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July 3, 2019

Filed on RESS and Sent via Courier

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

Dear Ms. Walli:

**Re: Hydro One Networks Inc. Transmission Rates Application
Board File No.: EB-2019-0082**

We are counsel to Anwaatin Inc. (**Anwaatin**). Please find enclosed Anwaatin's interrogatories to Hydro One Networks Inc. in the above-noted proceeding, filed pursuant to Procedural Order No. 1.

Sincerely,

A handwritten signature in black ink that reads "Jonathan McGillivray". The signature is fluid and cursive, with the first name being particularly prominent.

Jonathan McGillivray

- c. Linda Gibbons, Hydro One Networks Inc.
Charles Keizer and Arlen Sternberg, Torys LLP
Larry Sault, Anwaatin Inc.
Don Richardson, Shared Value Solutions Ltd.

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*,
S.O. 1998, c.15 (Sched. B), as amended (the **Act**);

AND IN THE MATTER OF an application by Hydro One
Networks Inc. (**Hydro One**) for an order or orders made
pursuant to section 78 of the Act approving rates for the
transmission of electricity (the **Application**)

EB-2019-0082

INTERROGATORIES FROM

ANWAATIN INC.

July 3, 2019

Question: Anwaatin.1

Reference: • Exhibit A, Tab 7, Schedule 2, page 5

Preamble: Following discussions with Anwaatin, Hydro One began an initiative in April 2018 to assess whether an energy storage pilot project could be developed in a remote region of the distribution system with sub-standard performance serving Anwaatin communities and tested to determine reliability improvement and whether the approach could be used as a repeatable approach in other regions of the system (the **Pilot Project**).

Anwaatin and Hydro One filed a Settlement Proposal with the Board on June 15, 2018 in EB-2017-0335 (the **Settlement Proposal**) and the Board accepted the Settlement Proposal in its Decision and Order dated August 23, 2018.

As of June 2018, Hydro One's technical assessment had focused on three distribution feeder lines that serve the Nakina and Moosonee communities (Nakina F2 and Moosonee F1 and F3). Completion of all engineering and financial viability review was targeted by September 30, 2018. Hydro One has noted that one of the key objectives of the Pilot Project is to assess scalability to meet similar reliability concerns in other communities served by Hydro One (see Exhibit I, Tab 6, Schedule Anwaatin-1, page 5 of EB-2017-0049).

As of February 2019, Hydro One reported that a Request for Proposal was completed outlining Hydro One's requirements for the Battery Energy Storage System (BESS) to supply Aroland First Nation. In response to the proposal, bids were received from several vendors and were in the process of being evaluated. In tandem with proceeding with steps toward completing the Pilot Project, Hydro One stated that it has met with the Aroland First Nations community and Anwaatin to provide updates on the status of the Pilot Project and will continue to do so as appropriate going forward (EB-2018-0130, Exhibit I, Tab 8, Schedule1, page 2).

In its Decision and Order in EB-2017-0049 dated March 7, 2019 (the **EB-2017-0049 Decision**), the Board encouraged "both Hydro One and First Nations and Métis groups to continue [a cooperative approach resulting in mutually beneficial outcomes] to achieving an understanding of the concerns and the implementation of solutions" (p. 18).

- a) Please provide an update on the status of the Pilot Project and indicate the steps Hydro One has taken to-date to implement the Pilot Project and the steps Hydro One plans to take in the future in order to complete the Pilot Project and determine whether the approach can be used to address sub-standard performance for Anwaatin communities and other outlier communities served by Hydro One.
- b) Please describe the model Hydro One proposes to use to rate-base the Pilot Project and any similar energy storage projects undertaken in the future, including any impact on the process followed by Hydro One to derive its 2019 transmission rates revenue requirement and allocate it among the three transmission rate pools.
- c) Setting aside the Pilot Project, please discuss all aspects of the Settlement Proposal that Hydro One is currently undertaking or intends to undertake during the term of the Settlement Proposal.
- d) The Settlement Proposal contemplates the use of solar generation facilities in conjunction with battery energy storage systems. Please describe Hydro One's consideration of solar generation facilities in relation to the Pilot Project and the Settlement Proposal broadly and provide all related reports and analysis.
- e) Please discuss how Hydro One has, in the context of this application, begun implementing the cooperative approach that the Board encouraged Hydro One to continue in the EB-2017-0049 Decision to achieve reliability improvements in northern and remote Indigenous communities.

Question: Anwaatin.2

- Reference:
- Exhibit A, Tab 7, Schedule 2, page 5
 - Exhibit A, Tab 7, Schedule 2, Attachment 3

Preamble: One of the actions Hydro One is taking to address the needs and preferences of Indigenous customers and communities is: [a]ging assets are being replaced, as described in Attachment 3 titled “First Nations Reliability Performance”, dated February 21, 2018.

In Exhibit I, Tab 10, Schedule 3 of EB-2016-0160, Hydro One’s last transmission rates application, Hydro One provided transmission system performance data for (1) the “Northern” part of the system and (2) the transmission system supplying certain First Nation communities (Beardmore DS #2, Long Lac TS, Moosonee DS, Nipigon DC, Red Rock DS). An update to CDPD outlier data was provided in Exhibit TCJ2.5.

- a) Please provide an update in respect of Hydro One’s transmission system performance data for (1) the “Northern” part of the system and (2) the transmission system supplying certain First Nation communities (Beardmore DS #2, Long Lac TS, Moosonee DS, Nipigon DC, Red Rock DS) by completing the following tables:

(i) Frequency of Momentary Interruptions

Year	2016	2017	2018
# of momentary interruptions			
# of DPs in Northern Region			
T-SAIFI-m*			

*T-SAIFI-m = Total number of momentary interruptions / total number of DP monitored

(ii) Frequency of Sustained Interruptions

Year	2016	2017	2018
# of sustained interruptions			
# of DPs in Northern Region			
T-SAIFI-s*			

*T-SAIFI-s = Total number of sustained interruptions / total number of DP monitored

(iii) Overall Frequency of Interruptions

Year	2016	2017	2018
# of overall interruptions			
# of DPs in Northern Region			
T-SAIFI-all*			

*T-SAIFI-all = Total number of momentary and sustained interruptions / total number of DP monitored

(iv) Duration of Sustained Interruptions

Year	2016	2017	2018
Duration of sustained interruptions (minutes)			
# of DPs in Northern Region			
T-SAIDI			

*T-SAIDI = Total duration of sustained interruptions / total number of DP monitored

(v) Delivery Point Unreliability Index

Year	2016	2017	2018
Total Unsupplied Energy (MW x minutes)			
System Peak Load (MW)			
DPI			

*DPI = Total unsupplied energy / system peak load

(vi) CDPP Outliers

Year	2016	2017	2018
Total # of DPs in Northern Region			
# of Outliers in Northern Region			

- b) Please present the data provided pursuant to part (a) in graphical form, together with the data from 2006 through 2015, in a manner similar to the graphical presentation of data in Exhibit TCJ2.5 of EB-2016-0160.

Question: Anwaatin.3

- Reference:
- Exhibit A, Tab 7, Schedule 1
 - Exhibit B, Tab 1, Schedule 1, TSP Section 1.3
 - Exhibit B, Tab 1, Schedule 1, TSP Section 1.3, Attachments 1-

Preamble: Hydro One states that its capital expenditure plan, as set out in Section 3 of the Transmission System Plan, is closely aligned with and highly responsive to the customer needs and preferences that Hydro One has identified through its customer engagement activities.

- a) Please describe all measures Hydro One has undertaken to ensure inclusion of Indigenous communities in the stakeholder session that took place on March 29, 2017.
- b) Please list which, if any, First Nation governments and First Nation organizations Hydro One invited to the stakeholder sessions listed in part (a).
- c) Please describe any and all assistance that Hydro One made available to First Nation entities to facilitate their attendance at the stakeholder session listed in part (a).

Question: Anwaatin.4

- Reference:
- Exhibit A, Tab 7, Schedule 2
 - Exhibit A, Tab 7, Schedule 2, Attachment 1
 - Exhibit A, Tab 6, Schedule 6, Attachment 1, page 9

Preamble: Hydro One's transmission business may impact Indigenous communities in several ways: (1) Hydro One transmission assets are located on reserve lands of twenty three First Nation communities and within the traditional territories of Indigenous communities; (2) Hydro One has large projects that cross or may impact Indigenous communities; (3) Hydro One enters into business partnerships with Indigenous communities.

Hydro One has ongoing efforts to engage with Indigenous communities, identify the needs and preferences of those communities as they related to Hydro One's transmission system, and take steps to address those needs and preferences. Hydro One hosted its 2nd Annual Hydro One and First Nations Engagement Session on February 21, 2018.

The Independent Electricity System Operator (**IESO**) defines distributed energy resources (**DERs**) as "electricity-producing resources or controllable loads that are directly connected to a local distribution system or connected to a host facility within the local distribution system."¹ DERs may include electric vehicles, energy storage, net-metering, solar panels, smart grid technologies, combined heat and power plants, natural gas-fuelled generators, and controllable loads (HVAC systems and electric water heaters). These resources are typically smaller in scale than the traditional generation facilities that serve most of Ontario demand.

- a) Please provide the presentation, all notes, memos, reports and related documents from Hydro One's First Nations engagement session held on February 21, 2018, including any and all reports to the Hydro One board of directors.
- b) Please provide any and all communications between Hydro One Transmission and Hydro One Distribution relating to:

¹ Independent Electricity System Operator, *Ontario's Power System*, "Distributed Energy Resources", available online at: <http://www.ieso.ca/en/Learn/Ontario-Power-System/A-Smarter-Grid/Distributed-Energy-Resources>.

- (i) the needs of Indigenous communities;
 - (ii) reliability in Indigenous communities; and
 - (iii) any other matter relating to Indigenous communities.
- c) Please describe how Hydro One consulted First Nations on increasing Hydro One capital investments in DERs to improve system reliability for First Nation customers in communities impacted by Hydro One's transmission business and what resulted from these consultation efforts.
- d) Please describe how Hydro One's transmission business is inclusive of DERs and responsive to the application of DERs in Indigenous communities.
- e) Given Hydro One's findings that some First Nation communities indicate that the electricity supply is not sufficiently reliable and are concerned about degrading Hydro One asset conditions (see, in particular, Attachment 1, page 12), please describe and provide any and all of Hydro One's plans, timing, and costs to:
 - (i) effectively address reliability in all Indigenous communities;
 - (ii) facilitate businesses in Indigenous communities; and
 - (iii) integrate DERs into areas of northern Ontario that experience higher frequency and duration of power outages to improve system reliability.
- f) Please describe how Hydro One's transmission system planning and investment planning processes consider appropriate planning criteria for the increasing scale of demand for DERs, especially for rural and First Nation customers seeking relief from reliability issues and increasing costs.
- g) Please describe how Hydro One's transmission business is accommodating the demand for DERs connected to the distribution system in terms of making its distribution network and customer services "DER-friendly", especially in areas where system reliability is a significant issue, such as northern Ontario.
- h) Please list any and all First Nation communities that are concerned about historical, present and future compensation (or the lack thereof), for Hydro One transmission assets on reserve lands and/or within traditional territories and treaty lands.
- i) Please list and describe in detail any and all measures that Hydro One has

taken with respect to DERs and business partnerships with DERs as a means of accommodating First Nation communities that are concerned about historical, present and future compensation (or the lack thereof), for Hydro One transmission assets on reserve lands and/or within traditional territories and treaty lands.

- j) Would Hydro One be amenable to a business arrangement whereby Hydro One leases Indigenous-owned DER assets, without initial capital expenditure, for the benefit of Hydro One's distribution or transmission business?

Question: Anwaatin.5

Reference: • Exhibit A, Tab 7, Schedule 2, Attachment 3

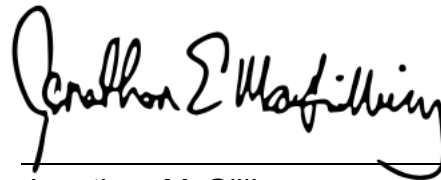
Preamble: One of the actions Hydro One is taking to address the needs and preferences of Indigenous customers and communities is: [a]ging assets are being replaced, as described in Attachment 3 titled “First Nations Reliability Performance”, dated February 21, 2018.

This attachment provides details on Hydro One’s historical reliability performance, the First Nations communities it supplies (transmission and distribution), certain aspects of distribution grid modernization, and planned work on assets serving First Nations communities.

- a) Please outline the methodology Hydro One employed in order to determine the structure and content of Attachment 3.
- b) Please discuss how Attachment 3 has been used for internal and external purposes.
- c) Please provide additional detail and specific examples of First Nations communities where Hydro One is improving transmission reliability, as set out in the four bullets on page 8 of Attachment 3.
- d) Pages 16 through 20 of Attachment 3 provide details of planned work on assets serving First Nations communities. Please update pages 16 through 20 to reflect the current status of planned work and re-file the complete corresponding spreadsheet.
- e) Please identify, in chart format, any and all planned work line-items updated pursuant to part (c) that incorporate, integrate, or otherwise involve the use of DERs.

ALL OF WHICH IS RESPECTFULLY
SUBMITTED THIS

3rd day of July, 2019

A handwritten signature in black ink, reading "Jonathan McGillivray". The signature is written in a cursive style with a large initial 'J' and a long, sweeping underline that extends to the right.

Jonathan McGillivray
DeMarco Allan LLP
Counsel for Anwaatin