

Hydro One Networks Inc.

483 Bay Street  
7th Floor South Tower  
Toronto, Ontario M5G 2P5  
HydroOne.com

**Joanne Richardson**

Director, Major Projects and  
Partnerships

☎ 416.902.4326

Joanne.Richardson@HydroOne.com

**BY EMAIL AND RESS**

March 25, 2024

Ms. Nancy Marconi  
Registrar  
Ontario Energy Board  
Suite 2700, 2300 Yonge Street  
P.O. Box 2319  
Toronto, ON M4P 1E4

Dear Ms. Marconi,

**EB-2023-0197 – Hydro One Networks Inc. (“Hydro One”) Leave to Construct Application – K4 Reconductoring Project – Reply Submission**

In accordance with Procedural Order No.1 issued on February 7, 2024, please find enclosed Hydro One Networks Inc.’s Reply Submission in support of its Leave to Construct Application – K4 Reconductoring Project.

As described in interrogatory response Exhibit I, Tab 1, Schedule 1 part a), this Project’s success is dependent on Hydro One being able to execute certain construction tasks during the limited outage window available for the K4 circuit, currently scheduled and approved by both the line-connected customers and the IESO, for the period starting May 29, 2024. To take advantage of this scheduled outage, we respectfully request this application approval proceed as expeditiously as possible.

An electronic copy of the Reply Submission has been submitted by Hydro One Networks Inc. using the Board’s Regulatory Electronic Submission System.

Sincerely,

A handwritten signature in black ink, appearing to read "Joanne Richardson", written in a cursive style.

Joanne Richardson

c/ Intervenors of record in EB-2023-0197

## ONTARIO ENERGY BOARD

**AND IN THE MATTER OF** an Application by Hydro One Networks Inc. pursuant to s. 92 of the *Ontario Energy Board Act, 1998* (the “Act”), for an Order or Orders granting leave to refurbish the existing transmission line K4 (“**K4 Transmission Line Refurbishment Project**” or “**K4 Project**” or the “**Project**”) between Kirkland Lake TS and Matachewan JCT.

**AND IN THE MATTER OF** an Application by Hydro One Networks Inc. pursuant to s. 97 of the Act for an Order granting approval of the forms of the agreement offered or to be offered to affected landowners.

---

**REPLY SUBMISSION OF**

**HYDRO NETWORKS INC.**

**March 25, 2024**

---

1 **1.0 INTRODUCTION**

2 Hydro One is seeking s.92 leave to construct approval for the Project which is for a section  
3 of the K4 115 kV transmission circuit measuring appropriately 10 km, spanning between  
4 Kirkland Lake TS and Matachewan JCT. Refurbishing this section of the K4 circuit is  
5 required to mitigate safety and reliability risks associated with operating deteriorated and  
6 obsolete assets. Not completing the work described in the Application will pose operational  
7 and safety risks to the public and crews in the proximity of this line and increase the risks  
8 of interruptions to K4-connected customers.<sup>1</sup>

9  
10 Consistent with commitments in Hydro One's Joint Rate Application<sup>2</sup>, Hydro One's  
11 recently updated new Transmission Line Loss Guideline<sup>3</sup> (the "Guideline") was introduced  
12 in this Application. The Guideline delineates the transmission line loss process Hydro One  
13 will follow and is accountable for and, where transmission line losses are material,  
14 describe an investment option analysis methodology for transmission line capital projects.  
15 Ultimately the updated line loss methodology will explore opportunities to reduce material  
16 line losses on transmission line projects in an economic manner. On this Project, Hydro  
17 One considered conductor options and ultimately selected as its preferred alternative, the  
18 997 kcmil ACSR type conductor, as the most cost effective. The analysis of the conductor  
19 options, and the driving rationale for the preferred option is provided in Exhibit B, Tab 5,  
20 Schedule 1. Furthermore, this investment will reduce the current safety and reliability risks  
21 associated with operating and maintaining poor condition assets on the section of the K4  
22 circuit identified for refurbishment and will return the span of circuit to like-new condition,  
23 resulting in reliability and quality of service benefits to the connected customers.<sup>4</sup>

24  
25 **2.0 BACKGROUND**

26 Hydro One received submissions from OEB Staff and Environmental Defence ("ED"). ED  
27 was the only OEB-approved intervenor in this proceeding.

---

<sup>1</sup> Exhibit B, Tab 1, Schedule 1.

<sup>2</sup> EB-2021-0110 Decision 29 November 2022, Schedule A (Settlement Proposal 24 October 2022, Transmission Line Losses (Issue 11), p. 62.)

<sup>3</sup> Exhibit I, Tab 2, Schedule 1, Attachment 1.

<sup>4</sup> Exhibit B, Tab 3, Schedule 1.

1 Hydro One will make comments in its Reply Submission on the following areas of the  
2 OEB-established Standard Issues List for leave to construct applications, namely; i)  
3 Project Need and Alternatives, ii) Project cost, and iii) Land Matters. Hydro One and  
4 parties to this application are in agreement on Customer Impacts, Reliability and Quality  
5 of Service and Conditions of Approval.

### 6 7 **3.0 SUBMISSION**

8 Project Need and Alternatives: Hydro One provided detailed information regarding the  
9 need for the Project in this Application (Exhibit B, Tab 3, Schedule 1). OEB Staff submitted  
10 that “that the evidence demonstrates a need for the Project”<sup>5</sup> and ED also agrees that  
11 Hydro One has established the need for the Project.<sup>6</sup> Hydro One provided information  
12 regarding alternative conductor sizing, including the detailed analysis utilised to determine  
13 the preferred conductor, which included aligning with HONI’s updated Transmission Line  
14 Loss Guidelines<sup>7</sup>.

15  
16 OEB Staff agree with Hydro One’s preferred 997 kcmil ACSR conductor choice. Even  
17 though that conductor size is above Hydro One’s minimum standard, OEB Staff submitted  
18 it “has the lowest annual cost on an NPV basis when the cost of line losses is considered”.<sup>8</sup>  
19 and therefore is cost-effective.

20  
21 ED’s submission is supportive of the Project, including specific support of the proposed  
22 conductor size. In their submission ED acknowledge Hydro One’s “decision to increase  
23 the size of the conductor beyond the minimum size”<sup>9</sup> and commended Hydro One on the  
24 current approach and the significant improvements regarding those conductor size  
25 determination practices.

26  
27 Project Cost: OEB staff submitted that Hydro One followed a reasonable process for  
28 developing its Project cost estimate and said that they were, “satisfied that the  
29 circumstances of this project including the need for complex construction methods, real

---

<sup>5</sup> OEB Staff Submission Pg. 3.

<sup>6</sup> ED Submission Pg.1.

<sup>7</sup> Exhibit I, Tab 2, Schedule 1, Attachment A

<sup>8</sup> OEB Staff Submission Pg. 5.

<sup>9</sup> ED Submission Pg.1.

1 estate acquisitions, the increased costs of materials, and the lack of economies of scale  
2 due to the shorter project length, justify the cost differential relative to the comparator  
3 projects.”<sup>10</sup> ED made no specific submissions regarding Project cost.

4  
5 Hydro One agrees with OEB Staff and submits that the cost per circuit km is appropriate  
6 given the scope, location and economic climate transmitters are currently experiencing.  
7 Hydro One also agrees that the comparator projects provided in the Application are the  
8 closest in terms of circuit length, and reasonable based on OEB Staff’s recognition of the  
9 comparator project’s costs having been completed “prior to the cost pressures  
10 experienced in the broader economy taking hold”<sup>11</sup>. Based on the above rationale and the  
11 Project cost evidence<sup>12</sup> provided in this Application, Hydro One submits that the Project  
12 costs are reasonable and should be approved as filed.

13  
14 Land Matters: The Project does require additional land rights. Hydro One’s Application  
15 identified two privately held properties that Hydro One requires new land rights from to  
16 accommodate the proposed transmission facilities<sup>13</sup>. Since filing the Application, Hydro  
17 One has successfully obtained the rights to one of the two outstanding properties. Hydro  
18 One expects to be able to secure the rights to the second and final property in a timely  
19 manner that will maintain the Project’s in-service date<sup>14</sup>.

20  
21 OEB Staff submitted it reviewed the proposed forms of agreements and has no major  
22 concerns. In its submission, OEB Staff identified one change where the rationale for the  
23 change was not clear and invited Hydro One to clarify<sup>15</sup> the following;

24  
25 In the ‘Compensation and Incentive Agreement- Easement’, OEB staff  
26 notes the removal of Valuation 1.(b), which addresses the adjustment of  
27 compensation based on changes in market conditions. Valuation 1.(b) is  
28 summarized as follows: Hydro One will adjust compensation for property if  
29 the time between the initial appraisal and project approval warrants it due

---

<sup>10</sup> OEB Staff Submission Pg. 6.

<sup>11</sup> OEB Staff Submission Pg. 6.

<sup>12</sup> Exhibit B, Tab 7, Schedule 1 and Exhibit B, Tab 5, Schedule 1, and Exhibit 1, Tab 1, Schedule 6.

<sup>13</sup> Exhibit E, Tab 1, Schedule 1, Pgs-2-3.

<sup>14</sup> Exhibit I, Tab 1, Schedule 3, part a) pg.1.

<sup>15</sup> OEB Staff Submission Pgs. 9-10.

1 to market changes. If an Option Agreement is in place before project  
2 approval, the property owner is entitled to this adjustment, known as the  
3 "Top-Up".  
4

5 Hydro One's rationale for removing the 'Market Top-Up' incentive from this Project's real  
6 estate acquisition program is based on the geographic location of the Project in which land  
7 values in the area have remained flat and prices for properties are not as dynamic as other  
8 geographical areas in the Province. Increasing interest rates are a factor which has  
9 discouraged sales transactions in the area and remains an attributing factor as to why  
10 property values are relatively unchanged between the timing of the option agreement  
11 execution by the landowner and the anticipated exercise of the option i.e. when the OEB's  
12 approval for this application is expected to be granted.

13

14 ED made no specific submissions on this issue.

15

#### 16 **4.0 CONCLUSION**

17 Hydro One submits that it has provided sufficient information in this proceeding to  
18 establish that the Project is in the public interest. Both OEB Staff and ED support the  
19 Project and recommend the OEB approve it as proposed.<sup>16</sup> Likewise Hydro One submits  
20 that the Standard Forms of Agreement that will be, or have been, used for securing any  
21 outstanding land rights should also be approved under s.87 of the Act.

22

23 As described in interrogatory response Exhibit I, Tab 1, Schedule 1 part a), this Project's  
24 success is dependent on Hydro One being able to execute certain construction tasks  
25 during the limited outage window available for the K4 circuit, currently scheduled and  
26 approved by both the line-connected customers and the IESO, for the period starting May  
27 29, 2024. To take advantage of this scheduled outage, Hydro One respectfully requests  
28 this Application approval proceed as expeditiously as possible.

---

<sup>16</sup> ED Submission Pg.1 and OEB Staff Submission Pg 10.

1 All of which is respectfully submitted this 25th day of March 2024.

2

3

By its counsel,

4

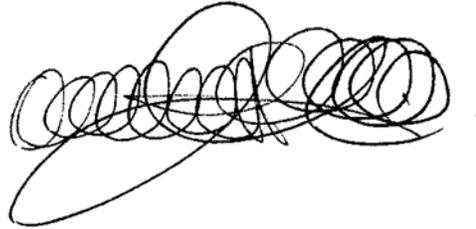
5

6

7

8

9

A handwritten signature in black ink, consisting of a series of overlapping loops and curves, positioned above a horizontal line.

10

Monica Caceres