

Hydro One Networks Inc.

8th Floor, South Tower
483 Bay Street
Toronto, Ontario M5G 2P5
www.HydroOne.com

Tel: (416) 345-5700
Fax: (416) 345-5870
Cell: (416) 258-9383
Susan.E.Frank@HydroOne.com

Susan Frank

Vice President and Chief Regulatory Officer
Regulatory Affairs



BY COURIER

August 2, 2013

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

Dear Ms. Walli:

EB-2013-0053 – Hydro One Networks Inc.'s ("HONI") Section 92 – Guelph Area Transmission Refurbishment Project – Hydro One Networks' Reply Argument.

I am attaching two (2) copies of Hydro One Networks' Reply Argument.

An electronic version of the Reply Argument has been filed using the Board's Regulatory Electronic Submission System (RESS) and the proof of successful submission slip is attached.

Sincerely,

ORIGINAL SIGNED BY SUSAN FRANK

Susan Frank

Attach.

c. Intervenor (electronic only)

ONTARIO ENERGY BOARD

IN THE MATTER OF *the Ontario Energy Board Act, 1998*;

AND IN THE MATTER OF an application by Hydro One Networks Inc.
for an Order granting leave to construct to upgrade existing transmission line facilities.

**REPLY OF HYDRO ONE NETWORKS INC.
TO THE SUBMISSIONS OF BOARD STAFF AND
ENVIRONMENTAL DEFENCE**

These are the reply submissions of Hydro One Networks Inc. (“Hydro One”) to Board staff’s and Environmental Defence’s submissions, both dated July 26, 2013.

REPLY TO BOARD STAFF SUBMISSION

Hydro One agrees with the two options presented by Board staff for classifying the Guelph Area Transmission Refurbishment (“GATR”) Line Connection Project Assets as Network Assets. Hydro One agrees that these are reasonable options pending further amendments to the Transmission System Code and should not delay the classification of the Project Assets as Network Assets.

REPLY TO ENVIRONMENTAL DEFENCE SUBMISSION

Hydro One’s reply to the submission of Environmental Defence addresses the following main areas:

- Planning for a reliable electricity supply;
- Load forecasts for the Kitchener-Waterloo-Cambridge-Guelph (“KWCG”) area;
- Conservation and demand management (“CDM”);
- Distributed generation (“DG”); and
- Environmental Defence’s request for a statement from the Board on the assessment of CDM and DG alternatives.

1 There is one preliminary issue that should be addressed. Environmental Defence has
2 attached to its argument a compendium containing new evidence (e.g., government and
3 agency statements, and a private email). Hydro One submits that this evidence is largely
4 irrelevant but, in any event, should be disregarded as it is not appropriate to introduce new
5 evidence into the record at this time. Hydro One's reply submission will focus on the
6 evidence that has been properly filed and examined through the course of this proceeding,
7 and will not address any new evidence submitted by Environmental Defence.

8 9 **Planning for a Reliable Electricity Supply**

10 Environmental Defence's submission that the Ontario Power Authority ("OPA") fails to
11 account for the "peakiness" of the demand for electricity in the KWCG area by sizing
12 infrastructure based on peak demand, rather than average demand levels, is contrary to
13 well-established planning standards.

14
15 The Independent Electricity System Operator's Ontario Resource and Transmission
16 Assessment Criteria ("ORTAC") establishes the planning criteria and assumptions to be
17 used for assessing the present and future reliability of Ontario's transmission system.
18 ORTAC is itself based on North American Electric Reliability Corporation ("NERC") and
19 Northeast Power Coordinating Council ("NPCC") standards.

20
21 In accordance with ORTAC, the electricity system supplying a local area must be planned
22 with sufficient capability under peak demand conditions to withstand specific outages
23 prescribed by ORTAC while keeping voltages, line and equipment loading within
24 applicable limits¹. Planning electricity infrastructure to peak demand conditions is a
25 standard and well-established practice used across North America, and it is appropriate for
26 the KWCG area.

27

¹ EB-2013-0053 Exhibit B, Tab 6, Schedule 3

Load Forecasts for the KWCG Area

Hydro One strongly disagrees with Environmental Defence's criticism that the OPA overestimated the need for increased capacity in the KWCG area because the Local Distribution Company ("LDC") forecasts used as the basis for the KWCG area gross demand forecast are, in the view of Environmental Defence, inconsistent and unverified, and based on unrepresentative and arbitrary historical time periods.

KWCG area LDCs are best positioned to assess the expectation of future gross electricity demand in their service territory, particularly over the near and medium terms. LDCs have local knowledge of the regional customer mix, expected customer connections, and municipal/regional growth plans, which are key electricity demand drivers.

While area LDC forecasts provide the best forecast information, Hydro One and the OPA recognize that there is uncertainty in any demand forecast. To address this uncertainty, the OPA conducted a sensitivity analysis that considered the impact of a higher and lower demand scenario. This sensitivity analysis confirmed the need for the project. As discussed in Exhibit I, Tab 2, Schedule 26-S, "while lower than expected demand growth may defer the supply capacity [need] in the Kitchener-Guelph 115 kV [subsystem into] the longer term, the majority of the needs in the KWCG area will need to be addressed in the near-to-medium timeframe under the lower demand scenario".

Further, with respect to longer-term demand forecast expectations, as discussed in Exhibit I, Tab 1, Schedule 1, the OPA reviewed the long-term demand forecast for the KWCG area, and identified factors such as forecast GDP, population and household growth that support the demand growth trend for the area. This analysis was based on economic forecasts for the Kitchener Census Metropolitan Area, which were obtained from an independent economic forecast service. Accordingly, Environmental Defence's assertion that neither Hydro One nor the OPA undertook any independent verification of the LDC forecasts is incorrect.

Over the near- to medium-term planning horizon, supply capacity and other reliability needs have been identified in the KWCG area.² Demand in the South-Central Guelph subsystem currently exceeds the load meeting capability of the existing transmission system, and the Kitchener and Cambridge, and Waterloo-Guelph subsystems currently do not comply with prescribed service interruption criteria. The recommended integrated solution of conservation and demand management, distributed generation, and transmission will address these existing needs, as well as improve the reliability of electricity supply to the area in order to meet forecast demand growth over the near- and medium-term. Over the longer-term, as indicated in Exhibit B, Tab 1, Schedule 5, monitoring growth in electricity demand, as well as monitoring the achievement of conservation and demand management and distributed generation in the area, will be key components of ongoing electricity planning for the KWCG area.

Hydro One, as part of the KWCG working group, has adopted the forecasts provided by the KWCG area LDCs, and disagrees with Environmental Defence's specific criticisms. Notably, Environmental Defence has not submitted any proposed alternate forecast methodologies, nor any alternate forecast for the KWCG area.

Conservation and Demand Management

Environmental Defence's argument that the OPA is not pursuing all cost-effective CDM opportunities in the KWCG area, and that these CDM opportunities can help to potentially avoid the GATR project, ignores the significant contribution of CDM to the integrated solution for the KWCG area and the infeasibility of addressing the remaining needs through CDM.

The evidence shows that CDM is not a feasible solution to address the near- and medium-term capacity and other reliability needs of the KWCG area. While CDM is an important component of the integrated solution proposed for the KWCG area, as discussed in

² Exhibit B, Tab 1, Schedule 1

1 Exhibit I, Tab 2, Schedule 44, the amount of additional CDM that would be required to
2 fully address the KWCG area's near- and medium-term capacity needs is significant
3 compared to the amount of planned CDM, especially for the South-Central Guelph and
4 Cambridge subsystems.

5
6 Hydro One specifically disagrees with Environmental Defence's assertion that incremental
7 CDM could potentially avoid the GATR project. The reason why incremental CDM is not
8 a feasible alternative to the GATR project is explained in detail by the OPA (see Exhibit I,
9 Tab 2, Schedules 44 and 26-S) and is supported by Board staff: "Board staff agrees with
10 the OPA's view, included in [Exhibit I, Tab 2, Schedule 26-S], that additional CDM is not
11 a feasible means of addressing the KWCG areas near- and medium-term needs"³.

12 13 **Distributed Generation**

14 Hydro One disagrees with Environmental Defence's submission that DG is a feasible and
15 realistic option to meet the needs of the KWCG area. It also disagrees with
16 Environmental Defence's submission that DG is more cost-effective than the proposed
17 GATR project and can reduce the need for additional baseload generation, such as new or
18 re-built nuclear generation, in Ontario.

19
20 The evidence shows that DG is not a feasible option for addressing the near- and
21 medium-term needs of the KWCG area. Environmental Defence's allegation that the
22 OPA's concerns regarding DG uncertainty are "disingenuous" is wholly unwarranted.
23 There is considerable uncertainty associated with the development of further DG facilities
24 in the KWCG area, which contrary to Environmental Defence's submission, is not simply
25 due to a "failure of the OPA to sign contracts for new DG projects". In their submission,
26 Board staff acknowledged this uncertainty, noting that the DG projects cited as prospects
27 in the KWCG area by Environmental Defence are "now all subject to the new directive by

³ Board staff submission, page 4

1 the MOE [Ministry of Energy] to the OPA dated June 12, 2013 which would impose
2 further caps on small FIT projects, and no further procurement for Large FIT projects”⁴.

3
4 • In addition, analysis was conducted to compare the cost of additional distributed
5 generation to that of the recommended transmission reinforcements. It was concluded
6 as a result of this analysis that additional distributed generation is not cost-effective
7 when compared to the recommended transmission reinforcements. As noted in
8 Exhibit I, Tab 2, Schedule 26, this analysis, notwithstanding the allegations to the
9 contrary from Environmental Defence, included the value that distributed generation
10 resources could provide by concurrently contributing to both the local area peak
11 capacity needs, which exist today, and those of the broader system, which are
12 anticipated to emerge in 2018, thereby reducing the need for peaking generation
13 elsewhere in the province. Exhibit I, Tab 2, Schedule 26 further notes that it is
14 anticipated that the system will have sufficient generation output from the existing
15 fleet of supply resources to meet energy needs at non-peak times (including baseload
16 energy needs). Accordingly, the analysis took into account the energy displacement
17 and excess energy that could be produced through the operation of additional
18 distributed generation alternatives. Further, as noted in Exhibit I, Tab 2, Schedule 17,
19 the role of distributed generation, as part of the overall supply mix, in deferring the
20 need for nuclear refurbishments and/or new-build is a policy decision to be made by
21 the Government of Ontario as part of the Long Term Energy Plan. As such, Hydro
22 One disagrees with Environmental Defence’s argument and submits that it is not
23 appropriate to include any avoided capital costs associated with nuclear facilities in the
24 economic assessment of the GATR project.

25
26 Lastly, Environmental Defence’s criticisms that DG and CDM were not considered in
27 combination are baseless. The factors outlined above, which show that a DG solution is
28 not preferred, also apply to a combined DG and CDM solution.

⁴ Board staff submission, page 5

1 **Environmental Defence's Request for a Statement from the Board on the Assessment**
2 **of CDM and DG Alternatives**

3 Hydro One disagrees with Environmental Defence's suggestion that Hydro One was
4 unreasonably delayed in assessing the KWCG area's needs. Likewise, Environmental
5 Defence's request for a direction or statement from the Board with respect to Hydro One
6 and OPA assessing CDM and DG early in the planning process is unwarranted.

7
8 Contrary to Environmental Defence's assertions, as noted in Exhibit I, Tab 2, Schedule 5,
9 the OPA and Hydro One began to assess the needs and options of the KWCG area, based
10 on the ORTAC criteria, as part of the 2007 Integrated Power System Plan ("IPSP").
11 While the review of the 2007 IPSP was suspended in late 2008, the OPA and Hydro One
12 continued to proceed with the implementation of some of the key recommendations
13 identified in the IPSP, including the implementation of the GATR project. In 2009, the
14 GATR project was put on hold while the impacts of the economic downturn were
15 monitored. In the summer of 2010, a broader regional planning study of the KWCG area
16 was undertaken which included assessment of options to meet the needs of the KWCG
17 area, including CDM and DG. Furthermore, going forward, the Board's Regional
18 Infrastructure Planning process outlines the framework for assessing the needs and
19 alternatives in regional electricity system plans.

20
21 **Conclusion**

22 Hydro One rejects Environmental Defence's submissions that CDM and DG can meet the
23 "KWCG area's electricity needs sooner, more reliably and at a much lower cost"⁵ than the
24 recommended transmission reinforcement. Hydro One submits that Hydro One and the
25 OPA have provided clear and substantial evidence establishing the needs for the project
26 and demonstrating that the GATR project is the preferred solution for addressing these
27 needs. Environmental Defence did not, at the evidentiary stage of the proceeding, file any
28 evidence in support of its assertion. Hydro One believes that the Guelph Area

⁵ Environmental Defence submission, page 2

1 Transmission Refurbishment project is in the public interest and should be approved as
2 filed.

3

4 All of which is respectfully submitted for the Board's consideration.

5

6 DATED at Toronto this 2nd day of August, 2013.