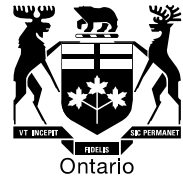


**Ontario Energy  
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**BY EMAIL**

January 12, 2010

Ontario Energy Board  
P.O. Box 2319  
27th Floor  
2300 Yonge Street  
Toronto ON M4P 1E4

Attention: Ms. Kirsten Walli, Board Secretary

Dear Ms. Walli:

**Re: Guelph Hydro Electric Systems Inc.  
2011 IRM3 Distribution Rate Application  
Board Staff Submission  
Board File No. EB-2010-0130**

In accordance with the Notice of Application and Written Hearing, please find attached the Board Staff Submission in the above proceeding. Please forward the following to Guelph Hydro Electric Systems Inc. and to all other registered parties to this proceeding.

In addition please remind Guelph Hydro Electric Systems Inc. that its Reply Submission is due by February 2, 2011.

Yours truly,

*Original Signed By*

Lawrie Gluck  
Analyst, Applications & Regulatory Audit

Encl.



# **ONTARIO ENERGY BOARD**

## **BOARD STAFF SUBMISSION**

2011 ELECTRICITY DISTRIBUTION RATES

Guelph Hydro Electric Systems Inc.

EB-2010-0130

**January 12, 2011**

**Board Staff Submission  
Guelph Hydro Electric Systems Inc.  
2011 IRM3 Rate Application  
EB-2010-0130**

**Introduction**

Guelph Hydro Electric Systems Inc. (“Guelph Hydro”) filed an application (the “Application”) with the Ontario Energy Board (the “Board”), received on September 17, 2010, under section 78 of the *Ontario Energy Board Act, 1998*, seeking approval for changes to the distribution rates that Guelph Hydro charges for electricity distribution, to be effective May 1, 2011. The Application is based on the 2011 3<sup>rd</sup> Generation Incentive Regulation Mechanism.

The purpose of this document is to provide the Board with the submissions of Board staff based on its review of the evidence submitted by Guelph Hydro.

In the interrogatory phase, Board staff identified certain discrepancies in the data entered in the application model by Guelph Hydro. In response to Board staff interrogatories which requested either a confirmation that these discrepancies were errors or, an explanation supporting the validity of the original data filed with the application, Guelph Hydro confirmed that they were errors and provided the corrected data. Board staff will make the necessary corrections to Guelph Hydro’s model at the time of the Board’s decision on the application.

Board staff makes submissions on the following matters:

- Incremental Capital Module; and
- Smart Meter Funding Adder.

**INCREMENTAL CAPITAL MODULE**

**Background**

**The Request**

Guelph Hydro proposed an incremental capital module to recover the incremental capital costs of \$10,519,668 associated with the design and construction of a municipal transformer station in south Guelph (the "New MTS - Clair").<sup>1</sup> Guelph Hydro proposes to recover the costs by means of a rate rider that would be in place until such time that Guelph Hydro files its next rebasing application. The impact attributed to the New MTS at Clair is a total bill increase of approximately \$2.92.

The *Report of the Board on 3<sup>rd</sup> Generation Incentive Regulation for Ontario's Electricity Distributors (the "Report")* requires that incremental capital expenditures satisfy the eligibility criteria of materiality, need and prudence in order to be considered for recovery prior to rebasing. Applicants must demonstrate that amounts exceed the Board-defined materiality threshold and clearly have a significant influence on the operation of the distributor, must be clearly non-discretionary and the amounts must be clearly outside of the base upon which rates were derived. In addition, the decision to incur the amounts must represent the most cost-effective option for ratepayers.

Guelph Hydro completed the 2011 IRM3 Incremental Capital Work Form, and calculated that the costs exceed the materiality threshold of \$7,008,381.<sup>2</sup> Guelph Hydro's 2011 forecasted capital expenditures are \$23,367,344, which includes the forecasted cost of \$10,900,000 to design and construct the municipal transformer station that is the subject of this incremental capital claim.

Guelph Hydro's indicated that the incremental capital expenditures are related to the design and construction of a municipal transformer station to provide bulk supply to service increasing load levels in the south part of Guelph.

The New MTS - Clair has a scheduled in-service date of October 2011. Guelph Hydro has commitments with existing and new customers for additional connections in 2011 that will require the added capacity via the New MTS - Clair.

Guelph Hydro has indicated that if the approval is not granted, Guelph Hydro will have to fund the capital expenditures from existing working capital, which may require temporary short term borrowing through its operating line of credit. Over the longer term, Guelph Hydro submitted that failure to approve the incremental capital claim might

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1 Application evidence, Manager's Summary, page 19

2 Application evidence, Appendix 5.4, Sheet E2.1

affect Guelph Hydro's longer term cost of borrowing.

### The Issues

Board staff filed extensive interrogatories designed to further inform the Board on whether the need and prudence eligibility criteria were met.

Board staff notes that Guelph Hydro provided full and complete responses to interrogatories. The answers provided have clarified the record and informed Board staff's review of the incremental capital module request.

### Project Need

Guelph Hydro provided evidence supporting the project need in its application and interrogatory responses. Guelph Hydro provided a "Guelph South Load Forecast", which indicated that current supply in the area of the New MTS - Clair would exceed installed supply in that area of the city between 2010 and 2011. Guelph Hydro submitted that its customers are severely at risk of service interruption if there is a loss of high voltage supply at the existing Hanlon TS.<sup>3</sup> Hanlon TS has exceeded maximum average feeder loading on numerous occasions, and exceeded contingency operation ratings on a few occasions.<sup>4</sup> Guelph also exceeded the Ten Day Limited Time Rating for Hanlon TS (42.9MW) in 2006 (43.8 MW).<sup>5</sup>

Guelph Hydro indicated that the IESO has completed a System Impact Assessment<sup>6</sup> with respect to the New MTS - Clair, dated October 26, 2010. Guelph Hydro noted that Hydro One Networks Inc. ("Hydro One") is currently working on the connection agreement.

### Project Alternatives

Guelph Hydro provided an in depth evaluation of alternatives in the form of an optimization exercise at page 15 of Appendix 5.2. Guelph Hydro considered distances from load centers, load capacity, feeder number and length, and other monetary and

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3 Response to Board Staff Interrogatory number 7a

4 Response to Board Staff Interrogatory number 7b and 7c

5 Response to Board Staff Interrogatory number 7d

6 Response to Board staff Interrogatory number 12b

timing constraints. Three main options were considered in the final analysis; “Hanlon TS expansion”, “New TS – Clair”, and “New TS – Maltby”. Table 7 provided Capital Cost Comparison, and Table 8 provided an Operating Cost Comparison. Guelph Hydro concluded that the optimal solution was to construct the New TS at the Clair location, at a capital cost of between \$16.2 and \$18.8 million.<sup>7</sup> Guelph Hydro also provided a list of advantages and disadvantages of a self-build versus a Hydro One build, and noted that the Hydro One Hanlon TS option would have an in-service date of late 2012, while the self-build option would be in-service in fall 2011.<sup>8</sup>

Guelph Hydro did not file a Connection Cost Responsibility Agreement (“CCRA”) with Hydro One with respect to bypassing Hydro One’s transmission system and providing its own supply.

In a similar application in Oakville Hydro (EB-2010-0104), Hydro One commented on bypass stating that:

*Moving load from an existing station to the new MTS for the purpose of avoiding Transformation Connection payments is considered to be bypass, and is subject to the bypass provisions as set out in the Transmission System Code. Bypass is considered to have occurred if the loading at existing facilities has been reduced to below the "Existing Load" as defined in the Transmission System Code and noted in the CCRA.”<sup>9</sup>*

#### Additional Risks of Self-Build

Guelph Hydro indicated its plans to mitigate risks by conducting an evaluation of suppliers, taking out extended warranties, and through continuous automated system monitoring.<sup>10</sup> Further, Guelph Hydro indicated that it intended to work in close cooperation with neighboring LDCs with similar transformer stations.

#### Transmission Assets

Board staff notes that the New MTS - Clair will be tapped off lines B5G and B6G of the

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7 Application, Appendix 5.2

8 Application, Appendix 5.2, page 19

9 Exhibit I, Appendix 8, September 28, 2010 letter, para 3.

10 Response to Board Staff Interrogatory number 10

115 kV Hydro One Networks Transmission System between Hanlon TS and Puslinch TS. As a result, the transformer station will provide transformation connection service, meaning that Guelph Hydro would be considered to be operating as a transmitter under the *Transmission System Code* ("TSC"). Guelph Hydro would have to acquire a transmission licence, or request that the New MTS - Clair be deemed a distribution asset to ensure compliance with the TSC.

Guelph Hydro indicated that it intends to request that the Board deem the new transformer station a distribution asset under S.84(a) of the *OEB Act*.<sup>11</sup>

#### Incremental Capital Rate Rider – Sunset Date

Guelph Hydro has requested an April 30, 2012 sunset date for its Incremental Capital Rate Rider. Board staff asked Guelph Hydro, as part of the Interrogatory process, to provide rationale for the proposed sunset date. Guelph Hydro noted that it is scheduled to file a Cost of Service Application for the 2012 rate year, which would set rates commencing May 1, 2012. Therefore, the remaining term of the IR plan is only one-year. Guelph Hydro stated that at the time of its Cost of Service application, it will seek the incorporation of the requested incremental capital expenditures related to the New MTS - Clair into its rate base.

Guelph Hydro also noted, in accordance with its May 11, 2010 letter, that it would be seeking a January 1, 2012 effective date for its 2012 rates. If the Board approves the 2012 effective date for the purpose of aligning the fiscal year with the rate year, then the sunset date for the Incremental Capital Rate Rider would be December 31, 2011.

#### **Submission**

##### Project Need

Board staff submits that Guelph Hydro's request for incremental capital funding associated with the design, construction, and operation of the New MTS at Clair should be granted.

Board staff submits that Guelph Hydro has demonstrated immediate short term and

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<sup>11</sup> Response to Board Staff Interrogatory number 12

long term capacity requirements as evidenced by Guelph Hydro's load forecast evidence and customer requests for capacity.<sup>12</sup> Board staff acknowledges that system reliability is maintained by adding new supply capacity in advance of the development of load.

Board staff notes that from the evidence, it is unclear whether Guelph Hydro will be required to make payments to Hydro One in respect of bypass. Board staff submits that this may affect Guelph Hydro's analysis of the total costs of alternatives presented. Board staff submits that the bypass issue, and associated costs, have not been adequately addressed in Guelph Hydro's application.

Board staff is pleased to see that Guelph Hydro intends to cooperate with its neighboring utilities to manage risks of failures with respect to the New MTS - Clair. However, while Board staff submits that the New MTS - Clair is optimized to satisfy Guelph Hydro's immediate service area needs and that Guelph Hydro has demonstrated the New MTS - Clair at Clair as the lowest cost alternative, there has been little evidence presented to demonstrate that Guelph Hydro has shown consideration for supply optimization in the context of regional supply planning. The Board may want to encourage the company to enhance the cooperation with neighbouring utilities for future planning activities.

### Project Alternatives

Board staff submits that rate impacts are least under the proposed New MTS - Clair with respect to Guelph Hydro's immediate service area and the transformer is ideally located to serve Guelph Hydro's expected load growth in the immediate area of its distribution system. Board staff notes that Guelph Hydro intends to recover the incremental capital costs by means of a variable rate rider that would be in place until such time that Guelph Hydro files its next rebasing application. Board staff notes that the variable rate rider will be based on kW demand or kWh consumption, depending on class.<sup>13</sup> Board staff submits that Guelph Hydro's proposal to recover the costs of the new transformation supply on a volumetric basis and the rationale for the proposed billing determinants are consistent with the Board's Report.

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<sup>12</sup> Response to Board Staff Interrogatory number 8

<sup>13</sup> Residential, General Service < 50kW, and Unmetered Scattered Load are on a kWh basis. General Service greater than 50 kW, Large Users, Sentinel, and Street Lighting are on a kW basis.



Board staff submits that the other alternatives to construction of the New MTS - Clair are not optimal based on total cost, in-service dates, and the associated risk of supply outages. The transformer station proposed is the most cost-effective alternative presented, and Board staff submits that it is in the best interest of Guelph Hydro's ratepayers that the New MTS at Clair be built.

#### Risks of Self-Build

Board staff submits that it appears Guelph Hydro has taken reasonable steps to protect the company and its ratepayers from unplanned costs as a result of failures associated with the New MTS - Clair. Guelph Hydro has budgeted for spare parts, and has indicated that it seeks to cooperate with its neighboring distributors to further manage its risks. It is unclear from Guelph Hydro's evidence the duration of warranties and cost of insurance. Board staff would appreciate any comment that Guelph Hydro could make on these points in its reply submission.

#### Transmission Assets

Board staff submits that Guelph Hydro has taken the appropriate steps for the safe connection of the New MTS - Clair to the transmission system. Guelph Hydro does not have a rate for transmission service and intends to use the New MTS - Clair solely for the purposes of serving its immediate distribution customers at distribution voltages less than or equal to 50kV. The Board has granted similar requests to other distributors with respect to deeming of transmission assets as distribution assets for recovery through distribution rates pursuant to Section 84(a) of the *OEB Act*. It appears Guelph Hydro is taking all necessary steps, and in Board staff's submission the Board may reasonably approve Guelph Hydro's request.

#### Incremental Capital Rate Rider – Sunset Date

Board staff submits that the calculation of the rate rider can only be made on the basis of the information available at this time. At this time, the Board has not provided any direction to Guelph Hydro in regards to the alignment of the fiscal year with the rate year. Therefore, the appropriate sunset date for the Incremental Capital Rate Rider is April 30, 2012.

Board staff submits that at the time of Guelph Hydro's 2012 Cost of Service application, adjustments could be made, if necessary, to reflect the Board's decision in that proceeding regarding the alignment of the fiscal year with the rate year.

## **SMART METER FUNDING ADDER**

### **Background**

Guelph Hydro has a current Board-approved smart meter funding adder of \$1.00 per month per metered customer. In the current Application, Guelph Hydro requested an increase in its funding adder to \$3.32 per month per metered customer.

In its Application, Guelph Hydro filed supporting documentation in accordance with section 1.4 of the Smart Meter Guideline (G-2008-0002).

Guelph Hydro noted that its smart meters and associated back-office systems meet the minimum specifications set out by O.Reg 425/06. The meters exceed the specifications in one specific area with respect to the inclusion of a communications chip base on the Zigbee standard. This communication chip will enable Guelph Hydro, through the smart meter, to communicate with in-home devices such as displays, thermostats, and Zigbee equipped smart appliances.

Guelph Hydro noted that it believes that it was prudent to include the communication chip in the smart meters on the basis that the incremental cost to do so was minimal (\$12.25 / meter) in comparison to the alternative of having to replace large volumes of meters before their end of useful life (15 years).

### **Submission**

Board staff submits that Guelph Hydro has complied with the policies and filing requirements of the Smart Meter Guideline. Actual smart meter expenditures will be subject to review when Guelph Hydro makes an application for disposition of the account balances in a subsequent proceeding. Board staff takes no issue with Guelph Hydro's proposal to increase its smart meter funding adder to \$3.32 per month per metered customer but would like to make the Board aware that the \$12.25 / meter cost

related to the communications chip has been included in Guelph Hydro's Smart Meter  
Adder calculation.

All of which is respectfully submitted.