

**Hydro One Networks Inc.**  
7<sup>th</sup> Floor, South Tower  
483 Bay Street  
Toronto, Ontario M5G 2P5  
www.HydroOne.com

Tel: (416) 345-5700  
Fax: (416) 345-5870  
Cell: (416) 258-9383  
Susan.E.Frank@HydroOne.com

**Susan Frank**  
Vice President and Chief Regulatory Officer  
Regulatory Affairs

BY COURIER

October 3, 2014

Ms. Kirsten Walli  
Secretary  
Ontario Energy Board  
Suite 2700, 2300 Yonge Street  
P.O. Box 2319  
Toronto, ON  
M4P 1R4

Dear Ms. Walli,

**Hydro One Networks Inc. Request for an Accounting Order to Establish a Deferral Account for Preliminary Development work relating to the North West Bulk Transmission Line Project.**

Hydro One Networks Inc. (“**Hydro One**”) is applying to the Ontario Energy Board (“**the Board**”) for an Accounting Order authorizing Hydro One to establish a new deferral account, “North West Bulk Transmission Line Deferral Account (“**NWBTD**”)”, for the purpose of recording expenses relating to the North West Bulk Transmission Line Project (“**NWBTL Project**”). Hydro One will be undertaking preliminary design/engineering, cost estimation, public engagement/consultation, routing and siting, and Environmental Assessment preparation work associated with this project before the costs qualify to be recorded in Construction Work In Progress (“**CWIP**”). These OM&A costs are not included in Hydro One Transmission’s current 2014 rates (EB-2012-0031), nor were they included in the 2015-2016 proposed transmission rates revenue requirement (EB-2014-

0140), and as such are outside the base upon which rates were derived. The intention is that these costs, incurred by Hydro One to facilitate the NWBTL Project, would be recovered through the Ontario Uniform Transmission Rates.

The effective date of the deferral account would be October 1, 2014.

## **1.0 BACKGROUND**

The NWBTL Project is a priority project identified in the 2013 Long-Term Energy Plan (LTEP). The purpose of this project is to augment the capacity and maintain the reliability of electricity supply to the area of northwestern Ontario located west of Thunder Bay to support forecast electricity demand growth. In December 2013, Hydro One received a directive from the Ministry of Energy (see Attachment A) to begin the development phase of the project and subsequent to that letter, the OEB included this request as a condition to Hydro One Transmission's license in January 2014 (EB-2013-0437), stating:

*“The Licensee shall develop and seek approvals for the expansion or reinforcement of a portion or portions of the Licensee’s electricity transmission network in the area west of Thunder Bay (the “Northwest Bulk Transmission Line Project”). The scope and timing of the Northwest Bulk Transmission Line Project shall be in accordance with the recommendations of the Ontario Power Authority.”*

Consistent with this direction, the OPA issued a letter to Hydro One on October 1, 2014 (see Attachment B) identifying two areas of adequacy concerns with the existing West of Thunder Bay transmission system, and advised that “due to the long lead time required for new transmission line projects, it is typical to initiate development work in order to better scope the transmission option, and to shorten the subsequent lead time required if the project is selected.” The letter also indicated that the required in-service date for the NWBTL Project could be as early as 2020.

For this project, the work direction and determination of the project's scope and timing were provided to Hydro One after its Business Planning process was completed. Therefore, the plan that was used to construct the proposed 2015-2016 Transmission rates revenue requirement application, did not include an allowance for these forecast costs in either test years.

Hydro One proposes to capture the following costs described below in the deferral account.

## **2.0 DESCRIPTION OF THE COSTS TO BE INCLUDED IN THE ACCOUNT**

### **PRELIMINARY ENGINEERING AND PLANNING WORK PRIOR TO SELECTION OF A PREFERRED ALTERNATIVE**

This account is requested to record preliminary engineering and planning work associated with the NWBTL Project. The type of costs that could expect to be incurred include activities such as; preliminary design/engineering, cost estimation, public engagement/consultation, routing and siting, Environmental Assessment preparation and real estate assessment costs. Extensive and lengthy consultation with groups such as, but not limited to, First Nations and Métis, private and commercial landowners and Infrastructure Ontario will also be undertaken. Environmental issues (e.g. wildlife, flora and fauna) will be complex given the location and Greenfield nature of the proposed lines. The implication of these various issues is that the completion of this phase of the project, with these types of characteristics and challenges, can be considered high risk, lengthy and consequently expose Hydro One to an elevated possibility of material expenditures. Projects such as the NWBTL will see Hydro One facing new challenges such as working alongside Infrastructure Ontario. In addition, as stated in the OPA's letter, the OPA is still assessing both transmission and generation options for augmenting the supply capability in the West of Thunder Bay area and are still addressing adequacy concerns, yet they would like Hydro One to initiate development work. This adds further to the risk of recovery of these preliminary development costs.

Hydro One, as stated earlier, is unable to estimate the costs at this time, but expects they will be material for the reasons cited above.

This transmission line preliminary engineering and planning work would need to commence prior to the designation of a preferred alternative to meet the possible required 2020 in-service date as indicated by the OPA. Once the preferred alternative is selected, this will be the trigger to enable future costs of the project to be capitalised.

### **3.0 ACCOUNTING AND CONTROL PROCESS**

The accounts requested above will be managed in the same manner as existing Hydro One Transmission variance and deferral accounts. They will be updated monthly and interest applied consistent with the Board-approved rate. Balances will be reported to the Board as part of the quarterly reporting process. The outstanding balances, whether in a debit or credit position, will be submitted for approval to the Board as part of a future Transmission rate filing.

Draft accounting entries for all transactions related to the NWBTDA are provided in Attachment 3.

Sincerely,

ORIGINAL SIGNED BY SUSAN FRANK

Susan Frank

**ATTACHMENT A**  
**LETTER FROM MINISTER OF ENERGY**  
**RE: NORTH WEST BULK TRANSMISSION LINE PROJECT**

**Ministry of Energy**

Office of the Deputy Minister

Hearst Block, 4<sup>th</sup> Floor  
900 Bay Street  
Toronto, ON M7A 2E1  
Tel: 416-327-6758  
Fax: 416-327-6755

**Ministère de l'Énergie**

Bureau du sous-ministre

Édifice Hearst, 4<sup>e</sup> étage  
900, rue Bay  
Toronto, ON M7A 2E1  
Tél: 416-327-6758  
Téléc.: 416-327-6755



December 11, 2013

*Carmin*

DEC 11 2013

Mr. Carmine Marcello  
President & CEO  
Hydro One Inc.  
483 Bay Street  
North Tower  
15th Floor  
Toronto, Ontario  
M5G 2P5

JAN 07 2014

Dear Carmine:

As you are aware, the new Northwest Bulk Transmission Line project (the "Project") has been identified as a priority transmission project for Ontario's transmission system in the Ministry's recently issued Long Term Energy Plan (2013). In furtherance of the project, the Ministry has now received the necessary approvals required in order to assign the development work for the Project, which includes engineering work and preparation of regulatory approvals, to Hydro One.

In terms of timing, the transmission line would not be built until the conclusion of the development work and the receipt of all required regulatory approvals.

However, a key initial step in the line's development would be the definition of the scope and timing for construction of the line, to be provided by the Ontario Power Authority in the course of its ongoing planning work. Given your corporation's important role in developing transmission assets for Ontario, I am confident that Hydro One has the experience and resources sufficient to develop the Project in a timely manner and to bring it into service in accordance with expected need dates.

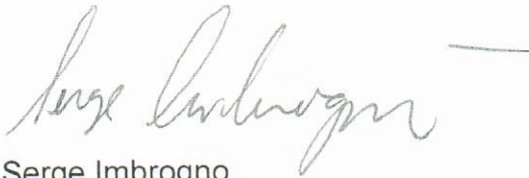
I am also in the process of requesting Infrastructure Ontario (IO) to provide advice and services to Hydro One, the project sponsor, as needed to support the development phase of the Project. Given IO's experience and expertise with financing and procurement for public infrastructure projects, Hydro One should continue working with IO so that the Project can be developed cost effectively. It is desired that IO provide advice regarding a competitive procurement framework for the Project. IO's scope of services would, for example, include

strategic and financial advice regarding the procurement, evaluation and contracting processes, project management or other areas of project development, construction or financing.

As a next step, and assuming all necessary approvals and authorities are in place, it is expected that Hydro One provide an initial report back to the Ministry of Energy on the progress of its discussions with IO within 60 days of IO having received the approvals referred to above. It is also expected that Hydro One be prepared to provide the Ministry with subsequent progress reports once discussions with IO have sufficiently progressed, which would be expected to include an assessment of the costs and anticipated benefits of this process.

I look forward to hearing the results of your progress.

Sincerely,

A handwritten signature in dark ink, appearing to read "Serge Imbrogno", followed by a horizontal line.

Serge Imbrogno  
Deputy Minister

**ATTACHMENT B**

**LETTER FROM OPA**

**RE: NORTH WEST BULK TRANSMISSION LINE PROJECT**



October 1, 2014

Mr. Mike Penstone  
Vice-President, Planning  
Hydro One Inc.  
483 Bay Street  
Toronto, Ontario M5G 2P5

### Scope and Timing for the Northwest Bulk Transmission Line Project

Dear Mike,

The Northwest Bulk Transmission Line Project is a priority project identified in the 2013 Long-Term Energy Plan (LTEP). The purpose of this project is to augment the capacity and maintain the reliability of electricity supply to the area of northwestern Ontario (the Northwest) located west of Thunder Bay to support forecast electricity demand growth.

In designating this project as a priority project, the 2013 LTEP also instructed that Hydro One “begin planning for a new Northwest Bulk Transmission line, west of Thunder Bay, with the project scope to be recommended by the Ontario Power Authority (OPA).” This letter provides the project scope.

### The supply today

The “West of Thunder Bay” area, for the purposes of this project, is shown in Figure 1. The area is bounded to the south and west by the US and Manitoba borders, and extends north to include Kenora, Dryden and Sioux Lookout, and east as far as (but not including) the City of Thunder Bay. The transmission system serving this area comprises the 230 kV and 115 kV circuits and stations connecting the Thunder Bay area and stations located at or near the major centres of Atikokan, Dryden, Fort Frances and Kenora, as shown in Figure 1. Note that the electrical system located north of Dryden is not included in this system definition; however as it is supplied from the West of Thunder Bay system, its net requirement (i.e. demand net of local resources in the area north of Dryden) is included for planning purposes as a power transfer out of the West of Thunder Bay transmission system at the Dryden station. The West of Thunder

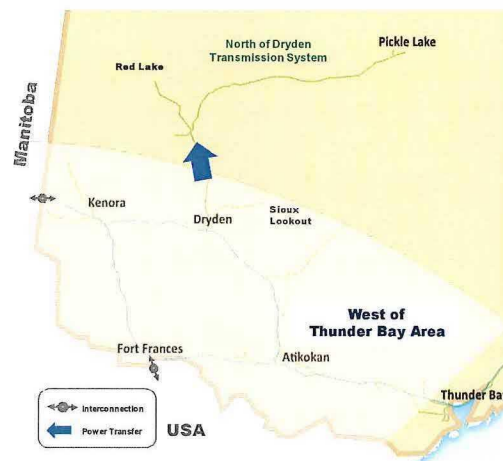


Figure 1: West of Thunder Bay Area

Bay transmission system is also interconnected with Manitoba at Kenora and Minnesota at Fort Frances.

The West of Thunder Bay area is generally self sufficient today. At present, peak electricity demand in the West of Thunder Bay area totals 210 MW in the winter and 145 MW in the summer. The West of Thunder Bay system also currently transfers up to 80 MW to the area north of Dryden (as described above). Local generation in the West of Thunder Bay area provides about 270 MW of dependable peak capacity – about 70 MW from run-of-river hydroelectric plants and 200 MW from the biomass-fueled unit at Atikokan GS. An additional 150 MW can be transferred to the West of Thunder Bay area through the transmission connection to Thunder Bay. The interconnections with Manitoba and Minnesota handle transfers scheduled on an economic basis and are not relied upon for supply adequacy at this time.

#### Potential Need for Increased Supply Capability

Both the West of Thunder Bay and North of Dryden areas have potential for economic development, in particular in the mining sector. The OPA's current demand forecast for the Northwest identifies a scenario of 160 MW of incremental load growth in the West of Thunder Bay area and about 75 MW in the North of Dryden area by 2025. Demand growth in the Northwest is highly dependent on mining sector related developments, and therefore carries uncertainty associated with timing, location and size of these developments. It is possible that demand could remain at today's levels, or could grow up to 30% higher than the current forecast. Due to the nature of the loads in the Northwest, demand growth can develop quickly and in large blocks, and planning for the area must take this possibility into account.

In consideration of the potential for significant but uncertain growth in the West of Thunder Bay and North of Dryden areas, the OPA updated its assessment of the capacity remaining on the existing West of Thunder Bay transmission system to serve demand growth in these areas. This assessment was conducted based on the latest demand and resource information, and is consistent with the IESO's ORTAC planning criteria.

The OPA's review identified, for planning purposes, two areas of adequacy concerns with the existing West of Thunder Bay transmission system. They are:

- There is 50-100 MW of additional capacity remaining that can reliably supply new loads in the North of Dryden area. Based on the current demand forecast, this capacity would be exceeded near the end of the decade.
- The power transfer capability from the Thunder Bay area (i.e. the two 230 kV transmission circuits from the Lakehead station to the MacKenzie station) is adequate today, assuming the generation at Atikokan is available. Currently, there is approximately 150 MW of margin remaining to serve new loads in the West of Thunder Bay and North of Dryden areas. However, if demand growth in the West of Thunder Bay and North of Dryden areas is in the range of the current forecast, the transfer requirement on this path will exceed these circuits' capability. If the Atikokan generation is not available, either



because of biomass fuel limitations or contract termination (in 2024), the shortfall will be accentuated.

### Options for Augmenting the Supply Capability

Both transmission and generation options are viable options for augmenting the supply capability in the West of Thunder Bay area and addressing the adequacy concerns cited above. Due to the long lead time required for new transmission line projects, it is typical to initiate development work in order to better scope the transmission option, and to shorten the subsequent lead time required if the project is selected.

### Scope and Timing

The Northwest Bulk Transmission Line Project, in conjunction with the existing transmission system, must be capable of increasing the total westbound transfer from the Thunder Bay area from about 150 MW to 550 MW. In addition, the total transfer capability to the Dryden transformer station (TS) would need to be increased from about 170 MW to 300 MW, as shown in Figure 2.

If demand grows as in the current forecast, the required in-service date for the Northwest Bulk Transmission Line Project could be as early as 2020.

The OPA has examined a number of configurations for the Northwest Bulk Transmission Line Project, including the option of ‘twinning’ the existing double-circuit 230 kV line between Lakehead TS and MacKenzie TS and the single-circuit 230 kV line from MacKenzie TS to Dryden TS. Hydro One should also consider other circuit configurations and routing options as appropriate. In all cases, only single-circuit or double-circuit 230 kV lines are to be considered. As requirements for switching and reactive facilities would depend on the configuration and line options, they are not specified at this time. Finally, consideration should be given to routing the section of the new line passing through the City of Thunder Bay such that it could facilitate future reinforcements of the electricity supply to the southern part of that city.

The scope of development work is to include preliminary design/engineering, cost estimation, public engagement/consultation, routing and siting, and Environmental Assessment preparation.

The OPA will provide support to Hydro One as required, including discussion of possible routing alternatives. As well, the OPA will continue to monitor developments in the region and confirm the best course of action to address the supply needs of the West of Thunder Bay area, and will keep Hydro One apprised of this work.

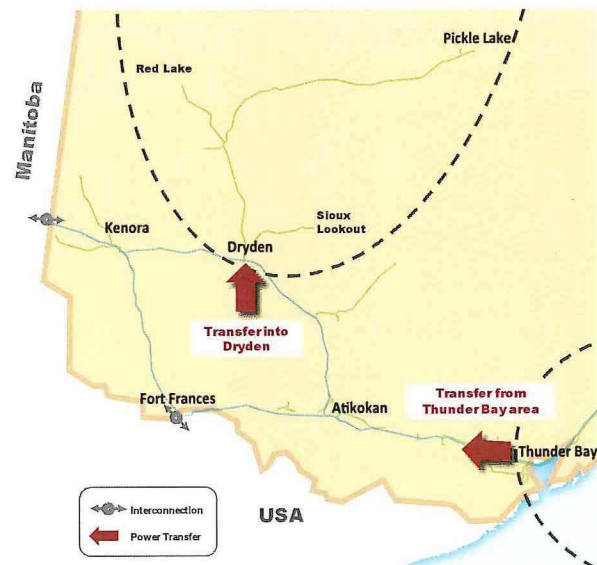


Figure 2: Power transfers from the Thunder Bay area and into the Dryden area

Sincerely,

A handwritten signature in dark ink, appearing to read 'A. Shalaby', with a stylized, cursive script.

Amir Shalaby  
Vice-President, Power System Planning  
Ontario Power Authority

cc  
Bing Young  
Ibrahim El-Nahas  
Bob Chow  
Joe Toneguzzo  
Bernice Chan  
Nicole Hopper  
Nancy Marconi  
Tabatha Bull  
Luisa Da Rocha  
Mark Wilson  
Ahmed Maria  
Ken Nakahara

**ATTACHMENT C**  
**PROPOSED ACCOUNTING ENTRIES**

**1) North West Bulk Transmission Line Deferral Account – Preliminary Engineering and Planning Costs**

**USofA #    Account Description**

Dr: 4XXX            Transmission Expense account range  
Cr: 2205            Accounts Payable

To record the preliminary recognition of Hydro One's preliminary engineering and planning costs incurred for the NWBTL Project prior to the selection of a preferred alternative.

Dr: 1508            Other Regulatory Assets – Sub account “North West Bulk Transmission Line Deferral Account – Preliminary Engineering and Planning Costs”  
Cr: 4XXX            Transmission Expense account range

Where Hydro One incurs incremental costs due to the NWBTL Project, during the phase prior to identification of a preferred alternative, this entry will record the costs for preliminary engineering and planning of the NWBTL Project in a deferral account for future disposition.

Dr: 1508            Other Regulatory Assets – Sub account “North West Bulk Transmission Line Deferral Account - Preliminary Engineering and Planning Costs”  
Cr: 6035            Other Interest Expense

To record interest improvement on the principal balance of the “North West Bulk Transmission Line Deferral Account”.