

Lisa (Elisabeth) DeMarco Senior Partner 5 Hazelton Avenue, Suite 200 Toronto, ON M5R 2E1 TEL +1.647.991.1190 FAX +1.888.734.9459

lisa@demarcoallan.com

May 11, 2018

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

Dear Ms. Walli:

Re: EB-2017-0049 Hydro One Networks Inc. application for electricity distribution rates beginning January 1, 2018 until December 31, 2022

We are counsel to Anwaatin Inc. (Anwaatin) in the above-mentioned proceeding. Please find enclosed the responses from Anwaatin to the interrogatories received from Hydro One Networks Inc. (HONI).

Yours very truly,

Lisa (Elisabeth) DeMarco

Interrogatory: HONI-01

Preamble: At Exhibit A Tab 4 Schedule 2, Pages 3-4, Hydro One discusses a province-wide First Nations engagement session held in early 2017 and hosted by Hydro One's senior executives. Hydro One's evidence is that all of the 85 First Nation Chiefs from communities served by Hydro One and the Ontario First Nations Regional Organizations were invited to attend this engagement session. Reliability and Partnerships were cited as two of the top 5 concerns identified in this session.

> During the Technical Conference (2T166-169) questions were asked by counsel for Anwaatin regarding a further First Nations engagement session that was held on February 21, 2018.

Hydro One is interested in Dr. Richardson's understanding of these engagement sessions and how these sessions have informed the views expressed in his evidence.

Question: 1. Please confirm Dr. Richardson was aware that First Nation members of Anwaatin attended the referenced 2017 and 2018 First Nation engagement sessions. If so, please indicate which First Nations attended either on their own behalf or on behalf of Anwaatin.

> 2. In preparing his evidence, what steps did Dr. Richardson take to understand why specific issues concerning investments in distributed energy resources were not raised at these sessions by First Nations attended either on their own behalf or on behalf of Anwaatin? Is Dr. Richardson aware of any reasons that precluded such matters from being raised? Alternatively, if Dr. Richardson is of the view that such matters were raised, please provide all materials presented and a summary of such discussions.

Response: 1. Dr. Richardson was aware that First Nation members of Anwaatin Inc. attended the 2017 HONI engagement session and were not satisfied that HONI was taking prompt actions to address the reliability disparity and very significant negative impacts of poor reliability in their communities. Dr. Richardson was then engaged by Anwaatin to research and develop potential solutions that could be promptly and efficiently implemented to address the reliability crisis in the Anwaatin First Nation communities. After the filing of the HONI EB-2017-0049 Application, both Larry Sault, CEO of Anwaatin, representing Anwaatin First Nation members, as well as Anwaatin First Nations members attended the HONI 2018 engagement session. Mr. Sault hand-delivered and distributed the following written comments and questions to HONI representatives at the 2018 engagement session:

- *i)* Poor system reliability and disproportionate negative impact on First Nations with Hydro One
 - There is an extraordinary and very real reliability disparity that First Nations communities are experiencing and have been experiencing for a long time - the disproportionate negative impact that that reliability disparity has specifically on First Nations communities.
 - Evidence shows that 60% of distribution assets serving First Nation communities are CDPP outliers (Customer Deliver Point Performance Standard "outliners" are the worst performing parts of the transmission system)
 - Delivery point reliability for A4L transmission line communities – Lake Nipigon First Nations to Geraldton/Ginoogaming/Aroland is 20.81 times worse than Ontario average - Four times worse than other Northern Ontario communities
- ii) First Nations communities have raised concerns about the high frequency and duration of power outages, particularly in northern Ontario. Some communities have also indicated that the electricity supply is not sufficiently reliable to serve businesses on reserve and are concerned about degrading Hydro One asset conditions on reserve.
- iii) Distributed Energy Resources (DERS) North America's electric power system generation resource mix is changing from the use of larger synchronous sources to the use of a

more diverse fleet of smaller sized resources with varying generation characteristics called Distributed Energy Resources or DERS which include renewables, energy storage and biomass generation

- How is Hydro One creating First Nations investment/ownership opportunities, and other business partnership opportunities related to DERs in grid-connected communities?
- How is Hydro One working with First Nations on DERs to improve system reliability given the very poor reliability of systems serving First Nations?
- Given Hydro One's findings that some First Nation communities indicate that the electricity supply is not sufficiently reliable to serve businesses on reserve and are concerned about degrading Hydro One asset conditions on reserve, does Hydro One have plans to integrate DERs into areas of Northern Ontario that experience high frequency and duration of power outages to improve reliability? If such plans exist, please provide them.
- Has Hydro One considered approaches to DERs and business partnerships with DERs, as potential accommodation for First Nation communities concerned about compensation, or the lack thereof, for Hydro One transmission and distribution assets on reserve land and off reserve but within traditional territories and treaty lands?
- How does Hydro One's investment planning process 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?
- 2. Please see response to HONI-01(1).

Interrogatory: HONI-02

Preamble: On September 7, 2017, OEB Staff prepared and filed in this proceeding a Community Engagement Report outlining the results of several engagement sessions undertaken with Hydro One customers affected by the 2018-2022 Hydro One Distribution Rates Application

Hydro One is interested in understanding how this information was taken into account by Dr. Richardson in preparing his evidence.

Question: 1. Which OEB Community Engagement Sessions were attended by Anwaatin Inc. representatives? In your response, please refer to the specific presentations described in the Community Engagement Report and where (1) matters relating to distributed energy resources were raised as issues of concern or topics of interest; or (2) the lack of consultation Hydro One had carried out with Anwaatin Inc. or its representatives prior to filing its 2018-2022 Distribution Rates Application.

2. If no presentations were made by Anwaatin Inc. or its representatives at any of these sessions, please provide Dr. Richardson's understanding why concerns regarding the lack of Hydro One's consultation with First Nations and other communities regarding distributed energy resources were not raised at that time?

3. Please provide all correspondence made prior to the filing of this Application between Anwaatin Inc. or its representatives to Hydro One and which evidence Anwaatin Inc. specific interest in the use of distributed energy resources and the need for Hydro One to address such matters in its 2018 Distribution Rates Application.

- **Response:** 1. Please see Anwaatin's response to HONI-01.
 - 2. Please see Anwaatin's response to HONI-01.

May 11, 2018 EB-2017-0049 Anwaatin.HONI.2 Page 2 of 2

3. Please see Anwaatin's response to HONI-01 and the May 3, 2018 joint letter of HONI and Anwaatin to the Ontario Energy Board (attached as Appendix A to this response) for communications that are not subject to settlement privilege.

Appendix 'A' to Anwaatin Response to HONI IR #2 (3)

, معد بر

.......





May 3, 2018

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

Dear Ms. Walli:

Re: EB-2017-0335 Anwaatin Inc. Motion to Review and Vary Ontario Energy Board Decision in EB-2016-0160 ("Anwaatin MRV")

This letter is provided by, and on behalf of, Anwaatin Inc. (**Anwaatin**) and Hydro One Networks Inc. (**HONI**) in relation to the Anwaatin MRV. We wish to advise the Board that Anwaatin and HONI are in the process of negotiating a potential solution to the reliability disparity issues that have characterized the A4L transmission line and challenged the First Nations communities that are served by it.

We hope to provide the Board and the two intervenors on the Anwaatin MRV with further information and developments on or before May 18, 2018, and would therefore ask that the Board refrain from issuing its Decision on the Anwaatin MRV until after that date in order to allow the Parties to continue their constructive dialogue.

Sincerely,

Lisa (Elisabeth) DeMarco Senior Partner DeMarco Allan LLP

5 Hazelton Avenue, Suite 200 Toronto, ON M5R 2E1 TEL +1.647.991.1190

in Pure

Ferio Pugliese Executive Vice-President Customer Care and Corporate Affairs

Hydro One Networks Inc. 483 Bay Street South Tower – Executive 8th Floor Toronto, Ontario M5G 2P5 FAX +1.888.734.9459 lisa@demarcoallan.com

www.HydroOne.com

Interrogatory: HONI-03

Preamble: On March 1, 2018 the Ontario Energy Board convened a Technical Conference into the 2018-2022 Hydro One Distribution Rates Application. In response to follow-up questions from Anwaatin counsel regarding Exhibit I Tab 6 Schedule 1 (Response to Anwaatin Interrogatory #1), Hydro One provided greater detail regarding recent efforts undertaken to explore opportunities to partner with interested First Nations and to leverage federal and provincial government funding to support green energy and greenhouse gas reducing energy projects.

At Transcript Volume 2 pages 152-162, Hydro One's witnesses indicated that initiatives underway with distributed energy resources involving a First Nation situated on Christian Island had only just commenced in 2017 following the filing of this Application. Additionally, that discussions with Anwaatin First Nation members affected by circuit A4L had commenced at the beginning of 2018 (i.e. prior to the interrogatory process in this proceeding) and were ongoing.

Hydro One is interested in Dr. Richardson's awareness of this information when preparing his evidence and how this evidence is intended to (a) influence the conduct of ongoing commercial discussions between Hydro One and Anwaatin regarding distributed energy resources and (b) the timing of Hydro One's current capital plan that includes replacement of the A4L circuit during the rate period.

Question: 1. When did Dr. Richardson become aware of and review the Technical Conference evidence?

2. What consideration was given by Dr. Richardson to the Technical Conference evidence in formulating his conclusions/assertions made

regarding inadequate consultation by Hydro One with respect to distributed energy resources?

3. Is it Dr. Richardson's view that Hydro One's proposed replacement of the A4L circuit should be deferred until commercial arrangements regarding a possible joint venture arrangement between Hydro One, Anwaatin Inc., and potentially others is concluded?

4. Acknowledging Dr. Richardson's lack of expertise, does Dr. Richardson believe the Ontario Energy Board should direct Hydro One to rely on a distributed energy resource solution in place of A4L replacement without first evaluating the cost and reliability differences between wire and non-wire solutions? Should activities regarding replacement of the A4L circuit be deferred until such cost and reliability comparisons are completed ad commercial joint ventures, if any, reached?

5. Is it Dr. Richardson's belief that such a point of cost and reliability comparison between replacing the A4L circuit vs relying on a distributed energy resource solution has been reached? If so, please provide all analysis that Dr. Richardson has conducted demonstrating that a distributed energy resource solution provides for greater reliability and lower cost as compared to Hydro One's current plan to replace the A4L circuit.

Response: 1. Dr. Richardson was engaged and aware of the Technical Conference evidence provided by Hydro One, and particularly the portions of the Technical Conference outlined in Transcript Volume 2 from page 155, line 22 to page 157 line 23 (reproduced below) wherein Hydro One witnesses indicate that they had yet to engage with the First Nations communities in relation to the two projects that Hydro One was contemplating without specific outcome, commitment, or timeline.

MR. FERGUSON: Thank you. Can you tell us which First Nations you're exploring these opportunities with? And if you can't do it off the top of your head could you undertake to provide the First Nations? MR. JESUS: You mentioned Christian Island. MS. GARZOUZI: Yeah, Christian Island is the one example— MR. FERGUSON: Are there other –

May 11, 2018 EB-2017-0049 Anwaatin.HONI.3 Page 3 of 4

MS. GARZOUZI: -- that I'm familiar with. MR. FERGUSON: Are there other examples? MS. GARZOUZI: I don't believe so. MR. FERGUSON: Believe so? MS. GARZOUZI: Just a moment --MR. NETTLETON: Ms. Garzouzi, would you mind just speaking closer to the mic? MS. GARZOUZI: Sure. MR. JESUS: I'll take that. So the other one that we are exploring is the A4L transmission circuit to the Anwaatin communities that supply to the Moosonee DS, so we are looking at that opportunity as well. MR. FERGUSON: And can you expand on that, and how are you looking at that --MR. JESUS: Well, from a --MR. FERGUSON: -- opportunity? MR. JESUS: -- from a -- from a transmission point of view we're looking at the reliability of supply. From a distribution point of view we're looking at the reliability of supply and seeing how it compares with the rest of the feeders in the province, as part of the worst performing feeders, and seeing what we can actually do in that community. MR. FERGUSON: That's great. And how far along with that work are you? How much -- what have you done and what's the timeline? MR. JESUS: So we're just starting to explore that particular project -MR. FERGUSON: Mm-hmm. MR. JESUS: -- and we expect it to get further along by the course of the year. MR. FERGUSON: And what do you mean by "get further along", just for clarity? MR. JESUS: So we're moving that project forward. We're looking to move it forward. MR. FERGUSON: And where would you like to be by the end of -- where is the plan to be by the end of the year? MR. JESUS: So right now we haven't got a full schedule for that --MR. FERGUSON: Okay. MR. JESUS: -- to be totally honest. I think at the end of the day we're exploring it and it is -- it's one of the communities that we're looking at --MR. FERGUSON: And have you been --MR. JESUS: -- is Christian Island. MR. FERGUSON: And you've been engaging with and working with the communities on this? MR. JESUS: We have not started that yet. MR. FERGUSON: You have not started that yet? MR. JESUS: No.

Dr. Richardson is now aware of further privileged discussions between HONI and Anwaatin as referenced in HONI-02(3) Appendix A.

2. Please see response to HONI-03(1) and specifically the HONI evidence (Technical Conference, Tr. Vol.2, line 19-23) that HONI had not yet engaged with the specific First Nations Communities:

May 11, 2018 EB-2017-0049 Anwaatin.HONI.3 Page 4 of 4

working with the communities on this? MR. JESUS: We have not started that yet. MR. FERGUSON: You have not started that yet? MR. JESUS: No.

3. Dr. Richardson is of the current understanding, subject to further developments and cooperative action, that Hydro One has not proposed prompt replacement of the A4L in a manner and on a timeline that resolves the immediate and ongoing reliability crisis in the Greenstone-Marathon and Anwaatin First Nations communities. In contrast and in accordance with Ex. B1-1-1, Section 1.2, Attachment 14, at page 37 of 77 (or p.824 of 2850), Anwaatin understood that the recommended stage 2 was contingent and undertaken to accommodate a gas to oil pipeline conversion project (Energy East), which has since been cancelled by the proponent.

Similarly, the conclusions and implementation of the IRPP (p.857 of 2076) do not appear to be committing to prompt A4L line replacement.

Dr. Richardson generally supports solutions that result in prompt and measureable improvement to reliability in the Anwaatin First Nations communities and allow for economic growth in the North of Dryden, Greenstone-Marathon, and West of Thunder Bay Regional Planning Areas.

4. Anwaatin does not acknowledge and agree with the pretense of this question. Please refer to HONI-02(3) Appendix A.

5. Dr. Richardson is of the view that the cost and reliability of short, medium and long term staged and/or phased implementation of immediate solutions, including DERs, to address reliability in each and all of the Greenstone – Marathon, Nipigon, North of Dryden areas is relevant. Please refer to HONI.2(3) Appendix A.

Interrogatory: HONI-04

Preamble: At paragraphs 14-16 of Dr. Richardson's evidence, criticism is provided regarding Hydro One's three-pronged strategy to improve system reliability in First Nation Communities. Dr. Richardson's evidence continues to discuss the merits of non-wire solutions as another way in which system reliability can be improved and at potentially lower costs than wire solutions.

> At the Technical Conference, Hydro One's witnesses explained that distributed energy resource solutions were being considered, however such efforts had only begun and were in the preliminary stages and such efforts followed the filing of the Application.

> Dr. Richardson refers to an IESO Report dated December 16, 2016 discussing community energy plans in First Nation communities in the Parry Sound/Muskoka area and cites the conclusions that more research is needed to understand the cost and feasibility of using DERs.

Question: 1. Is it Dr. Richardson's view that none of the three-prongs to the stated strategy can consider non-wires solutions when, for example, capital investment decisions are made (prong 1) or when new technologies emerge (prong 2) or using such solutions when bundling work (prong 3)? Please fully explain why such approaches (consideration of non-wire solutions within the three stated prongs of the strategy) are not possible, acknowledging Dr. Richardson is not an expert in such matters.

2. Is it Dr. Richardson's view that as of today's date, sufficient research and understanding now exists regarding the cost and feasibility of using DERs. If so, please provide the information Dr. Richardson is relying on published after the IESO's conclusion dated December 16, 2016 and today.

May 11, 2018 EB-2017-0049 Anwaatin.HONI.4 Page 2 of 2

3. If Dr. Richardson is not challenging the IESO's December 16, 2016 conclusion, does Dr. Richardson take exception to the approach Hydro One is currently following, as explained during the Technical Conference, of proceeding with the use of pilot projects to further the understanding of how DER's may improve system reliability and the costs associated with such potential solutions. If so, please fully explain.

Response: 1. Dr. Richardson has not provided expert evidence in this proceeding and has been engaged to assist HONI's most vulnerable First Nations customers to develop immediate reliability solutions to HONI's extreme reliability disparity issues in the Anwaatin communities. It is Dr. Richardson's view is that, in its current level of elaboration, none of the elements of HONI's three-pronged strategy intended to increase system reliability *within First Nations communities* appropriately addresses the role of DERs and other non-wires solutions, which may be particularly well-suited to Indigenous communities.

2. Dr. Richardson's view, which he believes to be shared by honi experts, is that sufficient research and understanding now exists regarding the cost and feasibility of using ders in order for honi to make specific effort to consider these approaches as part of short, medium and long term capital investment and reliability improvement decisions in this and future proceedings. Please see HONI-02(3) Appendix A.

3. Dr. Richardson supports Hydro One's current approach to proceeding with the use of pilot projects that benefit First Nations that suffer from reliability disparity issues and disproportionately negative impacts from poor electricity reliability. Dr. Richardson recommends that Hydro One consider BOTH wires and non-wires alternatives as potential solutions to address and resolve reliability challenges in a cost efficient and appropriately staged manner.

Interrogatory: HONI-05

Preamble: Dr. Richardson refers to several documents prepared by the Ontario Independent Electricity System Operator ("IESO") which have considered the topic of distributed energy resources.

> At Exhibit B1-1-1 Section 1.2 Hydro One discusses the regional planning process used in the Province and which is coordinated by the IESO. At page 4 of 25 of this Exhibit, Hydro One references the fact that emergent needs brought forward by the transmitter, distributors, customers or the IESO that cannot wait until the next scheduled plan is developed is one such "planning trigger". Reference is further made to the steps that the IESO may take (i.e. initiating a Scoping Assessment process) in collaboration with distributors and transmitters in its consideration of non-wires solutions to address the needs in a region or sub-region.

> Hydro One is interested in how Dr. Richardson has taken into account the IESO's regional planning process and his views on whether this planning process would best address emerging technologies and approaches such as distributed energy resources as described in his evidence.

Question: 1. When preparing his evidence, what consideration was given by Dr. Richardson to the IESO's regional planning process and specifically, the opportunity for customers to provide input into this planning process for emerging needs and solutions that include non-wire approaches?

2. Is Dr. Richardson aware of any steps taken by Anwaatin or its representatives to discuss distributed energy resources as potential non-wire solutions with the IESO? If so, please summarize these discussions, provide a chronology of when such discussion took place and discuss any next steps that are planned.

3. Is Dr. Richardson in a position to comment on any concerns or issues that the IESO has identified that require additional study before distributed energy resources are ones that could be adopted in the Anwaatin planning region?

- **Response:** 1. Dr. Richardson reviewed the IESO's regional planning reports in the context of the EB-2017-0049 application and the evidence prepared by Dr. Richardson for Anwaatin. He notes that the IESO regional planning reports included at B1-1-1, Section 1.2 attachments 13-15 inclusive, refer to consultation with First Nations and Indigenous communities in the North of Dryden, Greenstone- Marathon, and West of Thunder Bay, that took place largely between 2013 and 2015, prior to Dr. Richardson's engagement and any Anwaatin intervention in OEB proceedings in attempt to promptly address the reliability disparity crisis and disproportionate negative impacts of poor reliability on the Anwaatin First Nation communities.
 - 2. Please see HONI-02(3) Appendix A.

3. Dr. Richardson is not aware of any specific IESO concerns or issues with respect to the HONI A4L distribution systems or the HONI Moosonee distribution systems with respect to the adoption of distributed energy resources.

In May, 2016, the IESO reported on its "high-level assessment" of Renewable Distributed Generation for the Greenstone-Marathon Subregion to meet capacity needs, which at the time included a proposed 100 MW for pumping station for a gas converted to oil pipeline and the proposed Geraldton mine which will require in excess of the 25 MW of capacity. Since that time, the proposed oil pipeline has been cancelled and the Greenstone mine has formally filed federal and provincial environmental assessments that include a DER in the form of a non-grid connected combined heat and power plant with a generating capacity of approximately 48.5 megawatts.

The IESO did not facilitate an Integrated Regional Resource Plan with respect to the North/East Sudbury region. Instead, HONI provided a North/East Sudbury Regional Infrastructure Plan ("RIP") in April

2017.¹ The North/East Sudbury RIP makes no references to DERs, and is specifically a "wires-only" options report, does not reference First Nation consultation, and was not distributed to First Nations.

¹ HONI, 2017. North/East Sudbury Regional Infrastructure Plan. Available online at: <u>https://www.hydroone.com/abouthydroone/CorporateInformation/regionalplans/northeastofsudbury/Documents/Regional%20Infrastructure%20Plan_North-East%20of%20Sudbury.pdf</u>

Interrogatory: HONI-06

Preamble: On its website (http://www.ieso.ca/en/get-involved/regionalplanning/northwest-ontario/overview) the IESO reports that the single regional planning area for Northwest Ontario has been divided into four planning sub-regions. The IESO further reports that individual plans are being prepared for each sub-area and will be integrated into an overall Northwest regional plan. Community engagement is stated to be an important part of the regional planning process and sometimes includes the development of a Local Advisory Committee (LAC), which has up to 18 members, representing municipalities, First Nation and Metis communities, business consumers and citizens. the community, and environmental conservation groups.

> Active engagements in Northwest Ontario are reported to have taken place regarding the sub-region of Greenstone-Marathon and an Integrated Regional Resource Plan was completed in June 2016.

> Hydro One is interested in how Dr. Richardson has considered the IESO's regional planning process as a means for Anwaatin or its First Nation members to give consideration to potential reliability improvement solutions involving new technologies that may be associated with distributed energy resources.

Question: 1. Was Dr. Richardson aware of the engagement process associated with the development of the IESO Greenstone-Marathon Integrated Regional Resource Plan at the time his evidence was prepared?

2. Please provide Dr. Richardson's understanding of the IESO's ongoing engagement sessions that have been held in the Northwest Ontario region subsequent to the release of the Greenstone-Marathon Integrated Regional Resource Plan. In your response, please indicate whether Anwaatin or representatives from its First

Nation members attended these engagement sessions and the dates such engagement sessions were held. Please also address whether issues related to distributed energy resources were raised at such meetings.

Response: 1. Please see response to HONI-05(1).

2. Please see response to HONI-05(1). Further, Dr. Richardson understands that those sessions were primarily focused on prospective electricity load demands for a proposed large oil pipeline and a proposed mine. The oil pipeline project was cancelled in Fall, 2017, and the mining project is proceeding with regulatory approvals for a DER (self-generation). Both events fundamentally alter the IESO demand assumptions and resource conclusions in the report.