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Director – Major Projects and Partnerships  
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BY COURIER

July 24, 2018

Ms. Kirsten Walli  
Board Secretary  
Ontario Energy Board  
Suite 2700, 2300 Yonge Street  
P.O. Box 2319  
Toronto, ON M4P 1E4

Dear Ms. Walli:

**EB-2018-0098 – Hydro One Networks Inc.'s Section 92 - Kapuskasing Area Reinforcement Project – Reply Argument**

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Pursuant to Procedural Order No. 3 in this proceeding, please find attached Hydro One Networks Inc.'s Reply Argument.

An electronic copy of this has been filed through the Ontario Energy Board's Regulatory Electronic Submission System (RESS).

Sincerely,

ORIGINAL SIGNED BY JOANNE RICHARDSON

Joanne Richardson

**REPLY ARGUMENT OF HYDRO ONE NETWORKS INC.**

**EB-2018-0098**

1. In light of the submissions of the July 17, 2018 submissions of the Independent Electricity System Operator (“IESO”), Ontario Energy Board Staff (“Board Staff”) and Atlantic Power Corporation (“APC”), and pursuant to Procedural Order No. 3 in this proceeding, Hydro One Networks Inc. (“Hydro One”) is providing this Reply Argument.
  2. Hydro One’s Kapsukasing Area Reinforcement Project (“KAR Project” or the “Project”) is in the public interest. The IESO and Board Staff are supportive of Hydro One’s leave to construct application (“the Application”). The IESO recommends completing the Hydro One KAR Project to meet the reliability needs of the Kapuskasing area that will emerge in June 2020<sup>1</sup>. Board Staff submit that they do not oppose the Project and that Hydro One’s KAR Project represents the most viable solution for providing the required reliability. APC, however, continues to suggest that the Project is not in the public interest and that the Application should be rejected “pending a more fulsome [sic] analysis of project need and alternatives”<sup>2</sup>. Consequently, the lion’s share of this Reply Argument will focus on addressing the arguments of APC.
  3. Hydro One will organize this Reply Argument to align with the statutory objectives that must be considered by the OEB in assessing a leave to construct application as articulated in section 96 (2) of the *Ontario Energy Board Act, 1998* (the “Act”). In summary, contrary to the position of APC, this Reply Argument will demonstrate that the submissions of APC should be rejected because all alternatives that meet the same objective have been reviewed. Hydro One submits that the KAR Project is in the public interest and that the Application should be approved as filed.
- Price, Reliability and Quality of Electricity Service: Comparing and Assessing Alternatives*
4. For contextual purposes it is important to establish the IESO-identified need for the Project. The need for the Project is articulated at Exhibit B, Tab 3, Schedule 1, Attachment 1, pages 4 through 5 of the prefiled evidence. It can be summarized as

<sup>1</sup> EB-2018-0098 – IESO Final Submission – July 17, 2018 – Page 1

<sup>2</sup> EB-2018-0098 – APC Final Submission – July 17, 2018 – Paragraph 91

1 being required to address capacity and voltage performance needs that emerge due to  
2 the expiry of local generation facilities' contracts.

3  
4 5. As documented in the aforementioned reference, the bulk system study for the area  
5 informed the IESO that after the generation contracts expire, those facilities can no  
6 longer be relied upon to meet the local electricity needs. Supplying load in the Area  
7 will become dependent on external resources resulting in increased flows on  
8 surrounding circuits. The IESO determined through studies that reliance on external  
9 supply resources would not meet reliability standards, thus violating Ontario  
10 Resource and Transmission Adequacy Criteria.

11  
12 6. To address the identified capacity and voltage performance needs in the Kapuskasing  
13 area, the IESO recommended increasing the capacity of circuit H9K between  
14 Carmichael Falls JCT and Spruce Falls JCT and connecting a capacitor bank at the  
15 Kapuskasing TS 115 kV bus. For reference purposes, circuit H9K is of 1950 vintage,  
16 and it is predicted to have approximately 10-15 years of service left before  
17 reconductoring is required<sup>3</sup>. The IESO outlined that reinforcing these facilities would  
18 satisfy the applicable reliability requirements of ORTAC. This IESO request is  
19 ultimately what Hydro One is proposing to accomplish through the Project.

20  
21 7. APC intervened late in this Application with the intention to test the evidentiary  
22 record as it relates to project need, and whether alternatives were sufficiently  
23 considered based on accurate and reliable evidence<sup>4</sup>. In argument, APC purports that  
24 the two existing local generation facilities, the Calstock GS and the Kapuskasing GS,  
25 owned by APC, intend to continue to meet local needs at a cost that APC unilaterally  
26 argues to be the minimum reasonable cost to ratepayers<sup>5</sup>.

27  
28 8. APC has filed no supporting cost-based evidence to support its claim. Despite the  
29 OEB amending the procedural order of this proceeding to allow APC to file evidence  
30 to assist the OEB in addressing APC concerns<sup>6</sup>, APC filed no evidence to illustrate  
31 the cost of reconfiguring Calstock GS and the currently "mothballed" Kapuskasing  
32 GS.

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<sup>3</sup> EB-2018-0098 – Hydro One Prefiled Evidence – February 5, 2018 – Exhibit B, Tab 5, Schedule 1, Page 1

<sup>4</sup> EB-2018-0098 – APC Intervenor Letter – May 1, 2018 – Page 1

<sup>5</sup> EB-2018-0098 – APC Final Submission – July 17, 2018 – Paragraph 11

<sup>6</sup> EB-2018-0098 – Ontario Energy Board Procedural Order 2 – June 1, 2018

1 9. Since no information was provided in APC's evidence, and in an effort to assist the  
2 OEB, both Board Staff and the IESO requested information on costs from APC  
3 through the interrogatory process. Yet again, APC failed to divulge any cost-based  
4 evidence. APC either completely failed to respond to the cost estimate request<sup>7</sup> or  
5 suggested that it did not have the necessary information to complete the cost analysis.  
6 Rather than seek the information to answer the interrogatory, in response to OEB  
7 staff, APC provided a ratepayer break-even analysis laden with assumptions<sup>8</sup>. That  
8 analysis indicates that ratepayers will experience no rate impact as long as the per  
9 annum contract with APC is less the \$19.19M – a value that exceeds the total cost of  
10 the KAR Project-specific costs of \$17.07M<sup>9</sup> as discussed in Hydro One's Argument-  
11 in-Chief<sup>10</sup>.

12  
13 10. It is apparent from the record that APC does not want to disclose costs. Opportunities  
14 have been afforded to APC to complete a cost comparison with the KAR Project in  
15 this proceeding, but APC has not led the requirement evidence. A similar analysis  
16 laden with different assumptions, similar to the ratepayer break-even analysis, could  
17 have resulted in the cost analysis requested by Board Staff. Alternatively, APC could  
18 have easily requested any unknown information from Hydro One or the IESO to  
19 complete the comparison. The only credible evidence on the record of this  
20 proceeding for generation solutions are the estimates brought forward by the IESO.  
21 As documented by the IESO in its submissions, to assess generation alternative costs  
22 "the IESO used costs for similar IESO-contracted facilities in Ontario as well as third  
23 party cost estimates. These sources provide a reasonable and reliable basis to  
24 determine the cost range for generation options"<sup>11</sup>. All generation alternatives  
25 explored by the IESO are substantially more expensive than the Hydro One KAR  
26 Project as documented in evidence<sup>12</sup>.

27  
28 11. APC attempts to argue that the interrogatory requests put forward by the IESO are  
29 indicative of a lack of consultation and alternatives reviewed. APC asserts that  
30 through the interrogatory process, the IESO *for the very first time* started to explore  
31 options identified in what is loosely being qualified as evidence provided by APC<sup>13</sup>.  
32 APC suggests that a more in-depth assessment of the alternatives is required in order  
33 for the OEB to approve the Application. In doing so, APC references the Minister

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<sup>7</sup> EB-2018-0098 – APC Interrogatory Responses – June 21, 2018 - Exhibit K - Page 19

<sup>8</sup> EB-2018-0098 – APC Interrogatory Responses – June 21, 2018 - Exhibit K - Page 7

<sup>9</sup> EB-2018-0098 – Hydro One Pre-filed Evidence – February 5, 2018 – Exhibit B, Tab 3, Schedule 1, Attachment 1, Page 7

<sup>10</sup> EB-2018-0098 – Hydro One Argument in Chief – July 5, 2018 – Paragraph 25

<sup>11</sup> EB-2018-0098 – IESO Final Submission – July 17, 2018 – Page 3

<sup>12</sup> EB-2018-0098 – Hydro One Prefiled Evidence – February 5, 2018 – Exhibit B, Tab 3, Schedule 1, Attachment 1 - Page 7 - 8

<sup>13</sup> EB-2018-0098 – APC Final Submission – July 17, 2018 – Paragraph 47

1 directive to the IESO provided in Hydro One's interrogatory responses that the IESO  
2 continue to consider Non-Utility Generators ("NUGs") as options to maintain  
3 regional reliability<sup>14</sup>. APC further argues that Hydro One, as the transmitter, ought to  
4 have considered non-transmission alternatives and pursued those alternatives if they  
5 were more economically efficient in a manner that is analogous to distributors and  
6 conservation and demand management programs<sup>15</sup>.

7  
8 12. Hydro One disagrees. No further assessment of alternatives is required. To begin,  
9 the assessment to pursue a generation alternative or a transmission alternative is  
10 completed by the IESO, not the transmitter. The core of the IESO's mandate is a  
11 requirement to plan, operate and maintain the reliability of Ontario's electricity  
12 system, ranging from minute-to-minute operations to long-term system planning<sup>16</sup>.  
13 Consistent with the Ministerial Directive, the IESO considered generation alternatives  
14 in their assessment of the need for the Project and decided that a transmission solution  
15 was a more prudent investment, as the generation alternatives were all substantially  
16 more expensive than the KAR Project or, in the alternative, the generation  
17 alternatives could not meet the reliability needs of the area. Furthermore, Hydro One  
18 is of the view that the IESO was not confounded by APC's evidence, but rather,  
19 through the interrogatory process, the IESO was seeking to ascertain what was  
20 intended by various unsubstantiated claims in the APC evidence that to date remain  
21 unsubstantiated<sup>17</sup>. Despite the evidentiary record in this proceeding, the IESO's  
22 position has not wavered:

23 *"All Power Plant Options presented by APC either would not be*  
24 *viable in meeting the reliability needs or would not be cost-*  
25 *competitive alternatives to the proposed project"*<sup>18</sup>.

26 13. The APC documentation on this record references multiple pieces of *evidence* in EB-  
27 2005-0315, a proceeding to assess electricity supply to York Region that predates the  
28 current leave to construct filing requirements<sup>19</sup>. APC argues that this record is not as  
29 voluminous as EB-2005-0315 with respect to assessing generation versus

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<sup>14</sup> EB-2018-0098 – Hydro One Interrogatory Responses – May 23, 2018 - Exhibit I, Tab 1, Schedule 6

<sup>15</sup> EB-2018-0098 – APC Final Submission – July 17, 2018 – Paragraphs 32 and 33

<sup>16</sup> IESO Strategic Plan 2016 – 2020 - [www.ieso.ca/-/media/files/ieso/document-library/.../ieso-strategic-plan\\_2016-2020.pdf](http://www.ieso.ca/-/media/files/ieso/document-library/.../ieso-strategic-plan_2016-2020.pdf) - Page 8

<sup>17</sup> EB-2018-0098 – Atlantic Power Interrogatory Responses – June 21, 2018 - Exhibit K – IESO 3 - Page 19

<sup>18</sup> EB-2018-0098 – IESO Final Submission – July 17, 2018 – Page 3

<sup>19</sup> Ontario Energy Board - Filing Requirements for Transmission Applications Chapter 4 Applications Under s. 92 of the Ontario Energy Board Act – July 31, 2014

transmission alternatives<sup>20</sup> and that this Application lacks detailed or impartial evidence on the technical suitability of various generation alternatives<sup>21</sup>.

14. Hydro One will reference only the *decision* of that aforementioned proceeding in this Reply Argument, with the following extract:

*“With respect to generation or demand management, the Board’s authority is more limited. For example, on the generation side, the Board licences generators, but cannot compel anyone to build generation facilities. The OPA<sup>22</sup> has the statutory power to enter into contracts relating to the ‘adequacy and reliability of electricity supply’, the ‘procurement of electricity supply and capacity’, and the ‘procurement of reductions in electricity demand and the management of electricity demand’. As a consequence, the OPA has both the mandate to support adequacy, reliability and security of supply and the ability to enter into contracts to support new supply or demand reduction”<sup>23</sup>.*

15. It is important to delineate that the Project is being driven by the IESO – not Hydro One. The IESO, whose statutory powers and mandates are documented above, determined that the Hydro One KAR Project is the most prudent electricity investment to address the Kapuskasing area needs based on its own analysis<sup>24</sup> and not on Hydro One’s analysis. To question the credibility and impartiality of the IESO is preposterous and without merit. Though APC may not like the results, it is obvious, based on the record, that the IESO did indeed consider generation alternatives but that such alternatives either did not meet the needs of the Kapuskasing area or were cost-prohibitive. As a result the IESO did not explore these alternatives further. APC itself admits that the level of detailed analysis done in the EB-2005-0315 case is not required for this Application<sup>25</sup>. Hydro One agrees. The costs to implement the two different options are so drastically different that it would be inefficient and incomprehensible to continue to investigate the generation alternative that is more than double the cost of the preferred Hydro One KAR solution.

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<sup>20</sup> EB-2018-0098 – APC Final Submission – July 17, 2018 – Paragraph 36

<sup>21</sup> EB-2018-0098 – APC Final Submission – July 17, 2018 – Paragraph 42

<sup>22</sup> Now IESO through amendments to the Electricity Act on January 1, 2015

<sup>23</sup> EB-2005-0315 – Ontario Energy Board Decision and Order – November 22, 2005 – Page 9

<sup>24</sup> EB-2018-0098 – Hydro One Interrogatory Response – May 23, 2018 – Exhibit I, Tab 1, Schedule 2 Attachment 1

<sup>25</sup> EB-2018-0098 – APC Final Submission – July 17, 2018 – Paragraph 43

1 16. Upon reading APC's final submissions, Hydro One has realized that a minor  
2 correction is required to paragraph 15 of the Hydro One Argument-in-Chief. The first  
3 sentence of that paragraph should read that Hydro One's view is that the efficient and  
4 optimized development of the electricity system is of a higher value than the interests  
5 of any single operator within the system.

6  
7 17. It is clear, based on the record of this proceeding, including the corroborative  
8 evidence of the IESO, that the most efficient way to address the Kapuskasing area  
9 needs is through the KAR Project. Contrary to the assertion made by APC that this is  
10 a belt-and-suspenders-type exercise, advancing reconductoring work on the 70-year  
11 old circuit, H9K, that would otherwise have occurred regardless of the identified  
12 imminent need, is not only the most cost-effective solution to address the  
13 Kapuskasing area needs but it will also allow the IESO the flexibility to competitively  
14 procure generation through the incremental capacity auction. This effective long-  
15 term system planning approach will address the Kapuskasing area reliability needs  
16 identified by the IESO and benefit ratepayer prices relative to generation alternatives.

17  
18 18. As articulated in this proceeding, one or both non-utility generators could clear the  
19 incremental capacity auction that the IESO is currently designing. Hydro One  
20 anticipates that this will likely be at a more cost-effective price than what is currently  
21 stipulated in the fixed contract as envisioned by the Market Renewal Initiative  
22 contemplated in the Long Term Energy Plan<sup>26</sup>. In effect, APC is not completely  
23 incorrect when it states that a transmission line without power to transmit is neither  
24 used nor useful. However, whether that power will ultimately be generated by APC  
25 remains to be determined through the incremental capacity auction. Furthermore,  
26 regardless of whether one or both generators clear the incremental capacity auction,  
27 the Hydro One KAR Project would still be necessary. This is the case because  
28 although the date of the first capacity auction is still being determined, current  
29 forecasting from the 2017 LTEP indicates a need for incremental capacity to emerge  
30 in the mid-2020s, resulting in a continued need for the Project between the time of  
31 contract expiry in 2020 and the commitment time of a capacity auction. As a result,  
32 Hydro One continues to highlight that whatever the APC costs ultimately are, they  
33 will all be in addition to the cost of the Hydro One KAR Project. Therefore,  
34 pursuing a generation alternative would negatively impact customer prices.

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<sup>26</sup> 2017 Ontario Long Term Energy Plan – Delivering Fairness and Choice – October 26, 2017 – Page 36

1 19. Finally, contrary to APC's starting premise that the need for the Project has changed  
2 over time<sup>27</sup>, the IESO Report titled NUG Framework Assessment Report ("the  
3 Report"), published September 1, 2015, and referenced by APC in its final  
4 submissions articulates congestion issues on the transmission system. The Report, as  
5 outlined in the letter from the IESO to Hydro One<sup>28</sup>, identified that following the  
6 contract expiry of the APC generation sites, local reliability standards may not be met  
7 without further reinforcement. The need for the Project has not changed.  
8 Transmission reinforcement in the area is needed to address reliability needs.

9  
10 20. For all the reasons outlined above, as originally documented in the Report, Hydro  
11 One confirms that a need for the Project remains. Since the Report, the need is  
12 augmented by the expiration of the local generation contracts, current forecasting  
13 from the 2017 LTEP that indicates a need for incremental capacity to emerge in the  
14 mid-2020s, and pending market renewal initiatives such as the incremental capacity  
15 auction contemplated by the 2017 Ontario Long Term Energy Plan. Contrary to any  
16 unsubstantiated claims from APC, there is a need for this Project, and the most cost-  
17 effective approach to address the identified need is to complete the Hydro One KAR  
18 Project.

19  
20 *Promoting the Use of Renewable Energy Sources Consistent with the Policies of the*  
21 *Government of Ontario*  
22

23 21. Hydro One's position on this matter is clearly documented in Hydro One's  
24 Argument-in-Chief<sup>29</sup>. Consequently, Hydro One's submissions on this matter are  
25 consistent with those provided in the Hydro One Argument-in-Chief and summarized  
26 succinctly by stating that the Project does not preclude the promotion of the use of  
27 renewable energy sources consistent with the policies of the Government of Ontario.  
28 These submissions, therefore, will be brief and limited to addressing only  
29 inaccuracies or new arguments that have been made in the APC submission.

30  
31 22. APC does not refute any of Hydro One's position in the Hydro One Argument-in-  
32 Chief other than to document that the Ministerial Directive to the IESO, issued  
33 December 16, 2016, requested that the IESO "continue to consider NUGs as options  
34 to maintain regional reliability". APC also documents that Calstock GS is a

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<sup>27</sup> EB-2018-0098 – APC Final Submission – July 17, 2018 – Paragraph 36

<sup>28</sup> EB-2018-0098 – Hydro One Interrogatory Response – May 23, 2018 - Exhibit I, Tab 1, Schedule 2, Attachment 1

<sup>29</sup> EB-2018-0098 – Hydro One Argument in Chief – July 5, 2018 – Paragraphs 6-11



1 renewable biomass facility and that it is APC's view that the IESO has not met the  
2 obligation to consider NUGs to maintain regional reliability<sup>30</sup>.

3  
4 23. The evidence throughout this proceeding does document that Calstock GS is a  
5 renewable biomass facility and the mothballed Kapsukasing GS is not. The IESO in  
6 its submission reiterates that it "is important to note that for any generation option,  
7 the generation must have rapid start-up capabilities or run as baseload generation at  
8 minimum loading point in order to be available to address the specific reliability  
9 needs"<sup>31</sup>. Kapuskasing GS' startup time is approximately 20 minutes as explicitly  
10 identified in the APC's submission<sup>32</sup>. Calstock's startup time comparatively,  
11 however, is approximately five hours to reach minimum load based on past  
12 operations<sup>33</sup>. The costs to reconfigure and/or modify either of these facilities, despite  
13 not being provided by APC in this proceeding, have indeed been considered by the  
14 IESO<sup>34</sup>, consistent with the Minister directive, but were deemed to either not meet the  
15 reliability needs of the area or were cost-prohibitive in light of the Hydro One KAR  
16 Project alternative.

17  
18 24. The record is clear. Hydro One's KAR Project does not preclude the promotion of  
19 renewable energy sources in a manner that is consistent with the policies of the  
20 Government of Ontario. The Project is the most cost-effective solution to address the  
21 needs identified by the IESO. Hydro One supports the submissions of the IESO and  
22 Board Staff, and Hydro One requests that the Application be approved as submitted  
23 by August 31, 2018, in order to effectively meet the in-service date requested by the  
24 IESO.

25  
26 25. All of which is respectfully submitted.

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<sup>30</sup> EB-2018-0098 – APC Final Submission – July 17, 2018 – Paragraph 82

<sup>31</sup> EB-2018-0098 – IESO Final Submission – July 17, 2018 – Page 2

<sup>32</sup> EB-2018-0098 – APC Final Submission – July 17, 2018 – Paragraph 56

<sup>33</sup> EB-2018-0098 – APC Interrogatory Responses – June 21, 2018 - Exhibit K - Page 16

<sup>34</sup> EB-2018-0098 – Hydro One Prefiled Evidence – February 5, 2018 – Exhibit B, Tab 3, Schedule 1, Attachment 1 - Page 7 - 8