 2010.

The Consumer Council of Canada (“CCC”) and the Canadian Manufacturers & Exporters (“CME”) agreed with the analyses of Board staff and VECC, and submitted that there should not be an adjustment to 2010 rates.

4.2 PARTIES IN SUPPORT

Energy Probe accepted that Hydro One has demonstrated the technical necessity of the projects. It agreed with Board staff that the filing guidelines require comparative economic analysis of the identified alternative and that Hydro One has not provided the same level of detailed cost benefit analysis that it provided in the Bruce to Milton leave to construct application. However, Energy Probe noted that according to the evidence the only other viable alternative to the proposed projects is a new 500 kV transmission line at an estimated cost of \$1 billion compared to the estimated \$150 million for the proposed projects. It submitted that given the order of magnitude difference and that the transmission line could not be built in time, a more comprehensive cost benefit

analysis would not likely yield a different result. Strict compliance would seem to be unnecessary according to Energy Probe.

Ontario Power Generation (“OPG”) supported Hydro One’s Northeast Transmission Reinforcement Project, including the subject projects, because it is necessary for the effective transmission of generation from OPG’s Lower Mattagami River project, which will provide an additional 450 MW of generation, coming on line in 2013.

The Power Workers’ Union (“PWU”) noted that updates from the OPA indicate increases in generation resources, and that even though some in-service dates have changed, the OPA identifies that the subject projects are still required in the near term. The GEA and the FIT program also support the need to increase the capability of the North-South interface. PWU argued that the Board should balance its expectation of what it understands to be “sufficient evidence” in this matter with its commitment to streamline the process and reject calls for further analysis, which might ultimately provide the Board with little help in making its determination of the two projects.

4.3 THE APPLICANT’S REPLY

Hydro One responded that the need for the reinforcement of the North-South tie is even greater today than in May 2008 when the OPA recommended that the company proceed with the installation of reinforcement to the transmission system between Timmins and Barrie. Whereas approximately 900 MW was expected to come into service in the 2008 to 2013 timeframe, the increase in planned generation is now approximately 1300 MW.

Hydro One pointed to the passage of the GEA to encourage the delivery of infrastructure, and changes to section 96(2) of the OEB Act to promote the use of renewable energy sources and submitted that the evidence provided is a precursor of what Hydro One will be providing in support of rate applications in support of GEA initiatives. Hydro One submitted that Board staff and intervenors are interpreting the Minimum Filing Requirements too narrowly, and have failed to acknowledge the Board’s new objective.

Hydro One clarified that the need for project D7 does not arise to improve reliability to customers North of New Liskeard, but rather to meet reliability requirements and hence the project is non-discretionary. Hydro One is seeking approval for the projects to

facilitate the connection and utilization of renewable generation in accordance with the Minister's directive to procure northern hydroelectric generation and also to meet the IESO's Ontario Resource and Transmission Assessment Criteria ("ORTAC") requirements.

Hydro One noted that it does not understand Board staff's distinction between Connection Projects being non-discretionary and System Reinforcement Projects being discretionary. It is not practical to connect resources that can not be utilized, and in fact the Board's new objective includes the "use" and not merely the connection of renewable resources. Hydro One argued that the Board staff position implies that transmission reinforcements to enable the connection facilities are discretionary, a proposition with which Hydro One disagreed.

Hydro One argued that past applications, where it has provided more detail, were discretionary or partially discretionary, or were in the context of a section 92 application, not a rate application. It further submitted that the FIT program is on a non take-or-pay basis, which means that capacity constraints on the system must be removed if FIT proponents are to be able to sell their power into the grid. In Hydro One's view, the suggestion by Board staff and some intervenors that even non-discretionary projects should undergo an economic evaluation is inconsistent with the Filing Guidelines.

Hydro One submitted that little if any value would be added to the Board's review by including quantified comparisons of NPV in this case.

Hydro One referred to the support from Energy Probe regarding the order of magnitude difference in costs for a 500 kV transmission line over Projects D7 and D8 and that a more comprehensive cost benefit analysis would not yield a different outcome than the qualitative analysis presented in Hydro One's evidence. In response to Board staff's request for a loss of load probability study, Hydro One noted that project D7 is not intended to improve reliability, but rather to ensure that reliability standards are met, and therefore an economic evaluation is not required to justify this non-discretionary project.

5. BOARD FINDINGS

There are two substantial issues that are in dispute regarding the subject projects of the supplemental filing.

1. Whether Hydro One has provided adequate economic analysis in support of the projects and;
2. Whether the projects are required in the test year.

The Board's decision to allow for supplemental evidence on certain Network capital projects has provided Hydro One with an opportunity to file evidence framed within the regulatory construct created by the GEA. The filing of supplemental evidence also afforded Hydro One the opportunity to provide a more focused and comprehensive evidentiary basis for the specific projects. The compiling of supporting information that was originally filed as either pre-filed evidence, responses to interrogatories or in undertakings filed by Hydro One in the main hearing, has resulted in a more cogent rationale for the projects.

The new regulatory construct created by the GEA includes an obligation of the Board to, where applicable, promote the use of generation of electricity from renewable energy sources in a manner consistent with the policies of the Government of Ontario, including the timely expansion or reinforcement of transmission systems and distribution systems to accommodate the connection of renewable energy generation facilities.

Hydro One argues that the Board's new objective pertaining to the promotion of renewable energy has not been acknowledged by Board Staff and those intervenors who submit that the Board's Minimum Filing Requirements have not been met. It further argues that the proposed projects are required in the time frame stipulated to ensure that they are in place and available to enable the cited generation facilities and also potential FIT program projects being contracted for by the OPA in the area.

Board Staff, AMPCO, VECC and SEC claim that, according to the Minimum Filing Guidelines, the projects are not connection facilities and therefore, by definition, are discretionary projects requiring full supporting economic analysis. Board staff provided examples of the evaluations done for other projects, including a financial analysis of the congestion relief associated with the project D5, and alleviation of bottled energy for the Bruce-Milton project. These claims are disputed by Hydro One on the grounds that the projects are necessitated by Ministerial Directives and therefore they are non-discretionary. Hydro One claims that the type of analysis suggested by Board Staff and VECC would be of little value if any to the Board in making the determinations that are required in this case.

In the Board's view, the claims and counter claims of the parties regarding the characterisation of the projects as discretionary or non-discretionary are not determinative of the matter in this particular case. Irrespective of the manner in which the filing guidelines shape the application, the Board must decide whether or not the economic analysis provided in support of the projects demonstrates that the spending that is subject to Board review and approval is prudent.

On December 20, 2007 the Minister of Energy exercised the statutory power of Ministerial direction pursuant to section 25.32 of the Electricity Act, 1998. The Directive entailed the OPA making reasonable efforts to complete negotiations and execute financial energy supply agreements with OPG for the projects known as Lac Seul, Upper Mattagami, Healy Falls, Lower Mattagami and Hound Chute.

The evidence is clear that the Ministerial Directive to the OPA to procure renewable generation at these specific locations gave rise to the transmission system enhancements proposed by Hydro One. It is clear to the Board that the Ministerial Directive is intended to facilitate a policy initiative of the Government of Ontario and therefore these projects are to be considered in the context of the Board's new objective regarding the promotion of renewable energy sources.

The Board's obligation to promote renewable energy sources is a determinative factor in the establishment of the parameters of the economic analysis it will rely on to test the prudence of the applicant's proposals. The generation facilities will exist at prescribed locations as a result of Minister's Directive. Due to the site specificity of the renewable energy generation facilities in this application, analysis of congestion relief would essentially be an examination of the economics of the generation facility location. The Board does not intend to examine the economics of the project sites contained in the Minister's Directive. The Board does not require economic analysis of the generation locations to test the applicant's proposal to enable the generation against other alternatives that could also enable the generation.

In this application the Minister's Directives drive site specific generation projects and in turn affects discrete elements of the transmission system. Hydro One claims that the generation facilities necessitate a transmission system enhancement to render them fully operable and that the projects put forward are the most suitable of the project alternatives from both an economic and timeliness perspective.

The Board's role in this matter is to review the applicant's proposal to respond to the Minister's Directive to determine if it is the most efficient response available to it. Hydro One provided information on three alternatives to its proposed solution. They were all discounted due to ineffectiveness, cost, timeliness or a combination thereof. The Board would have been assisted by a more detailed cost comparison of the transmission line alternative but given the stark differential of nearly a seven-to-one ratio with respect to the proposed project, the Board accepts the evidence at face value. The Board accepts Hydro One's proposal as the most cost effective and timely alternative presented.

VECC and AMPCO have challenged the need for the project in the time frame proposed. Both challenge the time frames of the generation facilities being on-line and point to Hydro One's evidence as being illustrative of the projects being brought into rate base prematurely.

Hydro One counters that in addition to the projects being necessitated by the generation facilities that result from the Minister's Directive the transmission enhancements will also enable the procurement of renewable energy by the OPA through the FIT program. Hydro One also submits that the planning for completion dates for projects of this nature i.e. that are intended to enable procured renewable energy, should be done so in order to ensure projects are ready when needed.

The Board agrees that in these circumstances it is appropriate to complete the projects on the proposed timeline in order to facilitate the implementation of the FIT program in the affected area.

In conclusion, the projects are approved and Hydro One's 2010 revenue requirement will be adjusted accordingly and increased by \$7.1 million.

6. IMPLEMENTATION MATTERS AND COST AWARDS

6.1 IMPLEMENTATION

New transmission rates were implemented effective July 1, 2009 in accordance with the Decision of May 28, 2008 and a rate order issued in June 2009. The present Ontario Transmission Rate Schedule is:

Service Rate	Monthly Rate (\$/kW)
Network	2.66
Line Connection	0.70
Transformation Connection	1.57

The Revenue Allocators at present are shown in the following table:

Transmitter	Network	Line	Transformation
Uniform transmission Rates \$/kW-Month	2.66	0.70	1.57
Five Nations Inc.	0.00438	0.00438	0.00438
Canadian Niagara Power Ltd.	0.00390	0.00390	0.00390
Great Lakes Power Ltd.	0.02944	0.02944	0.02944
Hydro One Networks Inc.	0.96228	0.96228	0.96228
Total	1.00000	1.00000	1.00000

In accordance with its May 28, 2009 Decision, the Board issued a letter to Hydro One on November 5, 2009 setting out the Board's determination of Hydro One's return on equity and cost of short-term debt for 2010. The return on equity was set at 8.39% and the short-term debt rate was set at 0.55%. These values shall be used in the derivation of Hydro One's revenue requirement.

The Board directs Hydro One to file with the Board and all intervenors:

- a) A draft exhibit showing the final revenue requirement to reflect the Board's finding in this Decision and the cost of capital parameter values contained in the Board's letter of November 5, 2009.
- b) An exhibit showing the calculation of the uniform transmission rates and revenue shares reflecting the revenue requirement from above.
- c) A draft UTR reflecting these inputs.

6.2 COST AWARDS

Intervenors that were considered eligible for cost awards in the original case and that participated in the examination of the supplementary application shall submit their claims on or before December 31, 2009. The cost claims must conform to the Board's practice Direction on Cost Awards.

Hydro One should review the cost claims. Objections must be filed with the Board and one copy must be served on the party against whose claim the objection is made, by January 8, 2010.

The party whose cost claim was objected to will have until Friday January 15, 2010 to respond. Again, a copy of the submission must be filed with the Board and one copy is to be served on Hydro One.

Hydro One shall pay the Board's costs upon receipt of the Board's invoice.

DATED at Toronto, December 16 2009.

ONTARIO ENERGY BOARD

Original signed by

Cynthia Chaplin
Presiding Member

Original signed by

Paul Vlahos
Member

Original signed by

Ken Quesnelle
Member