



Ontario | Commission  
Energy | de l'énergie  
Board | de l'Ontario

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## **DECISION AND ORDER**

**EB-2018-0117**

### **HYDRO ONE NETWORKS INC.**

**Application for leave to upgrade existing transmission line facilities in the Barrie-Innisfil area**

**BEFORE: Michael Janigan**  
Presiding Member

**Robert Dodds**  
Vice Chair and Member

**Susan Frank**  
Member

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**April 23, 2020**

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## 1 INTRODUCTION AND SUMMARY

This is a Decision and Order of the Ontario Energy Board (OEB) on an application filed by Hydro One Networks Inc. (Hydro One) under section 92 of the *Ontario Energy Board Act, 1998* (OEB Act) for leave to construct transmission facilities that will increase transmission and transformation capacity to accommodate load growth in the Barrie/Innisfil area of Ontario. Hydro One requested approval to:

- Upgrade two 115 kV circuits (E3B and E4B), approximately 9 kilometres in length, between Essa Transformer Station (TS) and Barrie TS to become a new 230 kV double circuit transmission line (the new circuit nomenclature will be E28 and E29)
- Construct new 230 kV connection points at the existing Essa TS, including the addition of three new breakers, to connect the E28 and E29 circuits<sup>1</sup>
- Upgrade and expand the existing Barrie TS yard with new 230 – 44 kV facilities, consisting of two new 75/125 MVA transformers and a new 44 kV switchyard

The transmission line and station work are collectively referred to as the Barrie Area Transmission Upgrade (BATU) Project. Hydro One also sought approval under section 97 of the OEB Act for the forms of agreements it offers to landowners to use their land for routing or construction of the proposed facilities. A map showing the location of the BATU Project is attached as Schedule A to this Decision and Order.

Hydro One sought approval under section 6.3.19 of the Transmission System Code (TSC) to establish a 15-year period over which InnPower Corporation (InnPower) will make installment payments to Hydro One on the capital contribution for the BATU Project. Hydro One also made a request under section 78 of the OEB Act to establish the Capital Contribution Recovery Differential Account. The account is intended to record: (1) the outstanding capital contribution unpaid by distributors; and (2) the interest revenue difference between the allowed interest charges that Hydro One can charge connecting distribution customers and the weighted average cost of capital (WACC) that Hydro One would otherwise be entitled to earn to keep Hydro One whole.

Pursuant to the OEB's authority under subsection 92(1) of the OEB Act, the OEB grants Hydro One's leave to construct the BATU Project. This approval is based on an

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<sup>1</sup> The two existing 230/115 kV autotransformers at Essa TS will be retired, as well as the associated end-of-life 115 kV switchyard infrastructure currently used to supply Barrie TS.

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examination of the project need, project costs, reliability and quality of service, land matters and conditions of approval. The leave is subject to the OEB's conditions of approval, attached as Schedule B to this Decision and Order. The OEB approves the forms of agreements set out in the application.

The OEB denies Hydro One's request for approval of a 15-year period for InnPower's payment of its capital contribution. InnPower has revised its installment payment period plans to the five years as permitted by the TSC. The capital contribution shall be recorded in a regulatory deferral sub-account to be drawn down as InnPower makes payments. A second regulatory deferral sub-account shall also be established to record the interest income difference between the construction work in progress (CWIP) and WACC rates on the unpaid capital contribution. The OEB also permits Hydro One to exclude interest income earned on unpaid capital contributions in the External Station Maintenance, E&CS Revenue and Other Revenue Variance Account.

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## 2 THE PROCESS

Hydro One filed an application on October 11, 2019. A Notice of Hearing was issued by the OEB on November 11, 2019. The Independent Electricity System Operator (IESO) applied for, and was granted, intervenor status.

In accordance with Procedural Order No. 1, OEB staff filed interrogatories on December 13, 2019. Hydro One's responses to interrogatories were received by the OEB on January 9, 2020.

On January 23, 2020, the OEB issued Procedural Order No. 2 ordering a technical conference to take place on February 11, 2020 for further clarification on matters related to interrogatory responses.<sup>2</sup> The OEB also cancelled the dates for submissions established in Procedural Order No. 1. Responses to undertakings given at the technical conference were filed with the OEB on February 18, 2020.

On February 24, 2020, the OEB issued Procedural Order No. 3, which provided for Argument-in-Chief, submissions from the IESO and OEB staff, and a reply submission from Hydro One. Hydro One filed its Argument-in-Chief with the OEB on February 28, 2020. On March 12, 2020, Hydro One filed a letter updating its cost estimate.

In accordance with Procedural Order No. 3, OEB staff filed its submission on March 18, 2020, while Hydro One filed its reply submission on March 30, 2020. InnPower filed a letter of comment on March 30, 2020.

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<sup>2</sup> OEB staff questioned representatives from Hydro One, InnPower and the IESO during the technical conference.

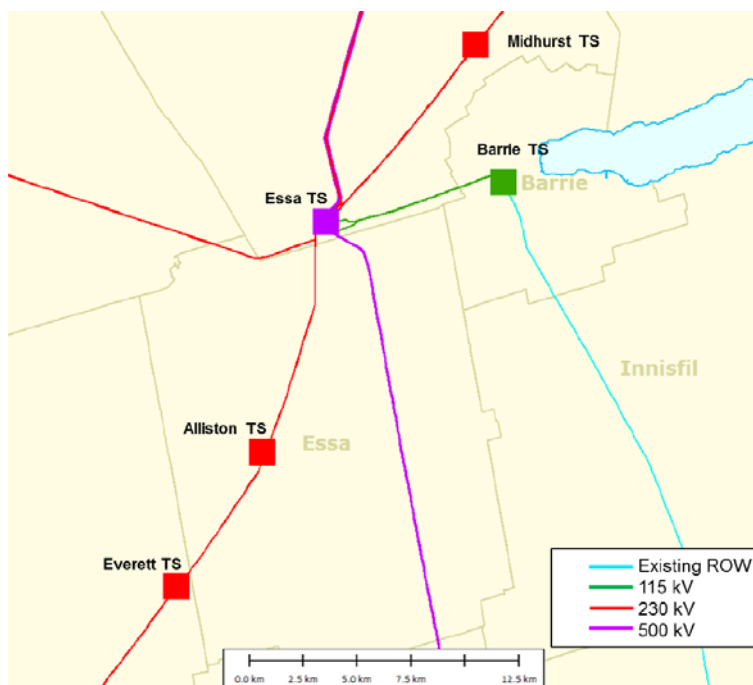
### 3 DECISION ON THE ISSUES

In reviewing applications under section 92 of the OEB Act, the OEB typically considers the need for the project and alternatives to the proposed project. The OEB's findings regarding the need for the BATU Project; the alternatives considered; the impacts of the BATU Project on price, reliability, quality of service; land matters; conditions of approval; and accounting-related matters are addressed in this chapter.

#### 3.1 Need

Electricity demand in the Barrie/Innisfil sub-region is supplied by Midhurst TS, Barrie TS, Alliston TS, and Everett TS. This area is supplied primarily by the bulk system, via the 500/230 kV autotransformer at Essa TS. InnPower is supplied from Barrie TS, Alliston TS and Everett TS. Barrie TS does not only supply InnPower; it also supplies Alectra Utilities Corporation (Alectra) – six feeders supply Alectra while one feeder supplies InnPower. Figure 1 provides a map of the Barrie/Innisfil area and identifies the location of the respective stations.

**Figure 1: Map of the Barrie/Innisfil Area**



According to the evidence, the BATU Project facilities are required to increase supply capacity to accommodate customer load growth in the Barrie/Innisfil area and to

address immediate end-of-life issues with the current transmission line and station facilities.

A letter from the IESO, dated December 7, 2015, to Hydro One identified the need to provide additional capacity to supply growth in the Barrie/Innisfil area and concluded that non-wires alternatives were not viable options.

The Integrated Regional Resource Plan (IRRP) for the Barrie/Innisfil sub-region, published on December 16, 2016, provided forecasted growth projections for the area and identified resulting near- and medium-term supply needs. The forecast in the IRRP included demand growth for both Alectra and InnPower. The South Georgian Bay/Muskoka Regional Infrastructure Plan (RIP), dated August 18, 2017, provided a consolidated summary of the needs and recommended plans for the area.

Hydro One noted in its application that, after the publishing of the RIP, Alectra had withdrawn its requirements for additional capacity for the area due to a lack of forecasted growth materializing. Even though Alectra had withdrawn its requirements for additional capacity, both Hydro One and the IESO confirmed the need for the BATU Project to address supply capacity and end-of-life infrastructure requirements in the area.

In March 2019, InnPower provided Hydro One with an updated forecast as further information regarding development in the Barrie/Innisfil area was known. InnPower's forecast increased from that provided in the IRRP and RIP. InnPower forecasted residential, industrial and commercial growth in the Barrie/Innisfil area, noting that 25,000 new homes were planned for construction, which would require an increase of approximately 85 MVA of peak power. InnPower stated that anticipated industrial, commercial and institutional development is expected to add an additional 90 MVA of peak power requirements.<sup>3</sup>

According to Hydro One's evidence, the current total existing supply capacity assigned by Hydro One to InnPower is 67 MVA with limited capability for load transfers to address long-term growth needs in the area.<sup>4</sup> In 2019, InnPower's peak demand was 64 MVA.<sup>5</sup> Hydro One submitted that the existing load-meeting capability of the E3B and

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<sup>3</sup> Exhibit B / Tab 1 / Schedule 1 / Attachment 1 / p. 1

<sup>4</sup> Supply capacity for Barrie TS, Alliston TS and Everett TS are 14 MVA, 50 MVA and 3 MVA, respectively.

<sup>5</sup> InnPower Undertaking JT1.1 / Table JT 1.1-1

E4B circuits, and transformation capacity at Barrie TS, are not sufficient to meet the growth projections outlined by InnPower.

The transfer of an Alectra feeder from Barrie TS to Midhurst TS will allow InnPower demand to be supplied by Barrie TS in the short-term. However, an updated load forecast for Barrie TS from Hydro One, in response to undertakings, illustrated that Barrie TS will exceed its capacity in 2023.<sup>6</sup>

During the technical conference, the IESO reiterated the need for the BATU Project due to growth in the Barrie/Innisfil area and the subsequent need to enhance the capacity at Barrie TS. The IESO also supported the BATU Project as being the appropriate solution to address long-term needs in the area.

In addition to providing load forecasts for InnPower, the IRRP stated that Metrolinx has applied to connect to the transmission system in the Barrie area to develop an electrified traction power station (Allandale Traction Power Station). The RIP estimated the Allandale Traction Power Station will require 40-50 MW of capacity.<sup>7</sup> OEB staff noted in its submission that Metrolinx's electrification of rail corridors is targeted for completion in 2025.

Hydro One's station assessment<sup>8</sup> confirmed the need to replace end-of-life equipment at Barrie TS, including the T1 and T2 transformers, the majority of the 44 kV switchgear, capacitor banks, and associated ancillary equipment.<sup>9</sup> At Essa TS, Hydro One's assessment confirmed the need to replace end-of-life equipment in its 115 kV switchyard, which includes the 230/115 kV T1 autotransformer, a station service transformer, the majority of the 115 kV switchgear, and associated protection and ancillary equipment. The balance of the infrastructure on both E3B and E4B circuits, with the exception of the conductor and some associated assets, has reached end-of-life and requires replacement. The E3B transmission facilities are between 69 and 71 years old while E4B transmission facilities are 58 years old.<sup>10</sup>

Hydro One considered three alternatives to address the needs for this project:

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<sup>6</sup> Hydro One Undertaking JT1.5 / Table 2

<sup>7</sup> Exhibit B / Tab 3 / Schedule 1 / Attachment 3 / p. 39

<sup>8</sup> Hydro One stated that the methodology used to determine end-of-life facilities is consistent with that submitted in its transmission rate application (EB-2019-0082).

<sup>9</sup> Exhibit I / Tab 1 / Schedule 4 / pp. 2-7

<sup>10</sup> Exhibit I / Tab 1 / Schedule 4 / p. 7



- *Alternative One – Maintaining the current 115 kV supply to the Barrie/Innisfil area through like-for-like replacement of the end-of-life facilities at Barrie TS and Essa TS:* The aging conductors and poles along the E3B and E4B circuits would also be replaced like-for-like.
- *Alternative Two – Construct a new Dual Element Spot Network (DESN) transformation station at Essa TS and decommission Barrie TS:* Barrie TS and the 115 kV transmission assets at Essa TS would be decommissioned and a new 230/44 kV DESN transformation site, within the yard of Essa TS.
- *Alternative Three – Rebuild Barrie TS to 230 kV supply:* The existing end-of-life 115 kV switchyard at Barrie TS and the existing 230/115 kV autotransformer at Essa TS would be retired. The 115 kV E3B and E4B circuits would be replaced with a 230 kV double circuit to supply the rebuilt 230 kV Barrie TS directly from the expanded Essa TS 230 kV system.

Alternative Three was recommended by the working group in the IRRP.<sup>11</sup> Hydro One selected Alternative Three as the recommended technical solution submitting that it addresses near- and medium-term capacity needs, removes an aging 115 kV switchyard at Essa TS, and enables future expansion capability to supply the region's long-term capacity needs.<sup>12</sup> Hydro One stated that the BATU Project is the most appropriate and cost-effective solution to address the timeline and magnitude of the need in the Barrie/Innisfil area.

Alternative One and Alternative Two both address end-of-life needs and are less expensive than Alternative Three, but were not selected due to their inability to sufficiently accommodate growth. Alternative One, the least expensive alternative, would not result in additional incremental capacity at Barrie TS or any additional 115 kV supply from Essa TS and limits options for future expansion of the transmission system. Alternative Two would provide additional capacity in the near-term, but limits options for future expansion of the transmission system. Further, when compared to Alternative Three, Alternative Two would have higher system losses due to longer distribution voltage rated feeders.<sup>13</sup>

OEB staff submitted that it supports the BATU Project as the upgraded transmission line and station facilities will replace end-of-life assets and assist in increasing supply

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<sup>11</sup> Exhibit B / Tab 3 / Schedule 1 / Attachment 2 / pp. 46-47

<sup>12</sup> Exhibit B / Tab 5 / Schedule 1 / p. 4

<sup>13</sup> Exhibit B / Tab 5 / Schedule 1 / pp. 1-2

capacity, accommodating InnPower's forecasted customer load growth in the Barrie/Innisfil area. OEB staff noted although there may be a question as to the exact amount of growth that will materialize in a given year, it is clear that the Barrie/Innisfil area is growing and that additional supply capacity will be needed over the long-term, even in the absence of Alectra.

## Findings

The OEB finds that the BATU Project facilities are required to increase supply capacity to accommodate customer load growth in the South of Barrie and Innisfil area and to address immediate end-of-life issues. This project was supported by the IESO following the development of an integrated resource plan. InnPower identified sustained strong future load growth with 24,545 residential and 40 commercial units forecasted to be constructed between 2020 and 2032.

Three alternatives were examined. Hydro One submitted that the recommended alternative addresses near-term and medium-term capacity needs, removes an aging 115 kV switchyard at Essa TS, and allows for future expansion capability to supply the region's long-term capacity needs. The IESO noted that the project also addresses end-of-life needs at Barrie TS, Essa TS and components of the 115 kV supply infrastructure.

Finally, the BATU Project will also accommodate load growth associated with future Metrolinx connections to facilitate the electrification of rail corridors.

The OEB finds that the proposed BATU Project is needed.

## 3.2 Impact on Price of Electricity Service

The total cost estimate of the BATU Project is \$91 million – consisting of a capital in-service cost of \$86.4 million and removal costs of \$4.6 million. The capital in-service cost of the BATU Project is comprised of \$22.9 million in line costs and \$63.5 million in station costs. Hydro One states that the BATU Project cost estimate is an Association for the Advancement of Cost Engineering (AACE) Class 3 estimate.

In the absence of the need for the BATU Project, Hydro One submits that it would have undertaken certain sustainment work on both E3B and E4B circuits, Essa TS and Barrie TS. The avoided cost of sustainment work was initially estimated to be \$56.2 million. However, on March 12, 2020, Hydro One filed a letter informing the OEB that the avoided sustainment cost estimate was revised to \$59.2 million – representing a 5.3%

increase from the estimate provided in the pre-filed evidence. The cost allocated to InnPower for line and station work is limited to the incremental costs relative to the cost of the avoided sustainment work, consistent with section 6.7.2(b) of the TSC.

Hydro One provided cost information for three comparable line projects – the Guelph Area Transmission Reinforcement (GATR) Project, the Woodstock Area Transmission Reinforcement (WATR) Project, and the South Georgian Bay Transmission Reinforcement (SGTR) Project. The comparable line project costs included an escalation adjustment of 2% per year. Hydro One considers the GATR, WATR and SGTR projects to be similar to the BATU Project since they replace 115 kV circuits with a relatively short length of double circuit 230 kV transmission line in a rural/semi-urban environment on existing Hydro One right-of-way – a scope similar to the line work for the BATU Project. The line cost per kilometre for the BATU Project is \$2.5 million/km, which is within the \$2.1 million/km and \$4.8 million/km range of the comparable line projects.

Hydro One also provided comparisons for the construction costs of station facilities. For the work at Essa TS, three comparable station projects were provided by Hydro One – the Detweiler TS Static Var Compensator (SVC) Project, Hydro Quebec Interconnection Project, and Detour Lake 230 kV Line Connection Project. The comparable station project costs included an escalation adjustment of 2% per year. Work at Essa TS is estimated to cost \$28.4 million while the Detweiler TS SVC Project, Hydro Quebec Interconnection Project, and Detour Lake 230 kV Line Connection Project cost \$32.1 million, \$28.1 million and \$28.7 million, respectively.

Hydro One provided cost comparisons for the station work at Barrie TS. The three comparable projects cited by Hydro One included the St. Isadore TS Project, Palmerston TS Refurbishment Project, and Enfield TS New DESN. Work at Barrie TS is estimated to cost \$35.1 million while the St. Isadore TS Project, Palmerston TS Refurbishment Project, and Enfield TS New DESN cost \$37.2 million, \$36.1 million and \$33.0 million, respectively.

Hydro One submitted that based on the load forecast, project cost, capital contribution from InnPower, and ongoing maintenance costs, the BATU Project will have minimal impacts on rates. Further, over a 25-year time horizon, Hydro One forecasts that the change in the line pool revenue requirement is not material enough to incrementally impact the Uniform Transmission Rate line pool rate. Hydro One states that the revenue requirement for station work at Essa TS should not have an impact on the network pool rate over the first seven years of the 25-year time horizon. Moreover, as load increases, the network rate will be reduced by the eighth year as the network pool rate will

decrease to \$3.82/kW/month. Finally, for station work at Barrie TS, the transformation pool rate will increase from \$2.30/kW/month to \$2.31/kW/month in year two.

OEB staff submitted that the evidence provided by Hydro One on cost information for comparable projects suggests that the cost estimates for the BATU Project are reasonable. OEB staff also submitted that Hydro One's pre-filed evidence demonstrates that the BATU Project will have no material adverse impact on transmission rates or customer bills as the rate impacts are anticipated to be minimal. In its reply submission, Hydro One restated that impacts on its transmission ratepayers will be negligible.

### Findings

The BATU Project was forecasted to cost \$91 million with an avoided sustainment cost estimate of \$59.2 million that will be allocated to the transmission rate pool and a customer capital contribution of \$14.4 million.

Cost information provided for comparable projects confirms that the projected project cost is reasonable. With the considerable support for the cost forecast provided by Hydro One, and the negligible impact of the project on Hydro One Transmission's ratepayers, the OEB accepts the BATU Project costs.

### 3.3 Impact on Reliability and Quality of Service

OEB staff asked Hydro One to comment on any reliability and/or back-up supply concerns for Barrie TS as the new 230 kV E28 and E29 circuits would be located on a single tower instead of on separate tower lines like the existing 115 kV E3B and E4B circuits. In response, Hydro One stated that in the extremely rare event that both new 230 kV circuits are unavailable, supply to Barrie TS would be lost. As Barrie TS has low voltage transfer capacity with Midhurst TS and Alliston TS, load transfers would occur to temporarily restore power to the affected loads until at least one of the 230 kV circuits is restored into service.<sup>14</sup>

Hydro One noted that in terms of reliability, the supply reliability for customers currently supplied from Barrie TS is not expected to change. In fact, with the upgraded 230 kV

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<sup>14</sup> Exhibit I / Tab 1 / Schedule 2 / pp. 1-2

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supply, customers can expect to experience better reliability due to the new assets and facilities that will replace the current end-of-life assets in operation.<sup>15</sup>

In the pre-filed evidence, Hydro One filed both the IESO's final System Impact Assessment (SIA) for the connection of the transmission facilities and the final Customer Impact Assessment (CIA). The conclusion of the IESO's SIA is that the BATU Project is expected to have no material adverse impact on the reliability of the integrated power system, provided that the requirements in the IESO report are implemented. Hydro One's CIA concludes that the BATU Project will have no material impact on customers of the area.

OEB staff submitted that based on the evidence provided, there are no concerns with respect to reliability and quality of electricity service associated with the BATU Project.

### **Findings**

Hydro One observed that with the replacement of end-of-life assets customers could expect to experience better reliability. The IESO's SIA indicated the BATU Project is expected to have no material adverse impact on the reliability of the integrated power system. In addition, the final CIA concluded that the BATU Project has no material impact on area customers.

The OEB finds that the BATU Project has no negative impact and will possibly result in an improvement in reliability and quality of service.

## **3.4 Land Matters**

Hydro One identified in the evidence that it will use existing land rights for the BATU Project and that it will be acquiring additional permanent and temporary land rights. Hydro One stated that it has completed all 15 permanent land rights agreements required. Hydro One identified that it will require three temporary access rights and that no substantial concerns have been raised by impacted landowners with respect to the BATU Project. Further, Hydro One confirmed it does not require any permits and/or approval to occupy municipal road allowances and that the right-of-way does not impact

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<sup>15</sup> Hydro One Argument-in-Chief / pp. 2-3

federal or provincial lands which require permitting or cross highway, rail, or permanent water crossings.<sup>16</sup>

Hydro One seeks approval of the forms of agreements offered, or to be offered, to affected landowners. Hydro One confirmed that the forms of agreements included in the pre-filed evidence were previously approved by the OEB in the Power South Nepean Project<sup>17</sup> application.<sup>18</sup>

OEB staff submitted that it reviewed the proposed forms of agreements and has no issues or concerns with Hydro One's proposed forms of land agreements. OEB staff further submitted that these agreements are consistent with the forms of agreements previously approved by the OEB in past Hydro One leave to construct applications and with the OEB's *Filing Requirements for Electricity Transmission Applications*.

## Findings

The OEB approves the forms of agreements proposed for the acquisition of permanent and temporary land rights.

## 3.5 Conditions of Approval

Under subsection 23(1) of the OEB Act, the OEB may, in making an order, impose such conditions as it considers proper.

OEB staff supported Hydro One's proposal and submitted that leave to construct the BATU Project should be granted subject to the conditions of approval listed in Schedule B.

OEB staff noted that the conditions it proposed are based on the standard set of conditions the OEB has previously approved in leave to construct applications, including a modification to condition 5 based on a recent decision by the OEB in Hydro One's D6V/D7V application for refurbishing a portion of transmission line.<sup>19</sup>

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<sup>16</sup> Exhibit I / Tab 1 / Schedule 11 / pp. 4-5

<sup>17</sup> EB-2019-0077

<sup>18</sup> Exhibit I / Tab 1 / Schedule 12 / p. 1 and Hydro One Reply Submission / p. 6

<sup>19</sup> EB-2019-0165

Hydro One expressed that it does not have any concerns with OEB staff's five proposed conditions of approval and submitted that the conditions be approved as documented in OEB staff's submission.<sup>20</sup>

## Findings

The OEB approves the proposed conditions of approval which are based on the standard set of conditions that the OEB approved in prior leave to construct applications.

The approved Conditions of Approval are attached as Schedule B to this Decision and Order.

### 3.6 Extension to Capital Contribution Payment Period

A request was made under section 6.3.19 of the TSC to extend the capital contribution payment period from five years to 15 years in the pre-filed evidence, in which InnPower will make installment payments to Hydro One for the BATU Project. A letter of support from InnPower, dated May 23, 2019, stated the 15-year period reduces immediate financial stress, aligns with InnPower's forecast load growth timeframe, does not cause significant impact on Hydro One transmission's asset pool, and is in line with the current capital contribution refund period for transmission projects.<sup>21</sup>

In the Notice of Revised Proposal to Amend a Code (August 2018 Notice), the OEB states that the only justification it foresees for the extension of a capital contribution payment period past five years is "...where the consumer bill impacts are still too high and continue to present a barrier to the implementation of a regional plan."<sup>22</sup>

OEB staff submitted that InnPower has not demonstrated there will be high bill impacts necessitating a capital contribution payment period extension beyond five years. OEB staff also noted that InnPower does not require an extension to the capital contribution period due to any breaches of debt covenants.

On March 30, 2020, InnPower filed a letter of comment with the OEB. InnPower states that it accepts OEB staff's recommendation for repayment of the capital contribution

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<sup>20</sup> Hydro One Reply Submission / p. 7

<sup>21</sup> Exhibit B / Tab 1 / Schedule 1 / Attachment 1 / p. 2

<sup>22</sup> Revised Proposed Amendment to the Transmission System Code and the Distribution System Code to Facilitate Regional Planning / EB-2016-0003 / August 23, 2018 / p. 16

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over a five-year period rather than the 15-year period originally requested, beginning the year the BATU Project is in-service.

## Findings

Hydro One had originally requested an extended period of 15 years for capital contribution installments based on a request from InnPower. In the letter of March 30, 2020, InnPower agreed with OEB staff that a capital contribution installment period of five years would not cause InnPower to breach any of its debt covenants, nor would it lead to significant bill impacts for InnPower's customers. InnPower's current proposal is for a repayment of the capital contribution over a five-year period starting in the year the asset goes into service.

Although the five-year term for capital contribution does not require OEB approval in accordance with section 6.3.19 of the TSC, the OEB makes note that the OEB accepts the five-year capital contribution installment period in light of consideration of a 15 year term in the original application.

## 3.7 Regulatory Treatment of Capital Contribution

Hydro One proposes a loan methodology (Loan Methodology) to record costs associated with the BATU Project. Hydro One submitted that if it uses the standard capital contribution methodology, the Net Book Value Reduction Methodology, transmission ratepayers will be impacted by negative tax consequences.<sup>23</sup> As such, Hydro One submits the Loan Methodology will save ratepayers over \$2 million during the capital contribution period as well as keep Hydro One whole.

The Loan Methodology will record the net cost (excluding the full capital contribution) of the BATU Project in Hydro One's rate base once in-service, while InnPower will record its capital contribution payments in its rate base as it is paid. The deferral of the capital contribution payment from InnPower will be treated as a loan – a position OEB staff agreed with in its submission. Hydro One also seeks approval to establish a generic regulatory account, the Capital Contribution Recovery Differential Account, of which there will be two sub-accounts:

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<sup>23</sup> Reducing the net book value of the asset as payments are received.



1. *Distributor Contribution Sub-account*: Will record the unpaid balance of the capital contribution and be drawn down as the distributor pays its capital contribution.
2. *Capital Contribution Recovery Differential Sub-account*: Will record the difference between the interest income at the CWIP rate that Hydro One is to receive from the distributor per the TSC and the OEB-approved WACC for return on rate base.

Hydro One states that the proposal will allow Hydro One to earn a return on rate base on any outstanding balance in capital contribution for the in-serviced asset and allow the distributor to earn a return on rate base for any installment payments made on its capital contribution owing. Hydro One submitted this proposal is in alignment with the August 2018 Notice.<sup>24</sup>

OEB staff disagreed with elements of Hydro One's proposed methodology and submitted that the regulatory treatment of the capital contribution should be the same as if InnPower borrowed the required funds externally. As such, OEB staff proposed the following treatment:

1. InnPower should include the full capital contribution in its rate base as an intangible asset when the BATU Project goes into service since it will be considered as used and useful to InnPower. In addition, InnPower should record a corresponding payable to Hydro One.
2. Hydro One should include the full capital contribution as an offset in its rate base when the BATU Project goes into service, with a corresponding receivable from InnPower.

Hydro One, through its reply submission, disagreed with OEB staff's proposed treatment of the transaction. Hydro One submitted that allowing InnPower to earn WACC on the unpaid capital contribution, and having Hydro One receive interest payments at the CWIP rate will cause Hydro One's shareholders to take on additional financing risk at a pre-determined, non-negotiated rate. In addition, Hydro One stated that OEB staff's submission would result in Hydro One loaning at least 80% of the capital contribution to a distributor, with the distributor including 100% of its capital

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<sup>24</sup> Hydro One Reply Submission / p. 8

contribution as rate base, although ratemaking principles allow a debt-to-equity ratio of only 60:40.<sup>25</sup>

## Findings

### *Hydro One rate base implication of the installment approach to capital contributions*

Both Hydro One and OEB staff agreed that the full amount of the capital contribution should be deducted from the cost of the project and not included in Hydro One's rate base when the asset is placed in-service. Hydro One has requested that the capital contribution be recorded in a regulatory deferral sub-account to be drawn down as InnPower makes payments.

The OEB agrees with this treatment and is establishing the deferral sub-account requested by Hydro One.

### *InnPower rate base implication of the installment approach to capital contributions*

OEB staff submitted that InnPower should include the full capital contribution in its rate base as an intangible asset when the asset goes into service as it is considered used and useful to InnPower. This approach would have InnPower earning its WACC on an asset that it had not paid for. The alternative approach is that as InnPower makes the capital contributions, the rate base is increased by the amount paid.

Under OEB staff's proposal, the distributor would be able to earn a full return on rate base (at WACC) on an unpaid capital contribution. This would allow a distributor to earn its WACC on an asset and pay Hydro One only a lower CWIP rate on the unpaid balance, at no risk to the distributor's shareholders, while imposing costs or risks with no return to the transmitter. This could encourage distributors to defer capital contribution payments. If Hydro One had only lowered its rate base by the amount of capital contribution that it had received, Hydro One would have earned the WACC on the unpaid capital contribution. Hydro One has proposed a deferral sub-account which would track the difference between the CWIP paid by InnPower and the WACC that it would have received had it not proposed to exclude the capital contribution from rate base and include it in the proposed sub-account.

Hydro One's proposal would result in: (1) Hydro One earning a return on rate base on any outstanding balance in capital contribution for the in-serviced asset; and (2) the

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<sup>25</sup> Hydro One Reply Submission / p. 11

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distributor customer earning a return on rate base for any installment payments made on its capital contribution owing. This is in alignment with the August 2018 Notice.

The OEB finds that it is appropriate that InnPower only record in its rate base the amounts that it has paid. The OEB agrees that to keep Hydro One whole, a deferral sub-account tracking the difference between CWIP and WACC on the unpaid capital contribution should be established.

### **3.8 Proposed Capital Contribution Recovery Differential Sub-account and Capital Contribution Sub-account**

During the proceeding, Hydro One argued that it will incur a revenue shortfall from any deferral of capital contribution payments if the proposed account, and two sub-accounts, are not established to capture the difference between the interest income Hydro One will receive at the CWIP rate per the TSC and its approved WACC on the unpaid capital contribution. As such, Hydro One submitted it should be able to receive the WACC on the unpaid capital contribution in order to be kept whole.

With regard to the OEB's causation, prudence and materiality eligibility criteria for establishing a new account, Hydro One submitted that it has met the criteria. For causation, Hydro One stated that costs to be captured in the proposed account fall outside the base upon which Hydro One's rates have been derived. For prudence, Hydro One noted the 15-year extension request over which InnPower will make capital contribution payments for the BATU Project. Regarding materiality over the 2020-2021 period, Hydro One forecasted \$250 million of capital contributions from distributors and expects the annual amounts it will record in this account will exceed its materiality threshold.<sup>26</sup>

For the causation criteria to establish a new account, OEB staff agreed that the costs to be captured in the proposed account fall outside the base upon which Hydro One's rates have been derived. However, OEB staff highlighted that the proposed account will be disposed to Hydro One ratepayers and that this does not align with the beneficiary pays principle. In its reply submission, Hydro One stated that it is not opposed to an

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<sup>26</sup> Hydro One Argument-in-Chief / pp. 5-6

alternative recovery of any balance in the regulatory account following the beneficiary pays principle.<sup>27</sup>

OEB staff submitted that it was unclear whether the amount potentially recorded in the Capital Contribution Recovery Differential Account will exceed Hydro One's \$3 million materiality threshold. As such, OEB staff questioned whether the materiality criteria would be met in order to establish a new account.

OEB staff submitted it takes no issue with the use of the Loan Methodology if the account is approved.

## Findings

Hydro One requested the establishment of a generic regulatory deferral account to record two project-related elements: (1) in-service additions subject to a capital contribution that will be paid in installments; and (2) the interest revenue difference between the allowed interest charges chargeable to connecting distribution customers and the WACC.

The OEB has determined that the requested deferral account with two sub-accounts are appropriate for the BATU Project. For a new generic deferral account, the utility must satisfy the prudence, causation and materiality threshold criteria for the OEB to approve its establishment. The OEB finds that there is insufficient evidence at this time to determine if a generic account is required. The OEB will make the determination of the need for the requested deferral account on a case-by-case basis.

### 3.9 Request to Exclude Revenue from Deferred Capital Contributions in Other Revenue Variance Account

Through a response to an undertaking and in its Argument-in-Chief, Hydro One requested an exemption to exclude the interest income earned on deferred capital contributions from the calculation of the amount recorded in Hydro One Transmission's External Station Maintenance, E&CS Revenue and Other Revenue Variance Account.<sup>28</sup>

The External Station Maintenance, E&CS Revenue and Other Revenue Variance Account will true-up actual Other Income to the annual OEB-approved Other Income

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<sup>27</sup> Hydro One Reply Submission / p. 15

<sup>28</sup> Hydro One Undertaking JT1.10 and Hydro One Argument-in-Chief / pp. 6-7

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amount and return the difference to ratepayers. Hydro One submitted that recording interest income earned on the unpaid capital contribution in this account will be contrary to the OEB's objective of keeping the transmitter whole and permitting the transmitter to recover those costs of deferring the capital contribution from distributors.<sup>29</sup>

OEB staff submitted it agrees with Hydro One's proposal to exclude the interest income earned on unpaid capital contributions from the External Station Maintenance, E&CS Revenue and Other Revenue Variance Account. OEB staff noted that this is a new stream of revenues not considered in the 2020-2022 transmission rate application filed by Hydro One.<sup>30</sup>

### **Findings**

The OEB notes that OEB staff agreed with Hydro One's proposal to exclude interest income earned on unpaid capital contributions from the External Station Maintenance, E&CS Revenue and Other Revenue Variance Account.

The OEB approves Hydro One's request to exclude interest income earned on unpaid capital contributions from the External Station Maintenance, E&CS Revenue and Other Revenue Variance Account.

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<sup>29</sup> Hydro One Argument-in-Chief / p. 7

<sup>30</sup> EB-2019-0082

## 4 ORDER

### THE ONTARIO ENERGY BOARD ORDERS THAT:

1. Hydro One Networks Inc. is granted leave, pursuant to section 92 of the OEB Act, to construct the BATU Project as described in the application.
2. Leave to construct is subject to Hydro One Networks Inc. complying with the Conditions of Approval set forth in Schedule B.
3. The OEB approves the proposed forms of agreements that Hydro One Networks Inc. has offered or will offer to each owner of land affected by the BATU Project.
4. Hydro One Networks Inc. shall exclude interest income earned on unpaid capital contributions in the External Station Maintenance, E&CS Revenue and Other Revenue Variance Account.
5. Hydro One Networks Inc. shall file a draft accounting order for the Contribution Recovery Differential Account with the OEB no later than **May 7, 2020**.
6. OEB staff shall file any comments on the draft accounting order with the OEB, and forward to Hydro One Networks Inc. no later than **May 21, 2020**.
7. Hydro One Networks Inc. shall file with the OEB any comments in response to OEB staff comments on the draft accounting order no later than **June 4, 2020**.
8. Hydro One Networks Inc. shall pay the OEB's costs of, and incidental to, this proceeding upon receipt of the OEB's invoice.

All materials filed with the OEB must quote the file number, **EB-2018-0117**, be made in a searchable/unrestricted PDF format and sent electronically through the OEB's web portal at <https://pes.ontarioenergyboard.ca/eservice>. Filings must clearly state the sender's name, postal address and telephone number, fax number and email address. Parties must use the document naming conventions and document submission standards outlined in the RESS Document Guideline found at <https://www.oeb.ca/industry>. If the web portal is not available parties may email their documents to [boardsec@oeb.ca](mailto:boardsec@oeb.ca).

NOTE: The OEB is temporarily waiving the paper copy filing requirement until further notice. All communications should be directed to the attention of the Board Secretary and be received no later than 4:45 p.m. on the required date.

With respect to distribution lists for all electronic correspondence and materials related to this proceeding, parties must include the Case Manager, David Martinello, at [David.Martinello@oeb.ca](mailto:David.Martinello@oeb.ca) and OEB Counsel, James Sidlofsky at [James.Sidlofsky@oeb.ca](mailto:James.Sidlofsky@oeb.ca).

**DATED** at Toronto April 23, 2020

**ONTARIO ENERGY BOARD**


*Original Signed By*








Christine E. Long  
Registrar and Board Secretary

**SCHEDULE A**  
**DECISION AND ORDER**  
**HYDRO ONE NETWORKS INC.**  
**EB-2018-0117**  
**APRIL 23, 2020**

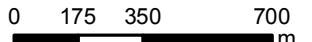






  
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|--|--|--|
|  Transformer Stations (TS)        |  Highways |  Municipal Boundary |
|  Transmission Line to be Upgraded |  Roads    |  |
|  Transmission Line to be Removed  |  Railway  |  |

**Barrie Area Transmission Upgrade:  
Project Area Map**

1:20,500
 
 0 175 350 700 m
 

**SCHEDULE B**  
**DECISION AND ORDER**  
**HYDRO ONE NETWORKS INC.**  
**EB-2018-0117**  
**APRIL 23, 2020**

**SCHEDULE B – CONDITIONS OF APPROVAL**  
**APPLICATION UNDER SECTION 92 OF THE OEB ACT**

**HYDRO ONE NETWORKS INC.**

**EB-2018-0117**

1. Hydro One shall fulfill any requirements of the SIA and the CIA, and shall obtain all necessary approvals, permits, licences, certificates, agreements and rights required to construct, operate and maintain the project.
2. Unless otherwise ordered by the OEB, authorization for leave to construct shall terminate 12 months from the date of the Decision and Order, unless construction has commenced prior to that date.
3. Hydro One shall advise the OEB of any proposed material change in the project, including but not limited to changes in: the proposed route, construction schedule, necessary environmental assessment approvals, and all other approvals, permits, licences, certificates and rights required to construct the project.
4. Hydro One shall submit to the OEB written confirmation of the completion of the project construction. This written confirmation shall be provided within one month of the completion of construction.
5. Hydro One shall designate one of their employees as project manager who will be the point of contact for these conditions, and shall provide the employee's name and contact information to the OEB and to all affected landowners, and shall clearly post the project manager's contact information in a prominent place at the construction site.