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

DECISION AND ORDER

EB-2023-0108

HYDRO ONE NETWORKS INC.

REQUEST FOR CODE EXEMPTIONS RELATED TO THE FUNDING OF CONNECTING THE ONTARIO POWER GENERATION (OPG) SMALL MODULAR REACTOR (SMR)

ELECTRICITY TRANSMISSION LICENCE: ET-2003-0035

BY DELEGATION, BEFORE: **Brian Hewson**
Vice President
Consumer Protection and Industry Performance

Date xx, 2023

INTRODUCTION

On March 15, 2023, Hydro One Networks Inc. (Hydro One), a licensed electricity transmitter (ET-2003-0035), applied under subsection 70.1(3) of the *Ontario Energy Board Act, 1998* (Act) for approval of exemptions from obligations under sections 6.3.3 and 6.3.4 of the *Transmission System Code* (TSC) (the Application).[1] Those two sections require generators, such as Ontario Power Generation (OPG), to pay the full cost of their own new or modified connection to the transmission system. The effect of the requested exemptions would be the transmission line that is to be constructed to connect OPG's Small Modular Reactor (SMR Connection Project) would be owned by Hydro One and fully funded through the uniform transmission rates (UTR); specifically, through Network charges that are paid by all electricity consumers in Ontario.[2]

This Decision and Order is being issued by the delegated authority, without a hearing, under section 6 of the Act. For the reasons set out below, the OEB has decided not to grant the TSC exemptions requested by Hydro One.

THE APPLICATION

In its Application, Hydro One explained that its request for TSC exemptions to allow for the SMR Connection Project to be fully funded by the UTR Network pool is primarily based on the following:

- Both Hydro One and OPG are rate regulated by the OEB, and the approved cost of the project would be borne by all ratepayers in Ontario whether the costs form part of Hydro One's rate base (and funded through the OEB-approved Network charges) or OPG's rate base (and funded through its OEB-approved payment amounts);

- There would be, according to Hydro One, a "financial benefit" to ratepayers over time if the costs are recovered through the Network pool revenue requirement;

[1] Section 5.1 of Hydro One's transmission licence requires that the Licensee comply with the TSC approved by the OEB, except where the Licensee has been specifically exempted from such compliance by the OEB.
[2] Each year, the OEB issues a decision that sets out the UTRs that are charged by the Independent Electricity System Operator (IESO). There are three separate pools – network, line connection, transformation connection – and a different rate is set for each pool. The OEB approves revenue requirements for each transmitter in a separate proceeding and aggregates them to calculate the UTRs. In the Application, Hydro One has requested including the SMR Connection Project in its revenue requirement.

- Asset classification would not impact reliability, nor quality of transmission service;

- The Project will be built within a provincially owned corridor over which Hydro One holds a statutory easement and on a right-of-way easement held by Hydro One; and

- OPG is experienced with building traditional nuclear plants and the proposed approach in the Application would permit OPG to focus its efforts on the construction of the SMR. It would also avoid intercompany project monitoring reporting and intercompany funding that would, according to Hydro One, unnecessarily increase the cost of connecting the SMR to the grid.[3]

Hydro One added that the need for regulatory certainty on the requested exemptions, at this time in the maturation process of the SMR Connection Project, is to provide clarity for project development and to provide sufficient time for Hydro One to explore possible First Nation equity partnership opportunities.

Hydro One clarified that the “financial benefit” (i.e., reduction in cost) to ratepayers referenced above would be almost $1 million on an annual basis. That estimate is primarily driven by the difference between OPG’s current approved debt-to-equity ratio of 55:45 (for its regulated business) and Hydro One’s debt-to-equity ratio of 60:40. The basis for that was the estimated annual network pool incremental revenue requirement would be $14.1 million versus OPG’s estimated incremental revenue requirement at about $15 million.

The debt-to-equity ratio of Hydro One itself was used to arrive at that estimated “financial benefit” and the project would be included in the revenue requirement of a partnership (i.e., Hydro One as a partial owner). OEB staff requested confirmation from Hydro One that all existing Hydro One partnerships involving First Nations, which currently have revenue requirements recovered through UTRs – B2M LP and Niagara Reinforcement LP (NRLP) – have the same equity thickness as Hydro One. It was confirmed by Hydro One that both NRLP and B2M LP have the same debt-to-equity ratio of 60/40, and the intent was to remain consistent in relation to all future First Nation equity partnerships.

[3] OEB staff requested clarification on the reference to “avoiding intercompany project monitoring reporting”. Hydro One explained that it referred to avoiding minor ancillary administrative costs that are typically associated with the administration of a Connection Cost Recovery Agreement (CCRA) with a customer, such as administering capital contribution payments and defining schedules.

As noted above, the specific sections of the TSC from which Hydro One is seeking exemptions were identified in the Application as section 6.3.3 and section 6.3.4. Under section 6.3.3, the transmitter must require a generator to provide its own dedicated connection facilities (and related equipment) at the generator's cost. Under section 6.3.4, the transmitter must require the generator to provide a capital contribution to cover the cost of a modification to a transmitter-owned connection facility that is required to meet the generator's needs.

Overview of SMR Connection Project and Estimated Cost

The proposed SMR Connection Project will involve constructing about 22 km of 230 kV double-circuit transmission lines from the Clarington Transformer Station (TS) to the Darlington SMR Switching Station (SS) on an existing transmission corridor.[4] The SMR Connection Project will also trigger investments at Hydro One's Clarington TS which include: (1) modifications to accommodate the connection of the new double-circuit transmission lines to the existing switchyard; (2) modifications to telecommunications facilities to provide status information; and (3) control capability to Hydro One's Integrated System Operations Center and status information to the Independent Electricity System Operator (IESO), as well as modifications and additions to protection and control, SCADA, metering, and AC/DC station service.

The Application noted that, regardless of the cost responsibility approach (i.e., generator-funded or network pool-funded), most of the length of the new double-circuit transmission lines will be built within a provincially owned corridor over which Hydro One holds a statutory easement, parallel to four existing 500 kV transmission lines that currently run between Bowmanville SS and Cherrywood TS. The remainder of the lines will be built within an easement which is also held by Hydro One. As a result, the lands required to build the project would remain unchanged whether the exemption request is approved or not.

Hydro One also clarified that the SMR Connection Project facilities that underpin this Application will be the subject of a future leave to construct (LTC) application, pursuant to section 92 of the Act. They would also be subject to an application under section 86 of the Act for OEB approval of the transfer of the assets to the new Hydro One – First Nations partnership once established.

Hydro One indicated that the $187 million cost estimate is not pertinent to the exemption sought in this Application and the only reason it was provided was to assist

[4] Those new transmission lines will be built to the 500 kV standard to meet OPG's ultimate generation capacity needs related to the SMR and will be operated at 230 kV in the interim.

with comparing the ratepayer implications associated with the two cost responsibility alternatives discussed above (i.e., to derive estimated “financial benefit” of almost $1 million).

Deferral Account Treatment

Hydro One clarified that a new deferral account was not being requested. While the station-specific facilities would be owned and operated by Hydro One, the line connection facilities identified in the Application would be owned by a future Hydro One - First Nations partnership. Hydro One therefore stated that the existing Affiliate Transmission Partnership Regulatory Account (ATP Account)[5] would be used to record and track costs for the line component of the project since the following criteria for that account would be met:

a) Hydro One has or will receive a letter from the IESO identifying transmission system needs, and/or an Order in Council or direction by the Minister of Energy (the Ministry) in respect of Hydro One or its OEB Transmission Licence for the development or construction of a transmission project; and

b) All or part of the project is expected to be owned by and included in the rate base of a new partnership between Hydro One and one or more First Nations partners, as a licensed transmitter, and will not form part of Hydro One’s rate base.

Hydro One acknowledged that it received no correspondence from the Ministry or the IESO related to the SMR Connection Project but added that “direction from the Ministry in respect of the Project is considered to have been provided via the amendments to Ontario Regulation 53/05 that prescribe the SMR facilities as regulated assets.”

Letters

On May 3, 2023, the Mississaugas of Scugog Island First Nation (MSIFN) submitted a letter to the OEB to indicate their support for Hydro One's application to take ownership of the SMR Connection Project. The MSIFN stated that “[a]pproval of this application would open the door for [MSIFN] to participate in Hydro One's equity partnership”.

[5] In a Decision and Order (EB-2021-0169), the OEB approved the ATP Account to record costs related to Hydro One partnership projects including: Waasigan Transmission Line, Chatham to Lakeshore Transmission Line, Lambton to Chatham Transmission Line, and future projects that meet the two criteria. In a subsequent Decision and Order (EB-2022-0142), the OEB amended Hydro One’s transmission licence to require it to develop and seek approvals for four new transmission line projects, which are also tracked in the ATP Account, as indicated in a Hydro One letter that was filed on July 8, 2022.

On June 9, 2023, the OEB received a [letter]() from representatives of several consumer groups that raised concerns with the Application, and with it being dealt with by delegated authority and without a hearing under section 6 of the Act. As noted previously, this matter is being dealt with by an employee of the OEB under delegated authority pursuant to section 6 of the Act. Section 6 provides that an employee of the OEB may exercise powers and duties that are delegated under this section without holding a hearing. Section 7 of the Act addresses rights of appeal from an order made by an employee of the OEB pursuant to section 6.

Findings

The Application was made under section 74 of the Act, which provides (in part) that the OEB may, on the application of any person, amend a licence if it considers the amendment to be in the public interest, having regard to the objectives of the OEB and the purposes of the *Electricity Act, 1998* (Electricity Act). The OEB is denying the exemptions from the TSC requested in the Application. The OEB finds that providing those exemptions would not be in the public interest, having regard to the objectives set out in section of 1 of the Act, for the reasons set out below.

The underlying principle associated with the OEB's cost responsibility rules in the TSC is the "beneficiary pays" principle. The primary beneficiary associated with the SMR Connection Project will be OPG since the facilities comprising the SMR Connection Project will be exclusively used by OPG to provide supply into the market for the purpose of earning revenues. Under Hydro One's proposed approach, the primary beneficiary would not pay any of the costs associated with that project. In contrast, as discussed above, under the current approach set out in the TSC – sections 6.3.3 and sections 6.3.4 – the primary beneficiary would pay all the costs associated with that connection project. This Application, if granted, would therefore represent a significant deviation from an OEB policy that has been in place since the OEB began to regulate the electricity sector.

The Application notes that OPG's SMR generation facility is a "new first of a kind technology".[6] While the OEB acknowledges that OPG's SMR generation facility itself is somewhat unique (as the first SMR OPG will construct), this proceeding is not about OPG's SMR. It is about the connection of that generation facility to the Hydro One transmission system (defined above as the SMR Connection Project), and that is not unique.

[6] Application, p.2.

The OEB finds that approval of the Application would set a concerning precedent for future connections of generation facilities. The rationale put forward by Hydro One in its Application could be provided for any new or modified transmission connection involving a new (or upgraded) generation facility that triggered a connection upgrade. If the OEB approved this exemption and proceeded to change its policy so all generators were treated the same (i.e., not pay for their connections to the grid), it would remove the incentive for a new generator to reduce connection costs (for example, by locating near transmission facilities) and thereby reduce its overall generation costs. This exemption would send the opposite signal to the generation sector, that in fact connections costs such as location are not a consideration within that context.

Other generators have paid (and will continue to pay) the costs related to their connections to the IESO-controlled grid, as required by the TSC. Generators in Ontario compete in the Ontario electricity market by providing offers to the IESO (to be dispatched). Subsidizing the SMR generation facility by recovering its related connection costs through transmission rates would provide OPG with a competitive advantage vis-à-vis other generators in the Ontario electricity market.

The OEB acknowledges that the UTRs and OPG's payment amounts are both regulated by the OEB. However, the cost recovery mechanisms associated with transmission and generation costs are much different. For example, transmission costs are recovered from all customers that are connected to the grid on the same basis – the higher of the customer's hourly coincident peak (CP) demand or 85% of non-coincident peak (NCP) demand during the month.[7] In contrast, generator costs related to supplying electricity to the market, which would include any connection assets, are recovered through a combination of the Hourly Ontario Energy Price (HOEP) and the Global Adjustment (GA). Recovery of GA costs is governed by O. Regulation 429/04 under which there are two types of consumers – Class A and Class B – that pay GA charges based on much different approaches. For Class B consumers, it is simply based on the amount of energy they consume. Class A consumers participate in the Industrial Conservation Initiative (ICI) and can lower their GA charges by reducing consumption during the top five provincial coincident peaks.

Under the status quo, a Class A consumer could avoid some or all of the costs related to the SMR Connection Project by taking steps to reduce their contribution to provincial peak demand during the high five peaks. However, under Hydro One's proposed approach, a Class A consumer could not avoid paying the costs to the same extent. The reason for that is Network charges are based on the "higher of" the customer's CP or

[7] Decision and Order, RP-1999-0044, p.44.

85% of NCP demand, and the latter essentially establishes a floor under which Network charges cannot be further reduced by a customer.[8]

The OEB is not persuaded by the suggestion that allowing Hydro One to own the transmission line – rather than OPG – will allow OPG to focus its resources on development of the SMR generation facilities. Under the current TSC rules, whereby OPG must provide its own dedicated connection facilities, the work on the line could be contracted out by OPG to another party.

While the proposal might result in a reduction in the overall cost if the SMR Connection Project was included in Hydro One's rate base and recovered through the Network charge, the OEB is not persuaded that the suggested savings warrant a change in policy with associated risks identified above. The amount noted by Hydro One is a revenue requirement differential of under $1 million per year which is immaterial when considered in the context of the UTR Network pool revenue requirement which is over $1.3 billion.[9] As such, the "financial benefit" referenced in the Application would have no effect on the Network charge because it would register at four decimal places while the OEB sets the Network charge based on two decimal places.

As the Application is being denied, the OEB does not need to comment on Hydro One's submissions regarding the ATP deferral account. Further, the OEB acknowledges the letter from the MSIFN expressing its support for the Application and Hydro One's approach to First Nations partnerships, and notes that this denial of the Application should not be construed as a comment on that support or approach.

[8] The IESO's ICI Backgrounder discusses the purpose of the ICI program as follows – "The [ICI] was designed to incentivize eligible industrial and commercial customers to reduce their demand during peak periods in order to help the province defer the need for investments in new electricity infrastructure that would otherwise be needed."
[9] 2023 Uniform Transmission Rates Update (EB-2023-0101), Decision and Rate Order, June 2023.

IT IS ORDERED THAT:

1. The application by Hydro One Networks Inc. for exemptions from sections 6.3.3 and 6.3.4 of the Transmission System Code related to the SMR Connection Project is hereby denied.

DATED at Toronto Date xx, 2023

ONTARIO ENERGY BOARD

Brian Hewson
Vice President
Consumer Protection and Industry Performance