

**Hydro One Networks Inc.**

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**LAW**

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October 20, 2010

Ms Kirsten Walli  
Board Secretary  
Ontario Energy Board  
27th Floor  
2300 Yonge Street  
Toronto, Ontario M4P 1E4

Dear Ms Walli:

**EB-2010-0229 – Hydro One Networks Request for Exemption from Certain Sections of the Distribution System Code – Hydro One Networks Argument**

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Enclosed are Hydro One Networks Inc.'s Submissions (Argument) regarding the above-noted proceeding, in which the hearing was held on October 6, 2010.

Yours very truly,

ORIGINAL SIGNED BY MICHAEL ENGELBERG

Michael Engelberg

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cc:Intervenors (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 or Orders approving exemptions to certain sections of the Distribution System Code

**SUBMISSIONS OF THE APPLICANT, HYDRO ONE NETWORKS INC.**

**Introduction**

This Application addresses two situations involving proponents of renewable generation projects, which are projects encouraged and promoted by the enactment of the *Green Energy and Green Economy Act, 2009*, and by the resulting amendments to the *Ontario Energy Board Act, 1998* (“the *OEB Act*”), including, but not limited to, the Board’s mandate “to promote the use and generation of electricity from renewable energy sources in a manner consistent with the policies of the Government of Ontario, including the timely expansion or reinforcement of transmission systems and distribution systems to accommodate the connection of renewable energy generation facilities,” as stated in s. 1(1) 5 of the *OEB Act*.

The Application is driven by the need for fair treatment of generation proponents, who, for reasons beyond their control, may find their projects to be no longer financially feasible or who may lose their allocated capacity to other proponents.

- A. The first situation requires addressing the treatment of costs to mitigate technical issues which emerged only after the first renewable generation projects were either placed into service or well into construction. The technical issues were not foreseen, nor could they have been foreseen, by either the generators or the distributor, Hydro One Networks Inc. (“Hydro One” or “the Applicant”). The technical issues and the estimated costs to mitigate these issues are:
- (a) excessive voltage fluctuations arising in the case of generator connections at certain greater distances from the station, for which investments of about \$42 million may be required (“the Feeder Distance Limitations issue”);
  - (b) over-voltage conditions identified with generators using a step-up transformer with a Delta-Y winding configuration, for which installation of grounding transformers are required, requiring investments of about \$4.5 million (“the Delta-Y Transformer issue”); and
  - (c) inability to sustain reverse flow in some transformers with dual secondary windings, for which corrective investments could range from a minimum

of about \$1.5 million up to about \$45 million if all problematic transformers require replacement (“the Dual Secondary Winding Transformer issue”).

These issues must be resolved to stabilize the distribution system for all users, including load customers and generators, and these issues require a decision on cost responsibility for the measures to be taken. The affected generator proponents who are the subject of this Application (“the Subject Generators” or “the Generators” or “the Subject Generation Facilities”) applied for connection and signed Connection Cost Recovery Agreements well before these issues and their related costs were known to either the Generators themselves or to Hydro One, and these issues and their related costs could not have been known earlier. At the time that these agreements were executed, the default responsibility for corrective investments would normally have fallen with the generator. However, the rules in the Distribution System Code changed as of October 21, 2009, making investments of this type the distributor’s responsibility. Hydro One submits that under the circumstances set out in this proceeding, the Subject Generators should be treated under the new rules, despite the fact that their applications for connection were submitted prior to October 21, 2009.

- B. The second situation involves large generation project proponents, i.e. of those projects greater than 10 MW of capacity, who may risk losing their capacity allocation by undergoing the Connection Assessment and Approval process of the Independent Electricity System Operator (“the IESO”). This is a two-part process that begins after a distribution Connection Impact Assessment (“CIA”) has been done and the generator has received its capacity allocation. The IESO first completes a System Impact Assessment (“SIA”), followed by a Transmission Customer Impact Assessment (“T-CIA”) performed by Hydro One Transmission. By regulation, the IESO and Hydro One Transmission are given five months to complete the two studies, and further time is then required for the development of cost estimates for the required connection work. However, the generator must execute its Connection Cost Agreement with the distributor and pay relevant deposits within six months after receiving its capacity allocation, or else lose that allocation. The reality is that the six months will likely be insufficient for the completion of all of these tasks, particularly if cost estimates for transmission work are needed.

The common element in the cases described in A and B above is that as a result of events which are out of the generators’ control and out of the distributor’s control, generation proponents may be financially harmed or disadvantaged by certain rules in the Distribution System Code or by the way in which the Distribution System Code has been applied. Hydro One therefore submits that it is not only possible but also appropriate for the Board to address these concerns, and Hydro One states that the Board may do so while respecting the provisions of both the *OEB Act* and of relevant Regulations under the *OEB Act*, including O. Reg. 330/09.

**Part A: The Applicant's Request for Exemptions to the Distribution System Code or Changes to the Way in which the Distribution System Code Has Been Applied, with Respect to Unforeseen Technical Issues**

***Restatement of Hydro One's Requests Regarding Part A***

With respect to the Subject Generators affected by the technical issues described above, Hydro One requests the Board's:

- (i) recognition of the three proposed investment areas (the feeder distance limitations, Delta-Y transformers and dual secondary winding transformers) as renewable energy expansion investments in accordance with s. 3.2.30 of the Distribution System Code;
- (ii) approval of the proposed expenditures for the Delta-Y transformer and feeder distance limitations issues (about \$4.5 million and about \$42 million, respectively);
- (iii) approval of Hydro One Distribution's appropriately making capital contributions to Hydro One Transmission in the amounts needed to address the dual secondary winding transformer issue;
- (iv) approval of the inclusion of these renewable energy expansion investments as an addendum to Hydro One's provisionally-approved Green Energy Plan and recognition that their costs therefore become Hydro One's responsibility, rather than that of the Subject Generators, in accordance with s. 3.2.5A(a) or s.3.2.5B(a) of the Distribution System Code, as necessary;
- (v) approval of the recording of these expenditures in a variance account until their disposition at a future Hydro One Distribution rates proceeding;
- (vi) approval of the application of the allocation or split of these costs between Hydro One's Distribution ratepayers and Provincial consumers, pursuant to O. Reg. 330/09, at the 18:82 ratio already approved by the Board for the Applicant's Green Energy Plan;
- (vii) deeming, for the Subject Generators, that the qualification test for the [October 21, 2009] change in cost responsibility rules in the Distribution System Code is the date that the necessary project investments are made by Hydro One (provided that the said investments are made on or after January 1, 2010), rather than the date that the Subject Generators applied to Hydro One for a connection. Using the wording format previously used by the Board, Hydro One is asking that the Board state, "For the generation projects that are the subject of one or more of the three categories of technical issues (feeder distance limitations, Delta-Y transformers and dual secondary winding transformers) in Hydro One's Application EB-2010-0229, the Board states that the new cost responsibility rules in sections 3.2.5A (a), 3.2.5B (a) and 3.2.30 in the Distribution System Code as amended on October 21, 2009, apply to the mitigating investments made by Hydro One on or after January 1, 2010, regardless of the date of the generator's application for connection to the distributor's distribution system."

### ***Hydro One's Capability to Foresee the Technical Issues***

At the hearing, the Applicant's witnesses were asked whether Hydro One could have foreseen these issues and also, once these issues were known, why the Applicant did not identify and address them in its latest rate application.

Hydro One submits that it has made clear in its prefiled evidence and through its witnesses, that it did not foresee, nor could it have foreseen, these technical issues. As discussed in Exhibit B, Tab 1, Schedule 1, Page 5, other jurisdictions have not attempted to connect, in such a short period of time, a similar volume of distributed generators, characterized by not only a variety of energy types and sizes, but also by the freedom to choose the location of their connection, all on the distribution system. Little or no information on these issues has been available in mainstream industry journals (Exhibit B, Tab 1, Schedule 1, page 5). As noted by Ms Sabouba in Vol.1, page 162, lines 3-28 and page 163, lines 1-7, it was only through experience, i.e. after generator connections had been made and were in service, that the excessive voltage fluctuation associated with generator connections at a distance from the transformer station, for example, were observed. It then took time to determine the extent to which these issues were systemic and if so, what might be done to address them in a programmed fashion. Likewise, it was only after generation connections were made that the need to move to a different grounding standard was identified and that it would therefore be necessary to invest in new grounding transformers for some of the projects that had already been connected by the old standard (Vol. 1, page 163, lines 8-21). As well, since Ontario's entire transmission and distribution systems had been built with the intention of always carrying large amounts of generation from the transmission system to the distribution system and then continually stepping it down at lower voltage levels until the generation reached the end customer, no one -- not even the manufacturers of transformers with dual secondary windings -- had ever thought about whether and how such equipment could handle large amounts of reverse flow of generation from the distribution system up to the transmission system (Vol. 1, page 163, lines 22-28 and page 164, lines 1-11). As Mr. D'Arcey stated, Hydro One is in a unique position (Volume 1, Page 161, lines 25-28): other jurisdictions have not reported similar issues.

For the above-stated reasons, Hydro One was still in the relatively early stages of gathering and verifying information when it was developing its last rate application. Hydro One accordingly could not yet identify work or related costs in a manner sufficient or appropriate for inclusion in a rate application, as explained by Ms Sabouba in Vol. 1, page 166, line 28, page 167, lines 1-18, and page 168, line 1.

### ***Hydro One's Submissions in Support of its Requests Regarding Part A***

O. Reg. 330/09 made under the *OEB Act* says the following:

- (a) the prescribed criterion for falling within the definition of a qualifying generation facility under s. 79.1 of the *OEB Act* is that the generation facility

satisfies the criteria necessary to be a “renewable energy generation facility” under the *Electricity Act, 1998*; and

- (b) the prescribed criterion for falling within the definition of an "eligible investment" under s. 79.1 of the *OEB Act* is that the costs associated with the investment are determined to be the responsibility of the distributor in accordance with the Distribution System Code.

With respect to (a) above, there is no doubt that the Subject Generation Facilities satisfy the criterion necessary to be a “renewable energy generation facility.”

With respect to (b) above, Hydro One submits that the investments required to address the feeder distance limitations, as noted in the Applicant’s prefiled evidence at Exhibit B, Tab 1, Schedule 2, page 5, lines 9-11, are well within the types of projects listed as expansion work in section 3.2.30 of the Distribution System Code. Although the addition of a grounding transformer to address the Delta-Y transformer issue could be considered a renewable enabling improvement due to its protection function, Hydro One submits that this work also meets the definition of expansion investments in section 1.2 of the Distribution System Code, as discussed in the Applicant’s interrogatory response at Exhibit I, Tab 1, Schedule 3, page 2. Both of these are investments in distribution system assets to enable renewable energy generation connections.

With respect to the dual secondary winding transformers, which are transmission assets, Hydro One submits, as noted in the Applicant’s interrogatory response at Exhibit I, Tab 1, Schedule 9, parts (i) and (ii), that it is inappropriate in this case to recover these costs from the affected generators, but that it would be appropriate for the Board to approve Hydro One Distribution’s proposal to make capital contributions to Hydro One Transmission for the relevant mitigation work on these assets, as discussed in Exhibit I, Tab 1, Schedule 9, page 4, part (iv), as the purpose of these investments is to enable connections of renewable generators to its distribution system. According to the normal treatment of a capital contribution, the assets would remain transmission assets, but the value of Hydro One Transmission’s rate base would not include the amount contributed by Hydro One Distribution. Hydro One submits that it would be appropriate for Hydro One Distribution to record the capital contribution paid as a regulatory asset and to then apply the appropriate accounting treatment to that.

Hydro One submits that the said technical needs make it appropriate that the costs associated with feeder distance limitations and Delta-Y transformers be qualified as renewable energy expansion investments. Hydro One also submits that the purpose of the work on dual secondary winding transformers and the capital contribution mechanism described above make it appropriate for the dual secondary winding transformer investments to be treated in that manner, as well.

Hydro One has substantiated the work and the related expenditures to address these issues to the best of its ability at this time. Details of these investments are provided:

- for the feeder distance limitations issue, in Exhibit B, Tab 1, Schedule 2, pages 4-6; Exhibit I, Tab 1, Schedule 7 and Vol. 1, page 117, lines 8-14;
- for the Delta-Y transformer issue, in Exhibit B, Tab 1, Schedule 3, page 3, and Ms Sabouba's explanation in Vol. 1, page 92, lines 22-28 and page 93, lines 1-10;
- for the dual secondary winding transformer issue, in Exhibit B, Tab 1, Schedule 4, pages 4-6, Exhibit I, Tab 1, Schedule 9, iii, pages 3-4, and Vol. 1, page 93, lines 19-22.

Hydro One submits that time is of the essence in this Application. As noted in Ms Sabouba's and Mr. D'Arcey's comments in Vol. 1, pages 168-169, the affected generators are incurring costs as they proceed to connection, and it is necessary now that there be certainty on the cost responsibility for mitigation of these issues before more liabilities are incurred. Additionally, even for those generators who are already connected, if it appears to them that they will be required to pay additional costs to address the technical issues, they will need sufficient time to reassess the impacts on their projects and to seek additional financing or to determine whether seeking additional financing is even the appropriate course of action to take. As for the distributor, Hydro One also needs certainty to continue its studies and begin the required mitigation work, not only for the benefit of the Subject Generators but also for the benefit of other generators and Hydro One's load customers. Hydro One assures the Board that it has committed to taking the most prudent course of action, which is to complete its monitoring and analysis of studies and to consult with the Subject Generators on alternative options as needed, prior to making major capital investments (as stated in Exhibit I, Tab 1, Schedule 7, ii, page 3, with respect to the feeder distance limitations issue, and in Exhibit I, Tab 1, Schedule 9, iii, pages 3-4, with respect to the dual secondary winding transformer issue).

Hydro One already has a provisionally-approved Green Energy Plan. Hydro One is therefore asking that these renewable energy expansion investments that are the subject matter of this Application be included as an addendum to its Green Energy Plan and that the investments therefore become Hydro One's responsibility, rather than that of the Subject Generators, pursuant to s. 3.2.5A (a) or 3.2.5B (a) of the Distribution System Code. The result would be that the said costs would be allocated between the Applicant's distribution ratepayers and provincial consumers, as provided by O. Reg. 330/09, by utilizing the 18:82 ratio approved by the Board to apply to Hydro One's Green Energy Plan. Hydro One submits that the Board has the jurisdiction to grant the request that these investments be included as an addendum to its Green Energy Plan and to accept Hydro One's proposal to record these expenditures in the variance account which has been established for its Green Energy Plan, with later disposition during a subsequent proceeding, as is a normal regulatory course of action.

### ***Proposed Treatment of Costs for the Subject Generators***

Hydro One proposed that its treatment of the investments necessary to resolve the technical issues identified herein should be applicable to the Subject Generators only, for

the reasons provided in the prefiled evidence, by the witnesses at the hearing, and in the preceding portions of these Submissions. In summary, neither Hydro One nor the Subject Generators knew, nor could they have known, of these issues at the time that the distribution CIAs and Connection Cost Agreements were developed. The costs associated with the additional technical requirements may be substantial, and Hydro One has stated that it is not appropriate to request further funding from the Subject Generators, who had made decisions to go forward with their projects based on connection costs based on a scope of work discovered later to be too narrow. Hydro One believes that this is a fair response to these unique circumstances.

Because neither Hydro One nor the Subject Generators knew, nor could they have known, of these issues at the time that the CIAs and Connection Cost Agreements were developed, Hydro One also submits that it would be inappropriate to allocate the costs to Hydro One's Distribution ratepayers: just as Hydro One submits that the Subject Generators were not at fault for the lack of the after-acquired information, neither was Hydro One at fault for the lack of the after-acquired information. Hydro One therefore submits that its proposal for treatment of these costs as renewable energy expansion investments and, therefore, as eligible investments pursuant to O. Reg. 330/09, and as appropriate components of its Green Energy Plan, is in accordance with the Board's position as stated in its Notice of Amendments to a Code (Exhibit K1.1, October 21, 2009, EB-2010-0077, page 10). Such treatment will facilitate the achievement of the Government's policy goals regarding the connection of renewable generation, while protecting the interests of consumers by preserving incentives for generators to connect in areas where connection costs are lower (Exhibit K1.1, October 21, 2009, EB-2010-0077, page 10). Hydro One's proposal has therefore been submitted in the spirit of fairness to all parties.

### ***The Board's Concern as to Its Jurisdiction Regarding Part A***

The new Distribution System Code cost responsibility rules that came into effect on October 21, 2009, are relevant to Part A, the portion of this Application that deals with the investments necessary to solve the technical issues. S. 3.2.30 lists examples of expansions, and sections 3.2.5A(a) and 3.2.5B(a) direct distributors to fund the costs of (generation-related) expansion improvements which are included in a Board-approved plan. The Board's Notice of Amendments states:

“As stated in the June Notice and the September Notice, with respect to distribution system investments related to the connection of renewable generation facilities that are intended to be covered by the Final Amendments, the Board confirms that the Final Amendments apply only to investments associated with renewable generation projects for which an application to connect was made on, or after, today's date. The date of application means the date on which the generator files with a distributor the necessary materials to formally request a connection to the distribution system as described in the applicable portion of Appendix F of the DSC (“Process and Technical



Requirements for Connecting Embedded Generation Facilities”), which describes the different steps in the connection process for different sizes of generation facility. As set out in Appendix F of the DSC, in applicable cases the application to connect would include a request for a connection impact assessment.”

- (EB-2009-0077, Notice of Amendment to a Code, October 21, 2009, page 10)

The Subject Generators applied for their connections prior to that date. Accordingly, at the hearing (Vol. 1, page 164, lines 24-28, and page 165, lines 1-14), the Applicant was asked by the Board to address the Board’s concern that because of the need for the authority provided by s. 79.1 of the *OEB Act* (which came into force on May 14, 2009) and for the authority provided by the resulting O. Reg. 330/09 (which came into force on September 9, 2009), the Board does not have the jurisdiction to provide the Subject Generators with the investment treatment being requested by this Application. (The change of the cost responsibility from generator to distributor is provided in sections 3.2.5A and 3.2.5B of the Distribution System Code.)

Hydro One’s response is that it is only in the Board’s above-cited Notice of Amendment to a Code (October 21, 2009) that the test for falling within the new cost rules was stated to be the date of the generator’s application for connection to the distributor: not even the Distribution System Code was changed to establish that event as the test. Nothing in s. 79.1 of *OEB Act* nor anything in O. Reg. 330/09 specified that the test for falling within the new cost rules would be the date of the generator’s application for connection to the distributor: the test chosen by the Board could, instead, have been one of a number of other tests, including, without limitation, the date the distributor made the investments necessary to enable the connection, or the date that the generation proponent entered into its contract with the Ontario Power Authority (“OPA”).

Therefore, Hydro One submits that the Board clearly has the authority -- without contravening anything in s. 79.1 of the *OEB Act* or anything in O. Reg. 330/09 or anything in the amended Distribution System Code, and without taking any steps or treatments retroactive to a date earlier than October 21, 2009 -- to establish (for the Subject Generation Facilities) the following test for falling within the new cost responsibility rules established by the amended Distribution System Code: that the mitigation investments [the investments necessary to mitigate the technical issues described in this Application] were made by Hydro One on or after January 1, 2010. [See item (vii) under the heading “Hydro One’s Requests Regarding Part A” above.]

### ***The Board’s Other Questions Concerning Cost Responsibility Regarding Part A***

At the hearing, the Applicant was asked for the following information:

- I. If Hydro One is unsuccessful in this Application, on what provisions in the various contracts between Hydro One and the Generators will Hydro One rely in

the future to state that the costs of the additional work on Hydro One's system can be visited on the Subject Generators?

*The response is found in Part I of Schedule "A" to these Submissions.*

II. If Hydro One is unsuccessful in this Application, on what factors outside the various contracts will Hydro One rely in the future to state that the costs of the additional work on Hydro One's system can be visited on the Subject Generators?

*The response is found in Part II of Schedule "A" to these Submissions.*

III. How much time can Hydro One take to go back to already-connected generators to ask for additional costs?

*The response is found in Part III of Schedule "A" to these Submissions.*

IV. To what extent do the Subject Generation Projects face more than one of these technical issues?

*The response is found in Schedule "B" to these Submissions. Schedule B is a table showing each affected projects by ID number, capacity, location, in-service date, and the specific technical issue or issues affecting that project.*

## **Part B: The Applicant's Request for Exemptions to the Distribution System Code with Respect to Capacity Allocation Issues**

### ***Hydro One's Requests Regarding Part B***

To address the timing issues for the generation proponents whose proposed projects must undergo both an SIA and a T-CIA, as raised in the Introduction to these Submissions, the Applicant has proposed the following:

- a) upon completion of the distribution CIA, that capacity be allocated on a provisional basis until all the remaining studies and relevant information are complete;
- b) once the SIA and T-CIA are complete, these are provided to the generator with confirmation of the capacity allocation and notice that the timeline to execute the Connection Cost Agreement and pay the relevant deposits begins on that date;
- c) if only distribution upgrades are needed:

- (i) the time for the generator to sign a Connection Cost Agreement would remain six months but would begin from the date that the capacity allocation has been confirmed; and
  - (ii) the distributor would prepare the cost estimate for the distribution upgrades and deliver the estimate with the offer to connect, within one to four months after the generator's capacity allocation is confirmed. This period enables the distributor sufficient time to provide either a simple cost estimate or to address issues of greater complexity which may arise as a result of the SIA or T-CIA (Exhibit C, Tab 1, Schedule 1, Diagram 2 – Phase 3; and Vol. 1, page 149, lines 23-27).
- d) if both distribution and transmission work are needed:
- (i) the time for the generator to sign a CCA would be extended by one month beyond the date that the scope of work and cost estimate for the transmission upgrades are provided to the generator;
  - (ii) the distributor would prepare the cost estimate for any needed distribution upgrades and would provide the generator with a package that includes the distribution cost estimate and further information on obtaining a detailed scope of work and cost estimate for the transmission upgrades. Hydro One proposes that the generator be provided two weeks in which to assess the study results, decide whether to proceed further, and provide payment to the transmitter for the scope of the transmission work and cost estimate. Upon receipt of the payment, the transmitter would then prepare and provide the generator with a detailed scope of work and cost estimate for the required transmission upgrades. The distributor would then compile the total costs of all distribution and transmission upgrades and would complete and deliver the offer to connect.

In addition to the above, Hydro One also committed to provide reports on the status of the relevant projects in order to ensure transparency in the process, subject to a check as to how these reports could be provided without breaching the privacy of the affected proponents (Vol. 1, page 87, lines 27-28, page 88, lines 1-12).

### ***Restatement of Hydro One's Requests Regarding Part B***

During cross-examination at the hearing, Hydro One agreed to review the exemptions it requires and to restate its requests, if needed. Accordingly, Hydro One requests the following exemptions from provisions of the Distribution System Code, with the reasons noted below each section:

a) Section 6.2.4.1e (i)

“an applicant shall have its capacity allocation removed if:

- i. a connection cost agreement has not been signed in relation to the connection of the embedded generation facility within 6 months of the date on which the applicant received a capacity allocation for the proposed embedded generation facility;”

Hydro One submits that this exemption is necessary to allow sufficient time for the completion of all the needed studies, as well as any needed cost estimates for both distribution and transmission upgrades to be developed before the Connection Cost Agreement must be executed.

b) Section 6.2.4.1c

“a connection impact assessment will not be completed unless the embedded generation facility which is the subject of the application meets the following requirements at the time the application is made:

- demonstrated site control over the land on which the embedded generation facility is proposed to be located and any required adjacent or buffer lands in the form of property ownership (deed), long-term lease (lease agreement) or an executed option to purchase or lease the land.
- a proposed in-service date for the embedded generation facility which is no later than 5 years for water power projects or 3 years for all other types of projects from the initial date of application for connection or in accordance with the timelines in an executed OPA contract.”

Hydro One submits that this exemption is necessary: although, in the second requirement noted above, the phrase “in accordance with the timelines in an executed OPA contract” may seem to suggest that a proponent has some flexibility to try to renegotiate its in-service date if a delay in the execution of its Connection Cost Agreement (or other condition) threatens the originally contracted timeline, neither Hydro One nor the proponent has any assurance that this will happen. In such cases, Hydro One would then be put in the position of having to remove the proponent’s capacity for reasons beyond the parties’ control.

c) Section 6.2.16

“In the case of an application for the connection of a mid-sized or large embedded generation facility, once the impact assessment is provided to the applicant, the distributor and the applicant have entered into an agreement on the scope of the project and the applicant has paid the distributor for the cost of preparing a detailed cost estimate of the proposed connection, the distributor shall provide the applicant with a detailed cost estimate and an offer to connect by the later of 90 days after the receipt of payment from the applicant and 30 days after the receipt of comments from a transmitter or distributor that has been advised under section 6.2.17.”

Hydro One submits that this exemption is necessary, because Hydro One cannot commit to provide a cost estimate for potential transmission work within 90 days.

Hydro One originally also requested an exemption to Section 6.2.18, which says:

“A distributor shall enter into a connection cost agreement with an applicant in relation to a small embedded generation facility, a mid-sized embedded generation facility or a large embedded generation facility. The connection cost agreement shall include the following:

- a. a requirement that the applicant pay a connection cost deposit equal to 100% of the total estimated allocated cost of connection at the time the connection cost agreement is executed;”

Hydro One has reconsidered its original request and states that if the Board were to approve an exemption to section 6.2.4.1e(i), no exemption from s. 6.2.18 would be needed.

### ***Hydro One’s Responses to Other Issues Raised Regarding Part B***

Several issues were raised regarding Part B matters in the interrogatories and during cross-examination, and Hydro One’s submissions regarding those issues are as follows.

#### **a) The Applicant’s Rationale for the Exemption Requests**

A couple of the Board staff interrogatories (Exhibit I, Tab 1, Schedules 11 and 12) requested historical and average information on the various stages involved in processing generation applications through the IESO’s SIA process, the T-CIA review process and the successive timelines for development of cost estimates. In response, Hydro One submits that although it may not yet have much history under the new arrangements on which to base its concerns, it is attempting to proactively explain the issues as it perceives them and ensure that they may be addressed in time for proponents who are currently moving through the process. As Ms Sabouba noted in cross-examination, the first generators affected by this issue could lose their capacity under the current rules as early as January, 2011. Because it can generally take up to 45 days to work through the Connection Cost Agreement between the generator and Hydro One, there is no time to lose (Vol. 1, page 169, lines 9-13). The Applicant therefore submits that the Board should set some parameters within which a realistic approach adhering to the spirit of the Distribution System Code may be determined.

#### **b) The Need for Provisional Capacity Allocation**

At the hearing, Counsel for the OPA asked, if the Applicant’s proposal is approved, what reason there would be for a *provisional* allocation of capacity because, in his understanding, Hydro One could continue to simply allocate the capacity after the completion of the CIA and carry on with the needed studies and additional work, given some relaxation in the timelines (Vol. 1, page 147, lines 7-14 and page 148, lines 4-10).

Hydro One submits that not all the studies, i.e. the SIA and T-CIA, are complete at the time that the distribution CIA is finished and the capacity is first allocated to the project.

As Ms Sabouba noted, the Distribution System Code requires that there must be capacity available at all levels of the system (Section 6.2.4.1 a) and only once the SIA study is complete and no issues are found, can that capacity be confirmed (Vol. 1, page 148, lines 11-25). Hydro One also notes that if no capacity were allocated until the completion of all these studies, the generation proponent could also lose its position to other smaller generators whose applications were submitted subsequently, but which are not subject to the same degree of review (Exhibit C, Tab 1, Schedule 1, page 9, lines 26-28). For these reasons, Hydro One submits that the concept of provisional capacity allocation is an important aspect of its proposal.

c) The Timeline for Development of Transmission Cost Estimates

Some concerns were expressed about the Applicant's inability, at this time, to provide a specific timeline for the completion of cost estimates for potential transmission work needed to enable generator connections to the Hydro One distribution system. Examples of Hydro One Transmission's proposed timelines provided in its Transmission Connection Procedures (Vol. 1, page 142, lines 24-28 and page 143, lines 1-15; Exhibit K1.2) and those in a late 2009 OPA webinar (Vol. 1, page 156, lines 24-28; Exhibit K1.3) were brought forward. Hydro One had discussed the reasons for this issue in its response to an interrogatory (Exhibit I, Tab 2, Schedule 4), namely that the work required to complete the various activities is not only complex, but quite variable, based on project-specific factors. The development of the detailed cost estimate can be performed only after a detailed scope of work is complete. That fact may, in itself, entail the review of several alternatives and must accommodate project-specific characteristics.

Hydro One submits that it is clearly committed to ensure the timely connection of these generators (Vol. 1, page 45, lines 11-18) and has agreed, as noted above under the heading "Hydro One's Request Regarding Part B," to submit status reports on affected projects as determined by the Board (Vol. 1, page 87, lines 27-28, page 88, lines 1-12).

d) Applicability to Other Distributors and Generators

During cross-examination, counsel for the OPA submitted that the Part B issues raised by Hydro One also apply to other distributors with large generation proponents whose projects must undergo SIA and T-CIA reviews (Vol. 1, page 160, lines 11-14 and 22-28). This subject was also raised in an interrogatory (Exhibit I, Tab 2, Schedule 7). In its response to that interrogatory, Hydro One agreed that others are likely affected by this issue. Hydro One remains of the view that it would support any steps by the Board if the Board were to decide to initiate a proceeding with broader application to other distributors, provided that until such a decision is rendered, the Board grants Hydro One the substantive relief requested, or interim relief granting the same substantive benefits. This relief is delineated above, under the heading "Restatement of Hydro One's Requests Regarding Part B."

**ALL OF WHICH IS RESPECTFULLY SUBMITTED.**

ORIGINAL SIGNED BY MICHAEL ENGELBERG  
Michael Engelberg, Counsel for the Applicant

## Schedule “A”

### To the Submissions of the Applicant, Hydro One Networks Inc. (“Hydro One”)

*If Hydro One is unsuccessful in this Application, on what provisions in the various contracts between Hydro One and the Generators, and on what common law outside the various contracts, will Hydro One rely in the future to state that the costs of the additional work on Hydro One’s system can be visited on the generators? Also, how long can Hydro One take to go back to already-connected generators to ask for additional costs?*

*[Note: Hydro One is answering the questions above because the questions were asked by the Board at the October 6, 2010, hearing. Hydro One acknowledges that there are also contractual clauses and common law on which Generators will rely in the future to state that the costs of the additional work cannot be visited on the Generators. Hydro One respectfully submits that this Application and this Board are not the forum in which the merits of each party’s contractual and common law rights, obligations, remedies and limitation periods will or should be evaluated or determined.]*

### **Part I: Contractual clauses from various contracts between Hydro One and the Generators**

*(This list is a sampling of such clauses; there may be other clauses on which Hydro One will be relying.)*

1. The Generator acknowledges and agrees that if System Impact Assessments are being performed for this Project or this Project in conjunction with other projects, there is a risk that the scope of the Hydro One Connection Work required to be performed on Hydro One’s distribution system and/or transmission system in order for the Generation facility to be connected to Hydro One’s distribution system may change materially which would affect the Ready for Service Date and/or the Actual Cost of the Hydro One Connection Work actually required to be performed by Hydro One in order for the Generation Facility to be connected to Hydro One’s distribution system.
2. Hydro One shall perform the Hydro One Connection Work in a manner consistent with Good Utility Practice, in accordance with the Conditions of Service and the Distribution System Code, and in compliance with all Applicable Laws.
3. The Hydro One Connection Work and Hydro One’s rights and requirements hereunder, including, but not limited to:
  - (i) Hydro One’s specifications of the protection equipment on the Generator’s side of the Connection Point;
  - (ii) Hydro One’s acceptance of power system components on the Generator’s side of the Connection Point; and



- (iii) Hydro One's acceptance of the technical specifications (including electrical drawings) for the Generator's Facilities;

are solely for the purpose of Hydro One ensuring that:

- (a) the safety, reliability and efficiency of the distribution system and the transmission system are not materially adversely affected by the connection of the Generation Facility; and
- (b) Hydro One's distribution system and transmission system are adequately protected from potential damage of operating costs resulting from the connection of the Generation Facility; and
- (c) The connection will not have a material adverse effect on the quality of services received by an existing connection to Hydro One' distribution system or transmission system.

4. Subject to all Applicable Laws, Hydro One shall make all reasonable efforts to complete that portion of the Hydro One Connection Work required to promptly Connect to Hydro One's Distribution System by no later than the date that will be specified in the cost estimate study provided that:

- (a) through (j)...
- (k) the scope of the Hydro One Connection Work required to be performed on Hydro One's distribution system in order to Connect the Generation Facility does not change materially for any reason, including, but not limited to the results of the Impact Assessments;
- (l) through (m)...

5. The Generator acknowledges and agrees that:

- (a) through (c)...
- (d) if the connection of the Generator's Facilities causes problems such as, but not limited to, flicker, ferroresonance, or unacceptable harmonics the Generator shall be responsible at its sole expense to remedy the problems. Hydro One shall have the right to disconnect the Generator's Facilities if in Hydro One's sole discretion the impact of this problem(s) caused by the Generator's Facilities is unacceptable to Hydro One; and
- (e) ...

Subsection (d) above shall survive the termination of this Agreement.

6. The Generator is responsible to design, install, commission, operate and maintain its Generation Facility and its connection devices, protection systems and control systems in compliance with Hydro One's requirements so that:

- (a) the safety, reliability and efficiency of the distribution system and the transmission system are not materially adversely affected by the connection of the Generation Facility;
- (b) Hydro One's distribution system and transmission system are adequately protected from potential damage or operating costs resulting from the connection of the Generation Facility; and
- (c) the connection will not have a material adverse effect on the quality of services received by an existing connection to Hydro One's distribution system or transmission system.

7. Upon completion of the Hydro One Connection Work, the Generator acknowledges and agrees that:

- (a) through (d)...
- (e) in the event that Hydro One identifies that the Generator requires additional facilities to address the unacceptable operation of the Generator's Facilities' protections, the Generator will comply with Hydro One's written requirements within 4 months of receiving such notice, by modifying its protection facilities or settings to address the concerns;
- (f) through (g)...

8. The limitation of liability set forth in Section ... above shall not apply to damages to Hydro One's distribution system or increased operating costs resulting from the Connection of the Generation Facility to Hydro One's distribution system. The Generator shall pay Hydro One the afore-referenced costs in accordance with the invoices rendered by Hydro One for same. [This section] shall survive the termination of this Agreement.

9. All rights and remedies of Hydro One and the Generator provided herein are not intended to be exclusive but rather are cumulative and are in addition to any other right or remedy otherwise available to Hydro One and the Generator respectively at law or in equity, and any one or more of Hydro One's and the Generator's rights and remedies may from time to time be exercised independently or in combination and without prejudice to any other right or remedy Hydro One or the Generator may have or may have exercised. The parties further agree that where any of the remedies provided for and elected by the non-defaulting party are found to be unenforceable, the non-defaulting party shall not be precluded from exercising any other right or remedy available to it at law or in equity.

10. By proceeding with this Agreement without having the benefit of Hydro One performing a Connection Estimate study, the generator acknowledges:

- (a) and agrees that the Generator is assuming the risk that the scope of the Hydro One Connection Work actually required to be performed by Hydro One in order for the Generator Facility to be connected to Hydro One's distribution system may be substantially different from the scope of the Hydro One Connection Work as described in schedule "B" which may have a material

impact on the Ready for Service Date and/or the Actual Cost of the work to be performed on Hydro One's distribution system in order for the Generation Facility to be connected to Hydro One's distribution system. Notwithstanding any term in this Agreement to the contrary, the Generator will be responsible for paying the Actual Cost of any work that Hydro One performs whether such work was required to be performed or had to be revisited because Hydro One does not have a detailed scope of work; and

- (b) that Hydro One is unable to provide the Generator with any estimate of the Actual Cost of the Hydro One Connection Work and the Generator has agreed to proceed with this Agreement in any event.

11. The Generator acknowledges and agrees that any revisions to the CIA made after the execution of this Agreement [the CCRA] may result in the scope of the Hydro One Connection Work required to be performed on Hydro One's distribution system and/or transmission system in order for the Generation Facility to be connected to Hydro One's distribution system changing materially which would affect the Read for Service Date and/or the Actual Cost of the Hydro One Connection Work actually required to be performed by Hydro One in order for the Generation Facility to be connected to Hydro One's distribution system.

12. This specification roughly describes the line and station works that Hydro One will provide to Connect the Generation Facility to Hydro One's distribution system. This specification is based on the "high-level" results from the Impact Assessment and may change materially which may have a material impact on the in-service Date and/or the Actual Cost of the work. Exceptions to the specifications are identified within each sub-project plan. All materials and equipment removed will be scrapped at site unless specifically stated otherwise.

## **Part II: Common law (outside the contractual clauses)**

### The Law of Mistake

1. "...the mistake under which the parties laboured was sufficiently fundamental to enable the agreement to be set aside in equity."

- from Cheshire, Fifoot & Furmston's *Law of Contract, Thirteenth Edition*, 1996, p. 249, citing the English Court of Appeal decision in *Magee v. Pennine Insurance Co. Ltd.* ([1969] 2 QB 507)

2. "It seems to me that, both on principle and on authority, when once the Court finds that an agreement has been come to between parties who were under a common mistake of a material fact, the Court may set it aside, and the Court has ample jurisdiction to set aside the order founded upon that agreement."

- from *Huddersfield Banking Co. Ltd. v. Henry Lister & Son Ltd.* [1895] 2 Ch 273, cited in Cheshire, Fifoot & Furmston's *Law of Contract, Thirteenth Edition*, 1996, p. 248

3. “In common mistake cases, the issue would seem to be whether the existence of such shared mistake destroyed the basis of the contract. In these instances there is no question of a lack of *consensus ad idem*. The parties have clearly agreed on the contract and its terms. However, there may be no contract, or the contract may be affected by some equitable remedy such as rectification, because the real, underlying intentions of the parties have been foiled. It is to this situation that Thompson J. was referring when he said, in *McMaster University v. Wilchar Construction Ltd.* (1971), 22 DLR (3d) 9 at 17 (Ontario High Court): ‘In mutual or common mistake the error or mistake in order to avoid the contract at law must have been based upon either a fundamental mistaken assumption as to the subject matter of the contract or upon a mistake relating to a fundamental term of the contract.’”

- from Fridman, *The Law of Contract in Canada, Third Edition*, 1994, p. 259

### **Part III: Time Limit to Seek Additional Costs from Already-Connected Generators**

Hydro One submits that it has the two-year period of time set out in the *Limitations Act, 2002*, and that the said two-year period of time begins to run, at the very earliest, on the date that Hydro One became aware that:

- (a) additional work was necessary to connect the particular generator in a manner that did not create problems for that generator, for other generators, or for Hydro One's load customers; or
- (b) additional work was or is necessary to allow the particular generator to continue to be connected without creating problems for that generator, for other generators, or for Hydro One's load customers.

**Schedule "B"**

**To the Submissions of the Applicant, Hydro One Networks Inc. ("Hydro One")**

**Projects Affected by Feeder Distance Limitation, Delta-Y Transformers and Dual Secondary Winding Transformers**

	Project Number	Project Size (MW)	Name of TS	Zone**	Actual In-Service Date	Target In-Service Date*	Distance Limitation	Delta Y	Dual Winding
<b>West</b>	<b>269</b>	12.0	Kingsville TS	1 West	3/31/2008			x	
	<b>281</b>	9.9	Tillsonburg TS	1 West	7/31/2008		x	x	
	<b>282</b>	9.9	Tillsonburg TS	1 West	8/30/2008		x	x	
	<b>855</b>	18.8	Talbot TS	1 West	12/31/2008				x
	<b>49</b>	10.0	Kent TS DESN 1	1 West	10/26/2009		x		x
	<b>76</b>	10.0	Kent TS DESN 1	1 West	11/6/2009		x		x
	<b>38</b>	10.0	Kent TS DESN 1	1 West	12/14/2009				x
	<b>69</b>	6.6	Forest Jura DS	1 West	12/18/2009		x		
	<b>1096</b>	9.9	Windsor Malden TS	1 West	5/4/2010		x	x	x
	<b>1097</b>	9.9	Windsor Malden TS	1 West	5/4/2010		x	x	x
	<b>1098</b>	9.9	Windsor Malden TS	1 West	5/4/2010			x	x
	<b>1099</b>	9.9	Windsor Malden TS	1 West	5/4/2010		x	x	x
	<b>553</b>	10.0	Modeland TS	1 West	6/29/2010				x
	<b>1012</b>	10.0	Modeland TS	1 West	7/30/2010				x
	<b>1013</b>	10.0	Modeland TS	1 West	7/30/2010				x
	<b>551</b>	10.0	Modeland TS	1 West	8/9/2010				x
	<b>554</b>	10.0	Modeland TS	1 West	8/9/2010				x
	<b>1183</b>	10.0	Modeland TS	1 West	8/13/2010				x
	<b>769</b>	1.6	Modeland TS	1 West	Connected				x
	<b>8</b>	10.0	Belle River TS	1 West		10/8/2010	x		
	<b>89</b>	10.0	Lauson TS	1 West		12/2/2010	x		
	<b>90</b>	10.0	Windsor Malden TS	1 West		10/15/2010			x
	<b>273</b>	9.9	Kent TS DESN 1	1 West		3/13/2011			x
	<b>274</b>	9.9	Kent TS DESN 1	1 West		3/13/2011	x		x
	<b>487</b>	8.5	Kent TS DESN 1	1 West		12/1/2010	x		x
	<b>689</b>	10.0	Keith TS	1 West		5/16/2011	x		
	<b>1014</b>	10.0	St. Thomas TS	1 West		3/31/2011	x	x	
	<b>11,330</b>	0.3	Windsor Malden Ts	1 West		12/31/2010			x
	<b>11,770</b>	8.9	Kent TS DESN 1	1 West		1/15/2011			x
	<b>13,400</b>	0.2	Windsor Malden TS	1 West		12/31/2010			x
	<b>14,000</b>	0.1	Kent TS	1 West		12/31/2010			x
<b>Sub-Total</b>	<b>31</b>	<b>276.1</b>			<b>19</b>	<b>12</b>	<b>14</b>	<b>8</b>	<b>23</b>
<b>West Central</b>									
	<b>1084</b>	9.9	Norfolk TS	2 West Central	11/15/2008		x	x	
	<b>113</b>	9.9	Orangeville TS DESN 1	2 West Central		4/1/2011			x
	<b>11,860</b>	9.0	Orangeville TS DESN 1	2 West Central		5/1/2011			x
<b>Sub-Total</b>	<b>3</b>	<b>28.8</b>			<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>
<b>East Central</b>									
	<b>835</b>	18.0	Havelock TS	3B East Central	4/7/2010		x		
	<b>645</b>	1.3	Nothcote DS	3B East Central		10/8/2010	x		
<b>Sub-Total</b>	<b>2</b>	<b>19.3</b>			<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>
<b>East</b>									
	<b>964</b>	10.0	Longueuil TS	4 East		9/1/2011	x		
	<b>965</b>	10.0	Longueuil TS	4 East		9/1/2011	x		
<b>Sub-Total</b>	<b>2</b>	<b>20.0</b>			<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>
<b>Northeast</b>	<b>251</b>	5.5	Timmins TS	6 Northeast		10/18/2010	x		
	<b>252</b>	15.0	Dymond TS	6 Northeast		10/26/2010	x		
	<b>11bi</b>	6.5	Manitoulin TS	6 Northeast		11/30/2010	x		
<b>Sub-Total</b>	<b>3</b>	<b>27.0</b>			<b>0</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>
<b>Grand Total</b>	<b>41</b>	<b>371.2</b>			<b>21</b>	<b>20</b>	<b>22</b>	<b>9</b>	<b>25</b>

\* Note the Target In-Service Date is based on the date initially supplied on the application and does not necessarily reflect the Forecasted In-Service date, as negotiated between Hydro One and the Proponent.

\*\* The zones are delineated as follows:

West (All land including and west of Walkerton, Listowel, Beachville and Aylmer);

West Central (Alliston, Orangeville, Guelph, Dundas, Simcoe and Lincoln);

East (All land including and east of Amprior, Perth and Brockville)

East Central (Cobden, Bancroft, Tweed, Kingston, Frankford and Picton);

Northeast (All land including and north of Manitoulin and Nipissing but excluding Thunder Bay, Fort Frances, Dryden and Kenora).