

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

Tel: (416) 345-5393  
Cell: (416) 902-4326  
Fax: (416) 345-6833  
Joanne.Richardson@HydroOne.com



**Joanne Richardson**  
Director – Major Projects and Partnerships  
Regulatory Affairs

BY EMAIL AND RESS

November 12, 2021

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

Dear Ms. Long:

**EB-2021-0136 – Hydro One Networks Inc. Leave to Construct Application – Richview TS by Trafalgar TS Reconductoring Project – Reply Submission**

Hydro One Networks Inc. (Hydro One) is submitting a written Reply Submission regarding the Ontario Energy Board (OEB) staff submissions and those registered intervenors who also provided submissions regarding Hydro One's Richview TS by Trafalgar TS Reconductoring Project Application, consistent with the timing outlined in the OEB's Procedural Order No. 1.

An electronic copy of this Reply Submission has been submitted using the Board's Regulatory Electronic Submission System.

Sincerely,

A handwritten signature in black ink, appearing to read "Joanne Richardson".

Joanne Richardson

cc. EB-2020-0136 Intervenors (Electronic only)

**REPLY SUBMISSION OF HYDRO ONE NETWORKS INC.**  
**EB-2021-0136**

**In the matter of** an Application by Hydro One Networks Inc. pursuant to s. 92 of the *Ontario Energy Board Act, 1998* for an Order or Orders granting leave to reconductor existing transmission line facilities (“the RTR Project”) in the City of Toronto and the City of Mississauga areas.

**And in the matter of** an Application by Hydro One Networks Inc. pursuant to s. 97 of the *Ontario Energy Board Act, 1998* for an Order granting approval of the forms of the agreement offered or to be offered to affected landowners.

**BACKGROUND**

1. Hydro One Networks Inc. (“Hydro One”) has applied to the Ontario Energy Board (the “OEB” or the “Board”) pursuant to s. 92 of the *Ontario Energy Board Act, 1998* (the “Act”) for an Order or Orders granting leave to reconductor four existing 230 kV circuits between Richview Transformer Station (“TS”) and Trafalgar TS, and to install new optical ground wire (“OPGW”) along one set of towers to take advantage of the same construction period opportunity and circuit outage. The RTR Project will facilitate increased transfer capability on the *Flow East Toward Toronto* (“FETT”) interface<sup>1</sup> by approximately 2,000 MW. The IESO, through the provision of extensive need evidence<sup>2</sup> (the “Need Evidence”), has identified a need for additional capacity east of the FETT interface by 2026.

---

<sup>1</sup> The FETT interface is defined by four 500kV circuits into Claireville TS, two 230 kV circuits out of Orangeville TS (measured east of Everett TS) and four 230kV circuits out of Trafalgar TS. This transfer stresses the FETT interface of the power system by transferring power from the Southwest, Bruce, Niagara and West Zones to the Toronto Zone. A schematic diagram of the FETT interface can be found at Exhibit B, Tab 2, Schedule 1, Figure 1.

<sup>2</sup> Exhibit B, Tab 3, Schedule 1. Attachments 1 through 3

2. The RTR Project will involve the reconductoring of four existing 230 kV transmission circuits, consisting of circuits of which their nomenclatures are R14T and R17T between Trafalgar TS and Richview TS (a distance of approximately 21.7 km), and circuits of which their nomenclatures are R19TH and R21TH - between Trafalgar TS and Tomken Junction (“JCT”) (a distance of approximately 13.7 km) along with other associated facility replacement, including the reinforcement of towers, as appropriate.
3. The forecast cost of the transmission line and related facilities for which Hydro One is seeking approval is approximately \$60.9 million<sup>3</sup>, of which \$56.3 million is capital and will be added to Hydro One’s rate base, and \$4.6 million is removals (i.e. will not be capitalized).
4. It is anticipated that the RTR Project will be completed within Hydro One’s existing corridor, with the need for only certain temporary land rights for access roads. In the event that temporary property rights will need to be negotiated, approval is being sought for the forms of the agreement offered, or to be offered, to affected landowners pursuant to s. 97 of the OEB Act. No new permanent land rights are required for the RTR Project.
5. There will be a minimal cost impact to transmission rates for Ontario’s transmission ratepayers as a result of the RTR Project. The line connection pool rate of Ontario’s Uniform Transmission Rates (“UTRs”) will remain unchanged, whereas the network connection pool rate is forecast to increase the 2020<sup>4</sup> OEB-approved rates by a 0.51%, or from the current rate of \$3.92/kW/month to \$3.94/kW/month. For a typical residential customer who is under the Regulated Price Plan, there will be minimal impact on rates.

---

<sup>3</sup> Exhibit B, Tab 7, Schedule 1

<sup>4</sup> As per Exhibit B, Tab 9, Schedule 1, Pg. 2, lines 9 through 12, the 2020 rates were used rather than 2021 rates to remove the impact of OEB-approved forgone revenue and any related variance accounts from the analysis, which in comparison would have been included in a 2021 rates analysis.

6. The IESO provided a final System Impact Assessment<sup>5</sup> which concluded that the RTR Project is expected to have no adverse impact on the reliability of the integrated power system.
7. Hydro One has completed the final Customer Impact Assessment (“CIA”) in accordance with Hydro One’s connection procedures. The CIA results confirm that the RTR Project will not have any adverse effects on the transmission-connected customers of the area<sup>6</sup>.
8. Hydro One received submissions from OEB-approved intervenors: Environmental Defence (“ED”), Association of Power Producers of Ontario (“APPrO”), in addition to OEB Staff (or “Board Staff”) on this Application. Hydro One is providing this Reply Submission pursuant to Procedural Order #1 (“PO#1”) issued September 16, 2021.

## **SUBMISSION**

9. Section 92 of the OEB Act provides that leave of the OEB must be obtained for the construction, expansion or reinforcement of electricity transmission lines. Section 96(2) of the Act limits the scope of the OEB’s review in an application under section 92 to the interests of consumers with respect to prices and the reliability and quality of electricity service.
10. Both OEB Staff and ED support Hydro One’s Application for the RTR Project.

---

<sup>5</sup> Exhibit F, Tab 1, Schedule 1, Attachment 1

<sup>6</sup> Exhibit G, Tab 1, Schedule 1, Attachment 1

11. APPrO submitted that the Application “does not satisfy the requirement under the OEB’s Standard Transmission Leave to Construct Issues List<sup>7</sup> to demonstrate that the RTR Project is the preferred option to address the current supply need, as opposed to implementing a different solution”<sup>8</sup>. However, APPrO’s Submission falls short of suggesting that the OEB should outright deny the Application. Instead, APPrO’s Submission includes a request for the Board to issue the IESO a directive, or Order, to include certain information in future project need assessments<sup>9</sup>. This request from APPrO will be addressed more in the ‘Project Need’ section of this Reply Submission, below.

12. In its submissions below, Hydro One will address what it considers to be the central areas of focus, namely, i) project need, and ii) conductor size alternatives and associated line losses. Additionally, Hydro One will also comment on the proposed conditions of approval proposed by OEB Staff.

### **Project Need**

13. Through Hydro One’s prefiled evidence and written interrogatory responses, the record shows that the IESO requested that Hydro One provide increased capacity on the FETT<sup>10</sup>.

14. Hydro One submits that together, Hydro One and the IESO have provided clear and substantial evidence<sup>11</sup> establishing the need (refer the Need Evidence) for the RTR Project and demonstrating that the proposed Project is the most cost-effective solution to address the magnitude of the need, as identified by the IESO.

---

<sup>7</sup> EB-2021-0136, Procedural Order No. 1, Schedule B, item 2.1

<sup>8</sup> APPrO Submission, filed October 29, 2021, Pg. 1

<sup>9</sup> The list is found on Pages 1 and 2 of the APPrO Submission, filed October 29, 2021

<sup>10</sup> Exhibit B, Tab 3, Schedule 1, Attachment 1

<sup>11</sup> Exhibit B, Tab 3, Schedule 1, including Attachments 1 through 3

15. In addition to providing significant Need Evidence, the IESO also provided responses to the many interrogatories received on this file relating to the need for the RTR Project.<sup>12</sup>

16. Board Staff expressed no concerns about the reliability and quality of service associated with the RTR Project, on which principles the Board is expected to adjudicate this Application. Additionally, OEB Staff also said that Hydro One's proposed forms pertaining to land agreements for the Project are acceptable.

17. Ultimately, ED supports Hydro One's Application as filed, stating;

*Environmental Defence supports the efforts of the Independent System Electricity Operatory [sic] (IESO) and Hydro One to increase the transfer capability in the relevant pathway to meet transmission reliability and resource adequacy needs. In addition, the IESO states that this project will increase the geographic area in which new resources can be located, which will increase competition and result in ratepayer savings. **Environmental Defence supports these positive goals**<sup>13</sup> [emphasis added].*

18. APPrO suggested in its submission that,

*HONI's investment in the RTR Project is supported by a directive from the IESO and not by an assessment by HONI of system need and alternatives<sup>14</sup>.*

---

<sup>12</sup> IESO responses to interrogatory questions from OEB Staff and Intervenors were noted in Exhibit I, with an indication prior to the response as to whether the IESO had provided either, i) the full response, or ii) contributed to the response in conjunction with Hydro One.

<sup>13</sup> ED Submission, filed October 26, 2021, Pg. 1

<sup>14</sup> APPrO Submission, filed October 29, 2021, Pg. 13

19. However, Hydro One submits that APPrO's statement is not founded on accurate assumptions with regard to Hydro One's role in the procurement of transmission capacity. The IESO is tasked with the role of planning for emerging needs and the appropriate assessment and procurement of transmission in Ontario, where and when appropriate, for the forecast emerging need. Hydro One worked closely with the IESO to assist with the IESO's Need Assessment for the RTR Project, by providing cost information for alternatives of transmission wires solutions to meet the IESO forecast capacity need on the FETT interface. In its implied assertion that Hydro One should be assessing system need, APPrO is aiming to distract the OEB from the role definitions of each organization, as understood by APPrO, for the future assessment of this particular project's need, which Hydro One submits appropriately resides with Ontario's independent system operator, the IESO.
20. In its submission, APPrO took issue with the IESO's need-related evidence, including the approach taken and adequacy of the RTR Project's Need Assessment and the IESO's regional planning process.
21. APPrO requested that the OEB include in its decision an order requiring that all future leave to construct applications contain certain additional requirements pertaining to a leave to construct project application's Need Assessment<sup>15</sup>.
22. Hydro One submits that the items APPrO is requesting to be included in future IESO Need Assessments, to be filed in support of any leave to construct application, are not in the OEB-issued *Filing Requirements for Electricity Transmission Applications – Chapter 4 - Applications under Section 92 of the Ontario Energy Board Act*<sup>16</sup>.

---

<sup>15</sup> The list of items it has requested can be found on page 1 of the APPrO Submission, filed October 29, 2021.

<sup>16</sup> [https://www.oeb.ca/oeb/Documents/Regulatory/OEB\\_Filing\\_Req\\_Tx\\_Applications\\_Ch4\\_20140731.pdf](https://www.oeb.ca/oeb/Documents/Regulatory/OEB_Filing_Req_Tx_Applications_Ch4_20140731.pdf) Section 4.3.2.3 - *Evidence in Support of Need*, dated July 31, 2014.

23. Hydro One submits that this s. 92 Application is not an appropriate forum for this type of request to be considered by the Board (i.e. in a single transmitter application) and that if the Board believes that the items requested by APPrO should be included, it would be more suitable to explore that matter in a generic proceeding by way of policy consultation or otherwise, where other potentially impacted OEB-licensed transmitters and impacted parties can also express their views and make submissions on those proposals. Without understanding the full scope of such a generic proceeding, Hydro One asks the OEB to set aside this request and consider its validity and appropriateness at a future date, if it believes one is necessary. Furthermore, Hydro One submits that consideration of such a generic process should not prejudice the relief sought in this Application.

24. Hydro One is aware that the Board has denied the IESO's request<sup>17</sup> to respond to APPrO on submissions APPrO made regarding the procurement and regional planning processes. While Hydro One submits that it is not accountable for the processes followed by the IESO, it supports the IESO planning process. Hydro One submits that the IESO's leave to construct Need Assessment evidence (Exhibit B, Tab 3, Schedule A, Attachment 1 and 3) provided in this Application is appropriate and supports the RTR Project need. In light of the Board's Decision<sup>18</sup> regarding the request<sup>19</sup> from the IESO to provide a reply submission to APPrO, the OEB made the following statement;

*It is the Applicant, Hydro One, that will file any reply submissions in this proceeding. Hydro One is free to consider the submissions or perspectives of parties, which include APPrO and the IESO, in any reply submissions that it might file.*<sup>20</sup>

---

<sup>17</sup> OEB Letter responding to the IESO request to make a Reply Submission on this file dated November 4, 2021.

<sup>18</sup> OEB Letter to all parties to the RTR Project S.92 Application, dated November 4, 2021

<sup>19</sup> IESO's request to the OEB via Letter dated November 3, 2021

<sup>20</sup> OEB Letter to all parties to the RTR Project S.92 Application, dated November 4, 2021, Pg. 2



25. Consistent with its understanding of the above statement issued by the Board, Hydro One has considered perspectives of APPrO and the IESO and submits that it is necessary to include in this Reply Submission responses to certain elements of the APPrO Submission that were prepared by, or with the assistance of, the IESO. Furthermore, Hydro One submits that the IESO-prepared material is important to have on the record of this Application and will be valuable to the Board when preparing to render a decision on this Application.

26. The following content in this section (i.e. section 26) has been prepared with the assistance of the IESO:

26.1. The IESO's letter dated December 10, 2020 (the "Letter")<sup>21</sup> and its report dated July 12, 2021 (the "Need Report")<sup>22</sup> describe a reliability risk that will emerge in the summer 2026 when the supply capacity east of the FETT interface is forecast to decline due to nuclear retirements and nuclear refurbishments. The proposed RTR Project can address this near-term reliability need by increasing the transfer capability of the FETT interface by approximately 2,000 MW. The RTR Project has a lower implementation risk than other alternatives and will remove locational constraints on participation in future supply resource procurements.

26.2. APPrO, in its submissions (the "APPrO Submissions"), made a number of comments with respect to the IESO's assessment of need for the Project.<sup>23</sup>

---

<sup>21</sup> Exhibit B, Schedule 3, Tab 1, Attachment 1

<sup>22</sup> Exhibit B, Schedule 3, Tab 1, Attachment 3

<sup>23</sup> Written submissions of APPrO dated October 29, 2021

***There are No Supply Alternatives that can fulfill the Identified Need***

26.3. APPrO argues that the IESO's assessment of need is insufficient. In its Submission, APPrO alleges that the IESO did not undertake a substantive assessment of supply alternatives to fulfill the identified need and faults the IESO for relying upon its "knowledge of the market" and not undertaking specific stakeholder consultation with supply resources when undertaking its assessment.<sup>24</sup>

26.4. Hydro One has been informed by the IESO that the IESO disagrees with the allegations made by APPrO regarding its assessment of supply alternatives. In the Need Report, the IESO wrote that it was not confident that it could successfully acquire approximately 2,000 MW of new supply resources east of FETT by 2026 due to "significant risks and unknowns".<sup>25</sup> The IESO determined that this uncertainty presented an "unacceptable risk" in its ability to meet reliability standard requirements.<sup>26</sup> In response to the APPrO Interrogatory, Exhibit I, Tab 3, Schedule 1 part a), the IESO clearly identified the reliability risks that will arise in 2026 as the reason why the RTR Project is being recommended:

---

<sup>24</sup> APPrO Submissions, Pg. 4

<sup>25</sup> Need Report at Pg. 7

<sup>26</sup> Need Report at Pgs. 2 and 6

*The proposed reconductoring project is required to meet North American reliability standards requirements as set out in NERC TPL-001 and NPCC Directory #1. The west-to-east transfer capability of the FETT transmission interface plus the capacity from resources located east of FETT needs to be sufficient to supply the demand east of FETT in manner meeting the above criteria. If the proposed reconductoring project was not developed, the IESO would need to acquire approximately 2,000 MW of new resources located east of FETT by 2026 to be compliant with its reliability obligations. The IESO has concluded that successfully acquiring approximately 2,000 MW of new resources east of FETT by 2026 represents an unacceptable risk. This RTR Project is being recommended to address this reliability risk.<sup>27</sup>*

26.5. The system need that will arise due to the Pickering GS retirement has been publicized by the IESO and should be well known to resource developers and existing operators.<sup>28</sup> Despite the publicized need, the IESO was not, and is not, aware of planned projects that are in a sufficiently advanced stage of development that could, individually or collectively, meet the approximately 2,000 MW need east of the FETT interface by 2026.<sup>29</sup> Projects of such magnitude have significant development timelines and carry inherent development risks. The early steps in the development process of a supply resource include obtaining a System Impact Assessment from the IESO and commencing public consultation. As the IESO stated in response to APPrO Interrogatory 2(a), there are currently “no projects east of FETT with completed System

---

<sup>27</sup> Exhibit I, Tab 4, Schedule 1, part a)

<sup>28</sup> At interrogatory Exhibit I, Tab 4, Schedule 2, part a), APPrO alleges that the IESO’s need for new supply was only communicated to the marketplace after in the issuance of the Letter. However, the planned retirement of the Pickering GS and the corresponding need for additional supply resource capacity was identified as far back as the initial Integrated Power System Plan prepared by the former Ontario Power Authority (prior to its integration with the IESO) in 2007.

<sup>29</sup> Response to Exhibit I, Tab 4, Schedule 2, part a)

Impact Assessments nor, to the IESO's knowledge, are there projects east of FETT with ongoing public/Indigenous consultations."<sup>30</sup>

26.6. Further, Hydro One has been informed by the IESO that it is the IESO's view that a specific stakeholder engagement with supply resources would not have changed the outcome of the IESO's assessment. The IESO provides supply resource developers and existing operators with various forums and *ad hoc* opportunities to engage with the IESO.<sup>31</sup> Through these mechanisms, the IESO became aware of some interest in developing supply resources (gas-fired generation, nuclear generation, and storage facilities) east of the FETT interface. However, most of these projects were at a preliminary stage and none of the proponents for these projects indicated an in-service date of 2026 or earlier.<sup>32</sup> Notably, no party in this proceeding has provided evidence of sufficient supply resources under development to meet the identified need of approximately 2,000 MW of new supply resources east of the FETT interface by 2026.<sup>33</sup>

---

<sup>30</sup> At interrogatory Exhibit I, Tab 4, Schedule 2, APPrO speculates that proponents may not have submitted applications for System Impact Assessments due to the structure of the Large Renewable Procurement I process. However, APPrO has not provided evidence from any proponents to support this assertion.

<sup>31</sup> Exhibit I, Tab 4, Schedule 2, part b)

<sup>32</sup> Exhibit I, Tab 4, Schedule 2, part c)

<sup>33</sup> APPrO criticizes the IESO for not disclosing further information about the potential supply projects east of the FETT interface of which it may be aware and requests that the Board draw an adverse inference. However, despite having the opportunity to do so, APPrO did not submit any evidence in this proceeding even though its members would be the best source of such information.

26.7. In absence of any identified supply alternatives that can provide the required capacity by summer 2026, Hydro One has been informed by the IESO that the IESO continues to recommend the RTR Project as a low-cost and low-risk means of addressing a near-term reliability risk. As stated in the response to ED<sup>34</sup>, the IESO has a “high degree of confidence” that the proposed RTR Project will provide sufficient transfer capability and be in service before summer 2026 so that the IESO can continue to meet its reliability obligations.<sup>35</sup>

***The Project Removes Locational Constraints for Supply Resources***

26.8. APPrO asserts that the IESO should have initiated a competitive procurement for supply resources east of the FETT interface before recommending the RTR Project. APPrO argues that the need assessment is contradicted by the IESO’s Annual Acquisition Report (“AAR”) published in July 2021<sup>36</sup>, which, according to APPrO, shows that the IESO expects to procure 2,000 MW of supply by 2026.

26.9. The IESO’s response to Interrogatory Exhibit I, Tab 4, Schedule 2, said it does not view a supply resource procurement as a sufficiently certain path to fulfilling the identified reliability need in 2026 (i.e. obtaining approximately 2,000 MW of supply resources east of the FETT interface by 2026). The design and implementation of a competitive procurement for resources, in addition to the time required to develop and construct the successful supply resources, carries inherent timeline risks that are incompatible with satisfying a pending reliability need in 2026. Nor would there be any guarantee that a procurement would be successful in acquiring approximately 2000 MW of supply resources east of the FETT interface given the size of the need and the lack of sufficiently advanced projects. As noted above, one of the advantages of the

---

<sup>34</sup> Exhibit I, Tab 3, Schedule 1, part a

<sup>35</sup> Exhibit I, Tab 3, Schedule 1

<sup>36</sup> The IESO’s 2021 ARR is available at: <https://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/aar/Annual-Acquisition-Report-2021.ashx>

RTR Project is that it carries lower implementation risk relative to the alternatives, which is an important consideration when addressing a near term reliability need.<sup>37</sup>

26.10. Further, the proposed RTR Project will remove locational constraints when the IESO undertakes the supply resource procurements identified in the AAR, which include the initiation of a capacity procurement for 750 MW of medium-term commitments in late 2021 (targeting a 2026 commitment date) and a further capacity procurement for at least 1,000 MW of long-term commitments in fall 2022 (targeting a 2027 commitment date).<sup>38</sup> Unless the existing transfer capability of the FETT interface is enhanced, approximately 2,000 MW of the new supply resources required to meet the provincial need must be acquired from east of the FETT interface by summer 2026 to satisfy NERC and NPCC reliability requirements.<sup>39</sup> Enhancing the transfer capability of the FETT interface will ease these constraints and provide the IESO with flexibility to meet the provincial need by acquiring the necessary capacity from supply resources located both west and east of the FETT interface.

26.11. Hydro One has been informed by the IESO that for this reason, the IESO's decision to recommend the RTR Project should not be reduced to a simplistic case of "supply versus transmission". While the RTR Project will provide the IESO with greater flexibility on the timing of future procurements and the location of eligible supply resources, it will not eliminate opportunities for supply resources located east of the FETT interface to contribute to the overall provincial capacity need. As the IESO stated in response to the Interrogatory at Exhibit I, Tab 1, Schedule 1, part a:

---

<sup>37</sup> Need Report at Pg. 10

<sup>38</sup> Exhibit I, Tab 4, Schedule 3. Specifically, the supply resource procurements identified in the AAR include the initiation of a capacity procurement for 750 MW of medium-term commitments in late 2021 (targeting a 2026 commitment date) and a further capacity procurement of at least 1000 MW of long-term commitments in fall 2022 (targeting a 2027 commitment date).

<sup>39</sup> Exhibit I, Tab 4, Schedule 1, part a) and, Exhibit I, Tab 4, Schedule 3, part d)

*The proposed reconductoring project eliminates the requirement to locate 2,000 MW east of FETT by 2026, however, there is still a capacity need in the province and new resources east of FETT could help meet that need. The RTR Project would not obviate the need to acquire new resources in the province. As stated on page 7 of [the Need Report], there is an overall need for capacity in Ontario (province-wide) due to increasing demand for electricity and the retirement of Pickering GS combined with nuclear unit outages for refurbishment. For the year 2026, that amount was determined to be about 5,200 MW after re-acquiring Lennox GS and 3,400 MW assuming all other resources with expiring contracts in the province are re-acquired. The proposed RTR Project will remove the constraint that 2,000 MW of those new resources must be located east of the FETT interface.<sup>40</sup>*

26.12. Hydro One has been informed by the IESO that the IESO agrees with APPRO's comment on the importance of timely communication of future capacity needs and potential procurement mechanisms to the marketplace. The IESO has initiated a Resource Adequacy Framework in consultation with stakeholders to further develop a long-term competitive strategy to meet Ontario's resource adequacy needs reliably and cost-effectively while recognizing the unique needs of different resources. The publication of the AAR in 2021 was intended to assist proponents in making decisions to address the province's reliability needs, as stated in the AAR Executive Summary:

---

<sup>40</sup> Exhibit I, Tab 1, Schedule 1

*It is also important to recognize that it will take time to build the mechanisms described in the Resource Adequacy Framework and for participants to adapt to changes in the procurement process and the ensuing contracts. The immediate next steps described in this report are designed to address needs that emerge mid-decade – with the understanding that it is neither necessary nor prudent to resolve every identified need immediately. With each annual iteration of both the APO and Annual Acquisition Report (AAR), there will be greater certainty on the magnitude of reliability needs on a go forward basis and the suite of resources, both conventional and emerging, available to competitively and reliably address future needs. As such, the development of this report has been informed by stakeholder input and is the first of what will become an annual process to put forward actions to address system needs.*

*Along with the yearly publication of the APO, this report is intended to provide the marketplace with annual sources of information so as to understand Ontario’s forecasted needs, along with the proposed acquisition activities to satisfy those needs. With this information, existing and potential proponents will be better positioned to make decisions about assets and services they can bring to the market to address Ontario’s reliability needs.<sup>41</sup>*

---

<sup>41</sup> IESO 2021 AAR Report – Pg.2, Executive Summary <https://www.ieso.ca/-/media/Files/IESO/Document-Library/planning-forecasts/aar/Annual-Acquisition-Report-2021.ashx>



26.13. The planned actions described in the AAR demonstrate the IESO's commitment to more competitive approaches to meeting future supply needs and driving down costs for ratepayers. The Project enables the multipronged approach described in the AAR and will provide the IESO with flexibility to adapt to changing conditions in the years ahead.

***Greater Competition is an Ancillary Benefit of the Project***

26.14. APPrO asserts that the IESO, "claims that the [Project] **will** increase competition in the market", [emphasis added] and states that the IESO should have submitted a price forecast to support this conclusion.<sup>42</sup> APPrO argues that leave to construct applications relying on claims that the proposed project will benefit competition must adequately demonstrate how competition will be impacted.<sup>43</sup>

26.15. APPrO has misunderstood the IESO's evidence on need. Hydro One has been informed by the IESO that the IESO's recommendation is based on the need to reduce the risk to reliability in having to acquire a large amount of capacity in eastern Ontario in relatively short timeframe.<sup>44</sup> As detailed above, this will be achieved by enabling more resources to compete to meet the overall provincial need by removing timing and locational constraints. This increased flexibility should, in turn, create greater competition amongst these resources and lead to ratepayer savings. As written in the IESO's Need Report, the IESO does not view ratepayer savings as a driver of the Project nor is it being relied upon by the IESO to justify need.<sup>45</sup> For this reason, the potential for greater competition was identified by the IESO in the Need Report as an 'ancillary benefit' of the Project.<sup>46</sup> The IESO has also informed Hydro One that it is the

---

<sup>42</sup> APPrO Submission Pg. 9

<sup>43</sup> APPrO Submission Pg. 9

<sup>44</sup> Need Report Pg. 7

<sup>45</sup> Exhibit I, Tab 4, Schedule 1

<sup>46</sup> Need Report at Pgs. 3 and 7

IESO's view that there is sufficient justification for the Project even in the absence of this ancillary benefit. Further, the IESO has not claimed that the Project "will" definitively increase competition amongst supply resources. The Need Report stated that the IESO "expected" the Project to provide greater competition that would ultimately lead to ratepayer saving.<sup>47</sup> In response to OEB Staff Interrogatory at Exhibit I, Tab 1, Schedule 1, part b), the IESO stated that its expectation was conceptual in nature and that it would not be possible to precisely quantify the benefit:

*By providing flexibility to acquire new resources west of the FETT interface, the proposed RTR Project should provide for greater competition amongst supply resources and ultimately lead to ratepayer savings. The IESO's assessment of ratepayer savings is conceptual in nature. The IESO has not calculated the value of the potential savings associated with greater competition and does not believe it would be possible to do so with any degree of precision at this time.<sup>48</sup>*

26.16. APPrO expresses a concern that the Project could interfere with future price signals when local marginal prices ("LMP") are introduced as part of the IESO's Market Renewal Program ("MRP"), and that these signals would have driven investment east of the FETT interface.<sup>49</sup> The IESO has informed Hydro One that while the IESO acknowledges that MRP and other market mechanisms may eventually provide the needed investment signals for supply resources, the required price signals and investment decisions simply could not have been made in an acceptable timeframe to satisfy the reliability need that will arise in 2026. As the IESO stated in response to Interrogatory Exhibit I, Tab 4, Schedule 1, part a), a do-nothing scenario is not an acceptable option to address a pressing reliability need. As detailed above, due to the

---

<sup>47</sup> Need Report at Pg. 7

<sup>48</sup> Exhibit I, Tab 1, Schedule 1

<sup>49</sup> APPrO Submissions at Pgs. 10-12

lack of sufficiently advanced generation projects east of the FETT interface, the IESO was not confident that it could rely upon LMP to address a near-term reliability need.

***APPrO's Requested Relief is Inappropriate***

26.17. In its Submission, APPrO does not advocate for a denial of Hydro One's leave to construct application: rather, it seeks to have the Board "hold the IESO accountable to its commitments" by imposing a series of suggested minimum criteria for future leave to construct applications under subsection 96(2)2 of the *Ontario Energy Board Act, 1998* (the "Act").<sup>50</sup>

26.18. The IESO has informed Hydro One that the IESO acknowledges some of APPrO's suggested criteria may be relevant and appropriate in individual leave to construct applications but that this should be determined and assessed on a case-by-case basis. For the reasons set out above, the IESO believes that it conducted an adequate assessment of supply alternatives given the identified reliability need and the flexibility that the Project will provide in meeting the Province's forecast capacity needs.

**Conductor Size Alternatives and Line Losses**

27. No objections were received from OEB Staff regarding project alternatives pertaining to the different type of wires or non-wires solutions identified, and ultimately the preferred wire solution of the RTR Project as presented in this Application.

28. Likewise, ED's submission made no comments regarding the type of alternatives, though ED did take issue with the RTR Project Application not having included any details on alternative conductor size options, notably the next largest conductor size to that of the Project's preferred alternative.

---

<sup>50</sup> APPrO Submissions at Pgs. 14-15. APPrO's reference to paragraph 2 of subsection 96(2) of the Act appears to be in error as that provision was repealed earlier this year and does not appear to be relevant in any event.

29. In its submission, ED asked that Hydro One include:

*“significantly more detail in future applications on whether to upsize a conductor. This would include an estimate of the net benefits/costs that accounts for the savings from reduced line losses and increased capacity.”<sup>51</sup>*

ED claims that Hydro One provided no such analysis in this Application. Hydro One disputes this claim.

30. In the response to Exhibit I, Tab 3, Schedule 2 part e, (reproduced below), Hydro One explained how the recommended conductor size was determined:

*Hydro One provided the IESO with a list of 230kV conductors that Hydro One currently utilizes on the transmission system and their associated ampacities. The discussions between Hydro One and the IESO resulted in the recommendation to use the 1,433 kcmil ACSS conductor because the Hydro One standard ACSR conductors are not able to meet the ampacity rating requested by the IESO of 2,000A (please see Table 1, below, that illustrates this conclusion).*

*Hydro One and IESO did not discuss the possibility of upsizing the 1,433 kcmil ACSS conductor to cost effectively reduce transmission losses, because any kcmil ACSS conductor greater than 1,433kcmil would require at a minimum, further tower reinforcement/modifications, and/or additional towers to provide appropriate overhead line clearances. Therefore Hydro One considered the use of a larger size ACSS conductor and ruled it out as uneconomical. Given this conclusion it was not discussed as a viable option with the IESO<sup>52</sup>.*

---

<sup>51</sup> ED Submission, filed October 26, 2021, Pg. 1

<sup>52</sup> Exhibit I, Tab 3, Schedule 2, part e

31. Contrary to ED's assertions that there was no assessment of this type performed<sup>53</sup>, this process did occur, and the outcome resulted in the IESO's Hand-Off Letter<sup>54</sup> to Hydro One. As Hydro One outlined in that response, there was an initial screening assessment done of potential larger capacity conductor sizes, but the next largest conductor size was not viable from a cost-benefit perspective.
32. During the discovery phase of the hearing, Hydro One provided a number of responses focused on whether upgrading the conductor, beyond the one proposed in the Application, would be cost-effective in reducing line losses. Hydro One's evidence and analysis demonstrated that the preferred conductor is the most appropriate in terms of meeting the IESO's requests and from a cost-benefit perspective, as illustrated in Exhibit B, Tab 7, Schedule 1, and in Exhibit I, Tab 1, Schedules 9 and 10.
33. Subsequent to the submission of responses to interrogatories Hydro One, at the request of ED<sup>55</sup>, provided additional information pertaining to a specifically-requested scenario analyzing the use of the next largest conductor size for the Project<sup>56</sup>. After having received this additional information, ED agreed with Hydro One's position regarding the use of the proposed 1433 kcmil ACSS, stating:

*After reviewing the responses, we agree that a case has not been made for further upsizing the conductor beyond the one proposed by Hydro One.<sup>57</sup>*

---

<sup>53</sup> ED Submission, filed October 26, 2021, Pgs. 1-2

<sup>54</sup> Exhibit B, Tab 3, Schedule 1, Attachment 1

<sup>55</sup> ED's email request to Hydro One, dated October 12, 2021

<sup>56</sup> <https://www.rds.oeb.ca/CMWebDrawer/Record/728123/File/document>

<sup>57</sup> <https://www.rds.oeb.ca/CMWebDrawer/Record/728702/File/document>

<sup>57</sup> Environmental Defence Submission, filed October 26, 2021, Pg. 1

34. OEB Staff state that they believe that it would be helpful if Hydro One would provide clarification of the confidence levels of its cost estimates for all options considered in the prefiled evidence and that it would assist if Hydro One were to explain the appropriateness of a recommended option in light of any differences and overlaps of confidence distributions among options considered. Hydro One is open to providing these clarifications as requested by Board Staff, however if needed, suggest that they become part of the ‘Chapter 4 Applications under Section 92 of the Ontario Energy Board Act’<sup>58</sup>, of the ‘Filing Requirements for Electricity Transmission Applications.
35. Hydro One is open to providing information on the accuracy level of its cost estimate(s) for any project alternatives provided in Hydro One’s future leave to construct applications. Hydro One believes that, if needed, this type of standard requirement should also be included in the OEB’s, ‘*Chapter 4 Applications under Section 92 of the Ontario Energy Board Act*’, of the ‘Filing Requirements for Electricity Transmission Applications.

### **Conditions of Approval**

36. Hydro One agrees with Board Staff’s submission that the Application should be approved, subject to the OEB’s standard conditions of approval as proposed in Board Staff’s interrogatory #7.
37. Neither ED nor APPrO made specific submissions regarding Board Staff’s proposed conditions of approval.

---

<sup>58</sup>[https://www.oeb.ca/oeb/Documents/Regulatory/OEB\\_Filing\\_Req\\_Tx\\_Applications\\_Ch4\\_20140731.pdf](https://www.oeb.ca/oeb/Documents/Regulatory/OEB_Filing_Req_Tx_Applications_Ch4_20140731.pdf)

## **SUMMARY AND CONCLUSION**

38. Hydro One submits that the RTR Project's need has been well established. The IESO, which is tasked with the role of planning and needs assessment, has provided the Board with strong evidence regarding need, in both the prefiled evidence and during the discovery phase (via written interrogatories).

39. Hydro One coordinates closely with the IESO as part of the planning process to review wires and non-wires options. For this Project, a non-wire option is neither practical nor cost-effective because the east of Toronto area is forecast to have insufficient generation resources post-2026, and this wires solution will facilitate flexibility of supply across the FETT to those areas where the current levels of generation are expected to diminish<sup>59</sup>. In their submissions, both Board Staff and ED outwardly support the RTR Project, while APPrO's submission states no objection to Board approval of the Project. Hydro One agrees with OEB Staff that the Project budget demonstrates that the cost estimate is reasonable and that the Project will have only "relatively modest impacts on customers"<sup>60</sup>. Additionally, Hydro One provided sufficient evidence to demonstrate that the RTR Project is the most cost-effective from a line loss mitigation perspective and that a larger sized conductor would not be advantageous or cost-effective. The RTR Project cost will be recovered through network pool rates, and no customer contributions will be required because the line is a network pool asset that ultimately provides benefit to all provincial ratepayers.

---

<sup>59</sup> Exhibit B, Tab 3, Schedule 1, Attachment 1 and Attachment 3

<sup>60</sup> OEB Staff Submission received October 27, 2021, Pg. 7

40. In any event, Hydro One and the IESO do not believe it would be appropriate to establish APPrO's suggested criteria as minimum requirements for a need assessment. The circumstances of individual leave to construct applications and the corresponding need assessments vary widely, and there is no one-size-fits-all assessment. For example, a requirement to conduct public stakeholdering of the relevant supply need and identify potential compensation framework options for alternative supply resources in every case (as suggested by APPrO) would be cumbersome and unnecessary where non-wires alternatives are incapable of meeting an identified reliability need.<sup>61</sup>

41. Hydro One is pleased to receive Board Staff's comments and agrees with their observations and conclusion:

*OEB staff appreciates that cost estimates for alternatives will not always have the same maturity or range of accuracy. The different confidence levels of transmission options assessed in this application were communicated through interrogatory responses. OEB staff has no concerns with the fact that Hydro One and/or the IESO have assessed options that have different levels of cost estimate confidence – in this case, the differences are not necessarily determinative, in OEB staff's view.<sup>62</sup>*

42. Hydro One submits that the role of the Board is to determine whether the RTR Project is in the public interest when considering price, reliability and quality of electricity service<sup>63</sup>. Hydro One has provided such evidence. The Project will provide increased reliability benefits to the transmission network and meet the IESO-identified need within the time it has requested the additional capacity be available.

---

<sup>61</sup> See Decision and Order, EB-2020-0265, *Hydro One Networks Inc., Application for leave to reconductor existing transmission circuits between Hawthorne transmission station and Merivale transmission station*, where the Board determined that the IESO appropriately screened-out non-wires alternatives as infeasible and not warranting further consideration.

<sup>62</sup> OEB Staff Submission received October 27, 2021, Pg. 6

<sup>63</sup> Chapter 4 of the Filing Requirements for Electricity Transmission Applications, Pg. 9



43. Hydro One submits that the RTR Project is in the public interest in accordance with s.96 of the OEB Act and that the Application should be approved as filed.

All of which is respectfully submitted.