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CanWEA INTERROGATORY #1 List 1

Interrogatory

Reference: Hydro One's Evidence at Page 3

"In Hydro One's view, its non-compliance with the Code could have been anticipated and Hydro One now seeks an exemption to address this situation."

Interrogatory:

- a) At what point in time was Hydro One able to anticipate its non-compliance with the Distribution System Code (the "DSC")?
- b) At what point in time did Hydro One start increasing its staff levels as described in Hydro One's response to Board Staff interrogatory #4?

Response

Response to a) and b) are given below:

Hydro One had anticipated 500 applications over five years under RESOP. However, in the first quarter of 2006, approximately seven months before the launch of RESOP, we realized that applications were coming in at a much faster rate than anticipated compromising our ability to turn them around within the DSC timelines. We took steps to increase our resources and by mid-2006 began to increase staff in this area significantly. Please see the response to OEB Interrogatory #1.

1 **CanWEA INTERROGATORY #2 List 1**

2
3 **Interrogatory**

4
5 **Reference: Hydro One's Evidence at Page 3**

6 "Due to limitations in the distribution and transmission systems, not all CIA applications
7 are eligible for processing by Hydro One. Projects that would result in a greater than
8 60% "reverse flow" through a transformer station (TS) or that would increase feeder
9 loading above 400 Amperes are not eligible for processing."
10

11 **Interrogatory:**

- 12 a) Please provide the authority (i.e. legislation, regulation, code, licence, etc.) that
13 exempts Hydro One from its obligation to process applications under 6.2.13 of the
14 DSC on the basis of Hydro One's eligibility criteria (i.e. 60% reverse flow or 400
15 Amperes) (hereinafter referred to as "Hydro One's Eligibility Criteria").
16
17 b) Please provide the technical basis for Hydro One's Eligibility Criteria?
18
19 c) In developing Hydro One's Eligibility Criteria, did Hydro One consider the technical
20 limits that other jurisdictions place on their transformer stations? If so, please explain
21 how Hydro One's Eligibility Criteria compare to the technical limits used in other
22 jurisdictions and explain why Hydro One's Eligibility Criteria differ. If not, please
23 explain why not.
24
25 d) Please explain the necessity of Hydro One's Eligibility Criteria in light of the fact that
26 Hydro One can rely on back-up transformers? If Hydro One can not rely on back-up
27 transformers, please explain why not.
28

29 **Response**

- 30
31 a) Hydro One began to notify generators who were applying for CIAs at locations where
32 they would not be able to connect due to system limitations that their CIA would not
33 be processed at this time. The generators' applications are kept on a first come first
34 served basis and the generator could become eligible for a CIA if the projects ahead
35 on the list drop out. This policy was undertaken to allow the limited staff resources to
36 focus on CIAs for projects that will ultimately be able to connect to the system.
37
38 b) The limit of 60% on reverse flow at supply stations has been established by taking
39 into consideration a number of factors including the need to facilitate as much
40 distributed connected generation as possible while ensuring reliability of supply that
41 our customers have come to expect from the system. These factors include technical
42 considerations such as strength of the transmission system at the supply station,
43 dynamic voltage swings due to wind turbine operations, low power-factor
44 interruption capability of transformer tap changers, protection of load/generation
45 combinations as well as reliability of supply to all connected load and generation
46 customers. The station reverse flow limit of 60% is, therefore, a proxy for a number
47 of factors such as those outlined above.

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The equipment rating in distribution systems in Ontario (and in North America) is 600 Amperes. To respect the equipment rating during contingency situations, the operational limit on distribution systems are 300 to 350 Amperes (about 50% of the rating). This ensures reliability of supply to all connected customers. Hydro One has increased this to 400 Amperes to facilitate additional distributed generation in the province.

c) Hydro One did consider other jurisdictions impacted by distributed generation and found significant differences between the Ontario scenario and other places (such as those in Europe):

- The significant DG penetration experienced by Hydro One under the RESOP program is unmatched by any other areas. The higher the penetration level, the greater the impact on the distribution system.
- Hydro One distribution feeders serving renewable-rich areas are generally much longer and carry far less load than other jurisdictions with renewable generation potential. The combination of these two items presents a technically more onerous situation for Ontario. The other jurisdictions have much shorter feeders and much higher feeder loadings.
- More often than not, renewable DG connection locations on feeders in the Hydro One system are far from supply stations. The ability to accommodate DGs onto the distribution system generally drops as connection locations of these DGs from supply stations increase.
- Control technology associated with renewable generation continues to evolve; however, it first caters to the needs that satisfy most cases but not the exceptions. Ontario falls in the latter category. Hydro One is working with manufactures to satisfy the needs of Ontario.

The above points explain that the Ontario scenario is not comparable to other jurisdictions with renewable generation potential. Therefore, the criteria used elsewhere can not be applied in Ontario

d) Unfortunately there is no simple solution to system constraints such as “relying on back-up transformers.” Hydro One’s “reverse flow” eligibility criteria for connecting generators to its distribution system is based on the reverse flow through any Hydro One substation not exceeding 60% of the MW capacity rating of the substation.

CanWEA INTERROGATORY #3 List 1

Interrogatory

Reference: Hydro One's Evidence at Page 3

"At that time (June, 2007), Hydro One stated that it would continue to reduce the backlog as long as the volume of new applications **and requests for "reworks"** continued at the rates experienced in the previous four months." [emphasis added]

Interrogatory:

- a) Please describe all the circumstances whereby a CIA would have to be "reworked", not including the circumstance described in section 6.2.15 of the DSC.
- b) For each circumstance described in (a), please describe whether a proponent's queue position would be affected.

Response

- a) A CIA rework is requested by a generator proponent with a valid CIA from the LDC in whose service territory the project is located. A CIA rework for a proposed generation facility with a valid CIA is generally limited to the following circumstances/changes that do not result in a material change:
 - 1) Change in the total MW size of the generating facility including the individual size of generators and the number of generators.
 - 2) Change in equipment specifications including change in the technology for the generating facility.
 - 3) Change to the single line diagram (SLD) especially as it impacts the interface connection to the LDC system.
 - 4) Change to the Point of Common Coupling (PCC) with the LDC system (interconnection point to the LDC system) that does not result in a material impact on the LDC system and/or other customers but limited to the PCC remaining on the same interconnection facility (substation and feeder must not change) and within 2 km of the original PCC on the original feeder.

A CIA rework is permitted only during the CIA phase of the proposed generating facility. It is not permitted once the project has progressed beyond the CIA phase into Connection Cost Estimating or beyond. Also, a CIA rework for a proposed generation facility must not have a negative impact on other projects with valid CIA's including things such queue position, cost and size of those projects.

- 1 b) A CIA rework as a result of any of the circumstances/changes outlined in (a) do not
2 affect the project's queue position. The queue position of a project with a valid CIA
3 would be affected if the circumstances/changes that result in the request for a CIA
4 rework include the following:
5
6 1) Change in the LDC interconnection facility (substation or feeder or both)
7 2) Change to the Point of Common Coupling (PCC) of more than 2 km on the
8 original identified interconnection feeder.
9
10 In these cases, the project would require a new CIA.

CanWEA INTERROGATORY #4 List 1

Interrogatory

Reference: Response to Board Staff Interrogatory #9

"Board Staff Interrogatory: Please provide a summary of the measures Hydro One has taken to address its non compliance with the timelines contained in the applicable sections of the DSC."

"Response: Please see the response to IR 4 above for Hydro One's efforts with respect to staffing. In addition, Hydro One has maintained frequent communication with the Board's Chief Compliance Officer (CCO) and his staff, Hydro One has provided monthly reports to the CCO and additional information when requested."

Interrogatory:

- a) Would it be correct to infer from Hydro One's response to Board Staffs interrogatory #9 that Hydro One has not taken any measures to address its non-compliance with the applicable sections of the DSC beyond those described in the response?
- b) Did Hydro One consider using third-party contractors as a means to address its non-compliance with the applicable sections of the DSC? If yes, why was that alternative dismissed? If no, why not?
- c) Please describe all the alternatives Hydro One considered but dismissed to address its non-compliance with the applicable sections of the DSC, and explain why those alternatives were dismissed.
- d) The IESO allows for proponents to prepare their own system impact assessments for review by the IESO. Has Hydro One considered implementing a similar regime for CIAs? If so, why has it not been implemented? If not, why not?

Response

- a) Hydro One did undertake a number of other measures to address its non-compliance, including :
 1. automating Initial Feasibility Assessments (IFAs);
 2. streamlining the generation connection process, including creation of templates to expedite work;
 3. increasing resources, including engaging contractors; and
 4. accelerating and improving training of staff.
- b) Yes, Hydro One did consider using third-party contractors and has brought them on board. In addition to bringing in third-party contractors, Hydro One also ramped up staff levels to improve productivity and to address customer needs. Experienced technical individuals require 8 to 10 months of specific training to be able to undertake complex technical CIA assessments and become productive. The need to

1 use senior experienced resources to train new individuals such as contractors,
2 outsourced staff or new staff, puts a limit on how many new staff we could train at
3 any one time while continuing to respond to hundreds of customer calls for
4 information and continuing to produce CIAs and other technical studies on a regular
5 basis.

6
7 c) Other options that were considered were having non-dedicated staff working on
8 generation connections (i.e. sharing staff with other departments who could not free
9 up the staff entirely), having additional staff work remotely from the rest of the staff
10 in Generation Connections, and having the work portioned out to others. In all three
11 cases the alternatives were found to be unsuccessful. In the case of non-dedicated
12 staff, it was difficult to maintain the priority on generation connections work. In the
13 case of remote staff, it was found that the synergies within the generation connections
14 team did not extend to them and their work suffered. It was also found that portioning
15 out the work resulted in the senior planner in generation connections having to
16 duplicate the work completed earlier by someone else so as to be certain that it was
17 done correctly

18
19 d) The IESO only allows customers the option of preparing their own System Impact
20 Assessments (SIAs) if these studies do not take into consideration other projects that
21 are of a confidential nature. This is not the case for multiple projects assessments (i.e.
22 of cumulative impacts) that Hydro One has to consider in the case of distribution
23 connected DGs. Nevertheless, Hydro One did consider the option of allowing
24 customers to prepare their own connection impact assessments, but rejected it because
25 Hydro One would still have to carry out significant portions of the technical work as
26 part of the package to be forwarded to customers. This package would include,
27 among other items,

- 28 • a detailed computer model of the feeder targeted for the DG connection, supply
29 station in question, models of other feeders (in most cases) with detailed technical
30 information specific to projects related to other customers, feeder and supply
31 station load data, etc.;
- 32 • Hydro One connection criteria;
- 33 • Hydro One templates for undertaking the study and recording information;
- 34 • Hydro One's detailed direction for conducting the study including contingencies
35 for each specific case; and
- 36 • packaging of Hydro One base case for each project

37
38 The additional time required to put together the above information (to be passed on to
39 the customer) and also to review and modify the document once received from the
40 customer/consultant for each project, would far outweigh the avoided work of
41 finishing the CIA.

42
43 As noted above, the package in most cases would contain specific information on
44 projects owned by other customers on the same feeder and station, and hence cannot
45 be shared with outside parties. Furthermore, technical challenges encountered in
46 almost every project are unique in nature and require contacting experts from

1 different areas within and outside Hydro One. Based on this assessment, Hydro One
2 rejected this option.

3

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CanWEA INTERROGATORY #5 List 1

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3 **Interrogatory**

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5 **Reference: Attachment "B" to Hydro One's Evidence**

6 **Interrogatory:**

7

8 Please provide all correspondence described in Attachment "B".

9

10 **Response**

11

12 Please find all the correspondence described in Attachment B of Hydro One Networks

13 Inc. evidence in Attachment 1 to this interrogatory.

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Compliance Office

February 13, 2007

Ms. Susan Frank
Vice-President and Chief Regulatory Officer
Hydro One Networks Inc.
483 Bay St., South Tower, 8th Floor
Toronto, ON
M5G 2P5

Dear Ms Frank:

Re: Hydro One Network's Connection Process for Distributed Generation

This letter is in relation to concerns that the Compliance Office has received from electricity generators regarding Hydro One Networks Inc. ("Hydro One"). Specifically, the concerns are with respect to Hydro One's ability to process applications for connection impact assessments for proposed small and mid-sized embedded generation facilities in a timely manner.

The Distribution System Code ("DSC") sets out the obligations of a licensed distributor to a person that is proposing to connect an embedded generation facility to the distributor's distribution system ("applicant generator"). Section 6.2.9 sets out the requirements for a preliminary review of a proposed embedded generation facility connection by a distributor. That section requires the distributor to complete the preliminary review and, if requested, hold a meeting with the applicant generator within 15 days of the request. Sections 6.2.12 and 6.2.13 of the DSC require that a connection impact assessment ("CIA") be provided to an applicant generator within 60 days for embedded generation facilities that are under 10 MW in nameplate capacity (mid-sized embedded generation facility).

At a meeting held on February 5, 2007, Hydro One indicated to me that the launch of the Renewable Standard Offer Program ("RESOP") has resulted in high volumes of applications for connection of distributed generation to Hydro One's distribution system. Hydro One stated during the meeting that it has a significant backlog for both the preliminary reviews and CIAs which is resulting in lead times that are beyond the timelines set out in section 6.2 of the DSC. Hydro One has also indicated this position through correspondence regarding individual generator concerns which have been reviewed by the Compliance Office.

Based on this information, I confirm my view as expressed at that meeting, that Hydro One is not compliant with section 6.2 of the DSC. I am therefore requesting that Hydro One provide the Compliance Office with an action plan demonstrating the steps that it intends to take to come into compliance with the requirements of the DSC. Your action plan should indicate the date by which Hydro One expects to be compliant with the timelines set out in sections 6.2.9, 6.2.12 and 6.2.13 of the DSC.

I understand that until the backlog of requests for preliminary meetings and CIAs is addressed it is unlikely that Hydro One will be able to meet the requirements outlined in the DSC. During this period of time and to address the concerns of applicant generators for information about processing timelines and status of applications, I request that Hydro One publish its expected timelines for preliminary reviews and CIAs so that generation proponents can take the necessary steps to deal with these delays.

The views expressed in this letter are mine and are not binding on the Board. Although no statutory power of decision has been delegated to me, I may seek enforcement action by the Board under Part VII.1 of the *Ontario Energy Board Act, 1998*, in relation to non compliance.

I request that Hydro One provide its proposed compliance plan no later than February 23, 2007. If you would like to discuss this matter or have any questions regarding the content of this letter, please do not hesitate to contact me at (416) 440-7628, or Gordon Ryckman, Senior Advisor, Compliance, at (416) 440-8109.

Sincerely,

A handwritten signature in black ink, appearing to be 'Brian Hewson', written over a horizontal line. The signature is stylized and somewhat abstract.

Brian Hewson
Chief Compliance Officer

Hydro One Networks Inc.

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Oded Hubert

Director, Regulatory Compliance
Regulatory Affairs



BY COURIER

February 23, 2007

Mr. Brian Hewson
Chief Compliance Officer
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON.
M4P 1E4

Dear Mr. Hewson:

**Compliance Office Request dated February 13, 2007 regarding
Hydro One Networks' Connection Process for Distributed Generation (DG)**

I am responding to your letter of February 13, 2007 to Ms. Susan Frank, regarding Hydro One's processing of applications for Connection Impact Assessments for proposed small and mid-sized embedded generators. In your letter, you ask Hydro One

- (i) to provide you with an action plan by today, addressing compliance with sections 6.2.9, 6.2.12 & 6.2.13, and
- (ii) to publish the expected timelines for the information of generation proponents.

In addition to addressing both these requests, I am taking this opportunity to note some other matters related to Distributed Generation that we discussed at our meeting of February 5, 2007.

1. Current Compliance with the Code

Hydro One has on several occasions, and from the start, expressed concerns with the timelines stipulated in the DSC with respect to embedded generator connections. We acknowledge that we are non-compliant with the following requirements:

Sections 6.2.9: The turnaround for work covered by this section ("initial consultations" or "initial feasibility assessments") is currently about two months. We note, however, that in this phase, Hydro One provides to generation proponents significantly more information than is stipulated in the DSC, to meet their information needs and more efficiently.

Section 6.2.12: Hydro One currently provides the necessary information to proponents of small projects about five months after receipt of the application.

Section 6.2.13: For mid-sized projects, Hydro One provides the assessment within about seven months of receipt of the application.

2. Overview of Current Work Volume

The attached figure (“The Standard Offer Pipeline”) illustrates the DSC requirements and some of the volumes we face in processing applications from proponents of DG proposals. From a handful of requests per year until 2002, the number of requests for assessments has increased to about 20-30 requests per year in 2003/2004, and subsequently to 689 requests in 2006.

The current status as at February 5, 2007 was as follows:

Item	Completed	Reworked	Waitlisted	On Hold by Customer
CIA	100	32 (32%)	190	
Initial Consultation/ Feasibility	146	-	152	56
Total	246	32	342	56

Note: Even if 50% of the Feasibility studies translate to CIA requests, the CIA backlog for 2007 will be between 260 to 340 studies. This would be excluding any rework in CIAs.

3. Actions to deal with the SOP workload

Hydro One supports the government’s policy of encouraging generation, and takes seriously both customer satisfaction and our regulatory obligations under the DSC. Following is a summary of the steps we have taken and are taking to improve our ability to respond to the geometric growth in the number of generation proposals.

Increased Resourcing: There is a scarcity of skilled technical staff capable of undertaking studies and assessments in support of Distributed Generation connections. To improve our capabilities in this area, Hydro One has, over the past year, hired 15 new staff, a tenfold increase from the initial staffing level of 1.5 FTEs. Staff increases of this nature do not instantly yield proportionate productivity gains, as they require extensive training. We are expecting much greater productivity during 2007 as staff will be more experienced. Hydro One will likely add three more team leads with some experience, in May 2007. Further hiring will be considered as we are able to absorb more new staff.

The increased staffing enabled completion of over 300 assessment/studies in 2006, of which 90 were full Customer Impact Assessments. We expect to do about 300 full CIAs and 300 initial assessments in 2007, given current plans.

Customer Communications and Process Initiatives: We have conducted workshops in London, Thunder Bay and Kingston to clarify to generation proponents, LDCs and other interested parties the generation connection process and related details. We take this opportunity to also manage customer expectations regarding the volumes of proposals and turnaround times we can accommodate. We expect to hold further workshops and participate in other sessions, to help potential generation developers in their efforts.

Other actions to improve compliance: Hydro One is working on a number of other initiatives that will improve our ability to respond to the DG workload.

- We engaged a consultant to streamline Hydro One's connection process. The report has been received and recommendations are being implemented
- Work on automating initial feasibility assessments is nearing completion.
- We are developing 'rules of thumb' to help us provide faster initial estimates
- We are supporting research on common and simplified DG connection standards and technology by industry associations and universities

4. Service Levels and Volumetric Targets

Our throughput in completing CIAs depends on

- the actual volume of new CIA applications,
- the volume of requests for CIA modifications (for CIAs already issued), and
- the resultant impact on existing queue holders and those new proponents joining (or leaving) the queue.

Given the unpredictability of these factors, Hydro One can only assert that we are taking action, and making progress on a best efforts basis, to hold CIA wait times to about six months in 2007.

From a throughput perspective, we can, however, commit to processing at least 25 CIAs per month for a total throughput of at least 300 completed CIAs in 2007. This processing will, of course, be made up of new CIAs as well as reworked CIAs for modified projects as per your guidance at our recent meeting.

Hydro One's view is that time-based metrics such as those stipulated in Sections 6.2.9, 6.2.12, and 6.2.1.13 of the DSC are only appropriate for mature and stable areas of the business, where the cost/performance tradeoff is well understood and the utility can realistically resource to meet variations in demand. For example, the Customer Service Quality Index (SQI) governing the percentage of new load connections completed within 5 days works well for this established and well-understood business activity, and Hydro One is able to manage to it despite the large volume (some 16,000-18,000 connects per year). The area of Distributed Generation, in contrast, is a rapidly growing, volatile market that the government, regulator and distributors are still adapting to. It is premature and unrealistic to establish a hard performance metric at this time. We respectfully suggest that the Compliance Office put aside the time-based metrics that are stipulated in the above sections, and use a volumetric metric that properly reflects the resourcing that Distributors can practically muster to meet the growing demand, and that reflects LDCs' compliance plans, such as ours. As noted above, for Hydro One, this metric would translate to about 25 assessments per month.

5. Posting of Information and other Options to Manage Expectations

In your letter of February 13 you request that Hydro One publish timelines for processing initial feasibility assessments and CIAs for the benefit of generation proponents. Hydro One has been candid and open with all stakeholders in many forums regarding the current timelines, and agrees that publishing this information would be somewhat helpful to interested parties, although it does not constitute a commitment. We will undertake to post the status of the turnaround times for feasibility assessments and CIAs at any point in time, and update these as they change. As discussed at our meeting, we will develop a proposal for publicizing this information and share it with you prior to implementing it, likely in about one month.

This week we also commenced work on a web-based listing that would allow generation proponents to “view the queue” and to examine the number of projects at each station or feeder.

6. Other Issues and Actions from our meeting of February 5, 2007

We appreciated the opportunity to meet with you and your staff earlier this month, and we note the following additional items that were discussed, with agreed-to actions:

- Processing of requests for material changes and modifications by generation proponents: We sought and received guidance from the Compliance Office on how to treat requests from generation proponents who are in the queue and seek to modify their projects. Hydro One undertook to modify our current practice in favour of this guidance, and the attached figure now reflects this approach. The attached Appendix A summarizes our understanding, and while we are proceeding on this basis, we would welcome your confirmation in this regard.
- Anaerobic Digesters: We discussed the OFA’s request for a separate queue or an expedited process. OEB staff agreed to review this issue and provide further guidance, if appropriate, on whether to expedite applications for such projects (and if so, how).
- Orange Zone projects: OEB Staff undertook to discuss with the OPA the concept of temporarily ‘parking’ applications for projects in the ‘orange zone’ given that contracts for such projects are not likely to proceed in the near future, and that resources would be best directed to projects that are more likely to receive contracts imminently. Hydro One has some 150 applications for this zone.
- Technical Limits on the Transmission/ Distribution System: Technical limits pose similar issues to those posed by the Orange Zone. Both parties agreed that the Standard Offer Program was intended to make best use of the existing system infrastructure, and not necessarily to drive significant investment in new infrastructure and upgrades. Hydro One undertook to propose some technical criteria that may be useful in establishing limits that would be used to ‘park’ or delay acceptance of new generation proposals that exceed those limits.
- Work with the EDA and other stakeholders: Both parties agreed that it would be advisable to hold a forum with the EDA to discuss some of these matters. Hydro One could bring its technical perspective to such a forum, and provide context on how LDCs interface with Hydro One. OEB staff undertook to follow up with the EDA.

I trust you will find this information helpful, and I thank you for our most productive meeting on February 5, 2007. Hydro One looks forward to following up on the various actions we have agreed to, and we remain interested in further dialogue to promote the efficient and effective development of distributed generation in Ontario.

Sincerely,

Oded Hubert

Attach.

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Compliance Office

March 13, 2007

Mr. Oded Hubert
Director - Regulatory Compliance
Hydro One Networks Inc.
483 Bay St., South Tower, 8th Floor
Toronto, ON M5G 2P5

Dear Mr. Hubert:

Re: Hydro One Network's Connection Process for Distributed Generation

I am writing this letter with respect Hydro One Network Inc.'s ("Hydro One") compliance with the Distribution System Code ("DSC") and more specifically, Section 6.2.9, 6.2.12 and 6.2.13. On February 13, 2007, I wrote Hydro One regarding my concerns with regard to its practices in relation to generator connections, and on February 23, 2007 you responded with a proposed compliance plan.

Upon review of Hydro One's proposed compliance plan it is my opinion that the proposal does not specifically demonstrate how Hydro One is addressing the non-compliance issue to ensure it is processing embedded generation facility applications in the timeframe prescribed within the DSC. In the Distribution System Code ("DSC") the obligations of a licensed distributor are clear with respect to the periods within which a distributor is to process requests to connect an embedded generation facility applicant ("applicant generator"). In your letter you confirm that Hydro One is presently non-compliant with Section 6.2.9 which requires the distributor to complete the preliminary review within 15 days of the request; and with Sections 6.2.12 and 6.2.13 which requires that a connection impact assessment ("CIA") be provided to an applicant generator within 60 days for embedded generation facilities less than or equal to 10MW (small and mid-sized embedded generation facilities).

Hydro One proposes to increase its resources by 18 new staff by the end of May 2007. These additional resources will process 300 applications for CIAs in 2007, with a commitment to average about 25 CIAs each month. In your response you also indicate that Hydro One intends to publish information regarding the timelines

for its customers. As well, Hydro One is proposing to implement process changes, including plans to automate CIA processes and to set guidelines.

Your compliance plan appears to be an overview of several actions that Hydro One has already taken or expects to take with respect to attempting to improve the timelines for completing generator connection reviews. The plan, however, does not indicate your assumptions about the expected number of future generator connection applications and how your proposed actions will achieve compliance on the basis of these assumptions. Nor does the proposed plan indicate specific milestone targets of improved timelines so that additional action can be taken if necessary to keep your plan on track. In short, the plan lacks clarity with respect to how Hydro One will address the significant backlog of applications waiting to be processed from 2006.

I note that you have requested that I take a different position on compliance with Section 6.2. Hydro One proposes that instead of a specific timeframe for completed CIAs, distributors should be required to commit to a numeric metric (i.e. total of 25 completed CIAs per month). I do not agree, nor do I consider this to be a reasonable interpretation of the particular sections of the DSC.

I therefore request that Hydro One provide details as specified above. These details should also include connection process wait times for both preliminary generator assessments and CIAs with a progressive metric, on a projected monthly basis, until the time you expect to achieve compliance.

Your letter indicates that Hydro One is looking at CIA process changes. I note that Hydro One has had a consultant review its process. I am interested in the recommendations made by the consultant and the plans to implement these recommendations. I therefore request that Hydro One provide a copy of the consultant's report and plans to implement such recommendations.

With respect to posting information about current turnaround times for feasibility assessments and CIAs, I believe this is critical information for prospective generators and should, therefore, be posted as soon as possible. Your proposed initiative to develop and post queue management information on a station or feeder basis will also be beneficial but should not delay the posting of turnaround times. You might also consider posting CIA application information on a station or feeder basis if you think it would assist prospective generators.

In your letter you included information that reflected our discussion with respect to requests for material changes. I reviewed the information (Appendix A) and confirm that it does reflect my interpretation of the requirements of section 6.2.4.1 of the DSC such that:

1. For any generator who has a completed CIA and is in the generation queue, Hydro One is to reassess the impact of any proposed generation change on an expedited basis.
2. The generator will be responsible for any Hydro One incremental costs required to address additional impacts. The generator will also be responsible for the incremental costs of other generators in the generation queue, but not for generators in the application queue.
3. The generator is to be presented with the incremental impacts.
4. The generator's queue position would not change unless there is a material change to the project and it is removed in accordance with Section 6.2.4.1.

Hydro One also presented other items in its letter, as it relates to the issues. These views were discussed in a meeting held on February 5, 2007. These included (i) processing of anaerobic digester generator applications; (ii) orange zone status; (iii) need for technical limits; and (iv) interface issues with other LDCs. I reviewed the information and there appears to be some inconsistency with what was discussed and agreed. You will find below my recollection of the discussion respectively.

1. With respect to the anaerobic digester applications, it was agreed that all interested parties should meet to discuss the matter further. I understand from our meeting that Hydro One intends to prepare recommendations to address OFA concerns for discussion with the OEB and OPA.
2. It is my view that the orange zone is an item to be discussed with the OPA. I understand that this issue is being addressed by the OPA Transmission Constraints working group in which both Hydro One and OEB are participating.
3. In our discussion around applying technical limits it was communicated that the OEB would welcome the opportunity to review any proposed plan Hydro One may develop with respect to technical limits on the transmission and distribution system. Please advise further.
4. The Compliance Office is, through discussion with the EDA, OPA, Hydro One and other LDCs, assessing the needs of LDCs with respect to the RESOP and distributed generation. I understood from our meeting, that Hydro One had already identified some of these needs with specific LDCs and would provide the information to the Compliance Office.

The views expressed in this letter are mine and are not binding on the Board. Although no statutory power of decision has been delegated to me, I may seek enforcement action by the Board under Part VII.1 of the *Ontario Energy Board Act, 1998*, in relation to non compliance.

I request that Hydro One provide its proposed compliance plan no later than March 16, 2007. If you would like to discuss this matter or have any questions regarding the content of this letter, please do not hesitate to contact me at (416) 440-7628, or Gordon Ryckman, Senior Advisor, Compliance, at (416) 440-8109.

Sincerely

A handwritten signature in black ink, appearing to read 'Brian Hewson', is written over a horizontal line. The signature is stylized and somewhat illegible.

Brian Hewson
Chief Compliance Officer

c. Susan Frank, Hydro One

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Oded Hubert

Director, Regulatory Compliance
Regulatory Affairs



March 15, 2007

Mr. Brian Hewson
Chief Compliance Officer
Ontario Energy Board
Suite 2700, 2300 Yonge Street
PO Box 2319
Toronto, ON
M4P 1E4

Dear Mr. Hewson,

Hydro One Networks' Connection Process for Distributed Generation

I am responding to your letter of March 13, 2007, requesting that Hydro One provide certain details and a compliance plan no later than March 16, 2007. As you know, we have been in contact with the Compliance Office in connection with this topic for several weeks now, beginning with our meeting of February 5, 2007. Following your letter dated February 13, 2007 that requested our compliance/ action plans, we provided on February 23, 2007 an outline of our discussions and action plans.

Compliance Plan: In your March 13 letter, you note that our February 13, 2007 response does not demonstrate how Hydro One plans to become compliant with the requirements in Section 6.2.9 of the Distribution System Code (DSC). You correctly observe that, while our plan outlines our past and planned actions to improve our turnaround times, we did not put forward a plan that would bring Hydro One into compliance with that section of the DSC. A plan for becoming compliant should include assumptions, planned actions, target milestones, and a mechanism for monitoring and correcting the course to compliance. In the case of distributed generation applications, we are unable to develop such a plan. The volume of new applications that we've observed to date, the number of applications requiring revision, and the expectation of any new OPA generation-oriented programs prevent the development of such assumptions. Furthermore, acquiring resources to handle the maximum number of applications would be imprudent, even if it were possible to locate these resources.

As a result, the only clarity we can provide regarding our efforts to improve our processing timelines is our previously-forecasted throughput of 25 applications per month, and a commitment to endeavor to keep the turnaround times for Initial Feasibility Assessments (IFAs) to within 3 months of application, and for Connection Impact Assessments (CIAs) to about 6 months in the second half of 2007, given the caveats noted above.

Hydro One has received almost 800 requests for Initial Feasibility Assessments (IFAs) and CIAs, of which about 370 have been completed, leaving 430 either underway or not yet started. This does not include future requests for projects where the IFAs are complete but the proponent has not yet applied for a CIA (which could be a substantial number). Some 80 new applications for IFAs or CIAs arrived in January and February 2007 alone. Given the uncertainty, Hydro One cannot meet your request for a monthly projection of wait times for the preliminary assessments and CIAs that would lead to compliance with the Code.

Actions taken to date: It is worth noting that our plans go beyond merely proposing to increase our resources by 18 new staff by the end of May 2007. Sixteen of these staff are already in place, and hiring is underway for three additional staff. A request for proposals is also in preparation seeking additional staff on a contract basis.

Volumetric vs. Time-based metrics in the Distribution System Code: Regarding our request that the Compliance Office put aside the time-based metrics in the DSC in favour of a volumetric measure, we accept that such an interpretation of the Code is not possible in your capacity as CCO. We would therefore appreciate any guidance that you can offer to assist us in pursuing such a change with the appropriate parties in the Board. As we noted earlier, we believe that an alternate metric is warranted in the Code during periods of extreme volatility, and we intend to pursue this change.

Process Improvements and Consultant's Report: As mentioned in our previous letter, we have engaged a consultant to examine opportunities to further streamline and simplify the DG connection process at Hydro One. The consultant recognized the unique nature of the Hydro One distribution system (long feeders, low loading levels). The consultant did not identify major new initiatives for Hydro One, but did provide some new suggestions, while reinforcing other initiatives that we already had underway. These included the following:

- Simplify Forms A and B and have applications submitted through the website;
- Post standard legal agreements on the website, along with helpful notes to the generators;
- Improve system modeling turnaround times ;
- Restructure the Hydro One website to incorporate additional information and to make it more user friendly;
- Develop an information package and detailed guide to assist generators; and
- Provide easier system map access to generators.

Implementation of some of these recommendations is already underway. For example, Form A has been simplified and put on our website and generators are using this to submit applications. Two additional resources were brought on board to assist with system modeling. In response to the last three bullets, we are hiring and allocating additional resources to monitor and improve our customer interactions including providing better information such as system maps.

The consultants also explored whether there are other jurisdictions where a program similar to Ontario's Standard Offer Program (SOP) has taken place. They noted two countries, United Kingdom and United States, where distributed generator (DG) initiatives had been implemented. However, they noted

significant differences in specific rules for participation between those countries and Ontario. It is our understanding that no other jurisdiction had or has a DG program in place similar to SOP.

Posting of Queue Information: We are in agreement regarding the desirability of posting of queue information, and we noted in my earlier letter that a system allowing proponents to “view the queue” was under development. Hydro One plans to post project queue information by the end of March 2007, which will be updated on a monthly basis. The queue information will show the respective queue positions of projects, identified only by project IDs (no names), along with their capacity in MW on transformer stations and feeders. Additionally, Hydro One will post, by the end of April 2007, the relative positions of those projects that are awaiting CIA completion and thus do not yet have queue positions. This will also be updated on a monthly basis.

Estimated wait times for assessment of new applications are not being posted yet, but will be by the end of March 2007. As I noted in my letter, this information is being provided for project planning purposes only and does not constitute a commitment. Actual time lines for a project will vary depending on the rework involved on that project and any rework triggered by other projects ahead in the queue. Due to the high volume of requests received, current turnaround times for IFAs are up to 4 months, and for CIAs they are over 7 months.

Once a project is assigned for assessment, which may be up to 2 months following the submission date for IFA, and up to 4 months for CIAs, Hydro One will contact the customer and commit to a completion date.

Material Changes: We are pleased that we have developed a shared understanding of the Compliance Office’s expectations regarding requests for material changes, as summarized in your four bullet points. The only item we wish to confirm is that a “material change to the project”, as stated in bullet point 4, would only occur in the event that a proponent does not agree to be responsible for the costs of mitigating the impacts of his change(s).

Anaerobic Biodigesters: Hydro One will contact the Ontario Federation of Agriculture, the proponent of this issue, to learn what steps the OFA would like to pursue next, and how Hydro One, the OPA and OEB can work together to address the OFA’s concerns. Hydro One believes that OEB concurrence with any process or policy changes to accommodate this technology is very desirable, if not essential. In addition, Hydro One has developed an expedited process for generators up to 500kW (and most, if not all, anaerobic biodigesters would fall in this category), and is working with each project proponent on protection issues to lower the connection cost.

Orange Zone: As we discussed, carrying out assessments of projects in the “orange” zone, which under current rules can’t obtain OPA Standard Offer Contracts, means that major effort is dedicated to projects that are unlikely to proceed, despite their early applications for assessments. Meanwhile, other projects with a much higher likelihood of proceeding (from the wires perspective) endure substantial wait times for their assessments because of a later application date. Discussions will continue with the OPA and OEB on this opportunity to provide relief to the process and “park” certain projects to allow more

feasible ones to proceed. Hydro One views this as a measure that will improve our own compliance, while also increasing service levels and benefiting the province and its electricity customers.

Technical Limits: We have done significant work in conjunction with the IESO in this area since we met last month, and wish to advise you of its results.

At a certain point, connection of new generators to the distribution system would require major equipment upgrades on our distribution system, and possibly also on our transmission system, including major station equipment such as power transformers. It is our understanding that the Standard Offer Program is not intended, on its own, to drive major upgrades to existing transmission and distribution infrastructure at ratepayer expense. Rather, the integrated planning process being undertaken by the OPA should identify system upgrades that are necessary and economic to enable beneficial new generation development, whether resulting from aggregated standard offer projects or other sources. If the cost of such upgrades were to be the responsibility of proponents, it is likely that the cost would make the economics of a new SOP generator infeasible.

The high volume of requests for assessments is concentrated in some areas, and as a result we are already expending significant effort to assess projects that, given the capacity of projects ahead of them in the queue, would cause the need for major upgrades. Similar to the “orange zone” issue, the investment of resources on such projects that require such major upgrades, and are therefore unlikely to proceed, is at the expense of other projects with a much higher likelihood of proceeding.

Hydro One and the IESO have discussed our concern with respect to system and customer impacts of net injections into the transmission system. We have several transformer stations where the total capacity of projects applying for assessment of connection to the associated part of the distribution system could cause a net injection (back feed) of over 10 MW into the transmission system. The IESO currently requires that any single generator injecting more than 10 MW into the system be the subject of a System Impact Assessment (SIA) to determine effects on the system, and Hydro One also undertakes a Customer Impact Assessment to determine effects on other customers already connected.

Aggregated generation exceeding a 10 MW injection can have similar impacts on the system and other customers, even though individual generators are not greater than 10 MW. Further, the IESO does not monitor the generators up to 10 MW, but does monitor individual generators above that level. Therefore, there is less operational information available on the smaller generators, adding to the risks associated with aggregated generation. We understand that the IESO has determined that SIAs should be done for TSs once the proposed generation connecting to the associated distribution would result in an injection exceeding 10 MW. This SIA will be done for the TS “clustering” all the proposed generators. Hydro One will do an associated Customer Impact Assessment. We have indicated to the OPA that we believe that Standard Offer Contracts should not be offered to new generators that exceed the 10 MW injection threshold at a TS until such assessments are done.

Hydro One plans to now apply the following technical considerations and limits, as agreed with the IESO as noted below:

1. Each generator will be studied along with other generators connected (or proposed ahead in the queue) on the feeder. Each generator and the total generation must respect the steady state thermal and short-circuit limits of the feeder in both normal and contingency operations (such as back-to-back feeder operation, bus switchover and/or outage of a transformer).
2. Pending assurances from the manufacturers and protection experts, Hydro One will only carry out CIAs for projects which cause a maximum injection into the system of less than 60% of the rating of the power transformer. This is to avoid the situation where a transformer upgrade, at a cost in the millions of dollars, would be required to accommodate reverse flow caused by a SOP generator. This limit will be revisited as more expert opinion is obtained in the future including input from the IESO.
3. All reverse power flows in excess of 10MW at a station will be referred to IESO for a SIA and to the Transmitter for a Customer Impact assessment on the transmission system.
4. The IESO fees for the SIA (\$20k–50k) and the Transmitter fees for a Customer Impact Assessment (\$15k) will be recovered from proponents based on cost responsibility principles that will be discussed with the OEB. Following this discussion an action plan will be developed.

Details are provided in the attachment to this letter.

Hydro One, with the agreement in principle of the IESO, is moving forward with the above technical limits for implementation and will communicate this decision to all the affected project proponents in the queue and other new ones seeking queries in the affected areas.

We are recommending that the OPA enforce (as a part of a modified process) the requirement that all proponents causing >10 MW aggregated injection to the transmission system only be issued standard offer contracts upon the completion of a SIA and Customer Impact Assessment. We have already discussed this with the OPA in principle and will separately be writing to them in this regard.

As we continue to gain experience with the Standard Offer Program, other technical issues may arise, and we will work with the IESO, OPA and the OEB staff to identify any other technical limits that may be required to ensure the success of the SOP.

Discussion with EDA, other LDCs and other stakeholders: In a letter from Mark Graham to the EDA on March 13, Hydro One identified a number of issues that need to be jointly addressed by distributors, particularly with respect to coordinated management of queues and associated response to customers. We have asked that a session be organized by the EDA to discuss these issues, and the EDA is already working with us in this regard. A copy of the letter is being forwarded for your information. We will advise you of plans as these evolve.

Brian, as you recognize, significant time, effort and other resources have been expended by Hydro One to meet the needs on the Distributed Generation front, and great progress has been made to date. I am reassured by the level of commitment that the various parties have shown in an effort to meet the challenges imposed by the growing interest in Distributed Generation. I believe that our exchanges have been open and forthright, and suggest that this response is the best possible that Hydro One can provide given our current circumstances.

Sincerely

ORIGINAL SIGNED BY

Oded Hubert
Director – Regulatory Compliance
Hydro One Networks

ATTACHMENT 1

Hydro One's Distribution system is essentially designed to serve load (i.e. flows are out from TSs on to feeders and thence to load customers). Thus, unless we are willing to entertain large investments in infrastructure any projects that introduce reverse flow at our facilities can have technology/equipment/system implications that must be addressed. Technical issues have already surfaced to date that will require either major investments in new facilities or the establishment of explicit limits on projects that can connect to the existing system. The key issues identified thus far are:

Reactive Power (MVARs)

Increases in distributed generation projects in general affect reactive power flows supporting system voltage since the system now has to supply both the Load as well as the DG reactive power requirements. The accumulated generation would potentially affect the following areas on the transmission system:

- a. Reactive power support from the Transmission system to these Distribution connected generators will create additional stresses on the transmission system which in many areas is already approaching its reactive limit – as a result, additional reactive compensation could be required at a substantial cost
- b. More frequent transmission voltage variations at Hydro One stations

These issues become more severe as the extent of DG increases and at a certain point, the impacts will require IESO and transmitter studies.

Real Power (MW)

As the generation levels increase, there are several scenarios that play out:

- Generation level less than Feeder load resulting in no reverse power flow on the individual feeder
- Generation level more than Feeder load resulting in reverse power flow on the individual feeder and neutralize some load in other feeders
- Generation level more than the station load resulting in reverse power flow on the individual feeder, the bus and the transformer (after neutralizing all minimum load in other feeders)

At a very minimum any small modifications to accommodate reverse flow includes changes to stations and feeder metering systems (in addition to revenue metering); protection changes to the station, the LV bus and the applicable feeders and review of transformer components such as tap-changer settings. As the extent of reverse flow on the transformer (causing injection into the transmission system) increases, the loading of the transformer itself becomes a concern.

In the spirit of maximizing the SOP program through maximizing reverse flow at its TSs consistent with maintaining equipment and reliable operation, Hydro One has taken the steps noted below:

- a. Sought the expert opinion of transformer vendors re: reverse flow on large transformers
- b. Examined (on a select basis), the various network protection systems impacts when Dx feeds to the upstream Tx systems
- c. Formed a company wide taskforce to fully identify current and potential system and equipment issues related to generation connection, and their resolution

Proposed Technical Limits

The following are the Hydro One proposed technical considerations:

1. Each generator will be studied along with other generators connected (or proposed ahead in the queue) on the feeder. Each generator and the total generation must respect the steady state thermal and short-circuit limits of the feeder in both normal and contingency operations (such as back-back feeder operation, bus switchover and/or outage of a transformer).
2. Pending assurances from the manufacturers and protection experts, Hydro One will allow a maximum back feed or reverse flow of 60% of the rating of the power transformer. This limit will be revisited as more expert opinion is obtained in the future including input from the IESO.
3. All reverse power flows in excess of 10MW at a station will be referred to IESO for a System Impact Assessment and to the Transmitter for a Customer Impact assessment on the transmission system. It should also be noted that the IESO SIAs may result in a limit different than the 60% level noted in 2 above.
4. The IESO fees for the SIA (\$20k–50K\$) and the Transmitter fees for the Customer Impact Assessment (15k\$) will be recovered from generation proponents based on discussions with the OEB on cost responsibility.

The following are the IESO proposed technical limits:

1. Each Station will be allowed only a maximum of 10 MW reverse flow after which the transmitter must submit a SIA application to the IESO (consistent with item 3 above).
2. The IESO will review each SIA case on a station-by-station basis and provide limits to the transmitter, defining the allowable reverse-flow power, in excess of 10MW, that can be accommodated without major investment in VAR equipment.
3. The cost of any other tools (as determined by the IESO) needed for reliable management of the system, and caused by such Distribution connected SOP generators, should be borne by the proponent. This would include any requirements for curtailment of the generator.

IESO and Hydro One agreement in principle

In view of the above, Hydro One and the IESO agree in principle to the following:

1. That 60% of the transformer rating at a station will be the maximum reverse flow allowed.
2. That the lower of the IESO/Hydro technical limits (as determined for the various locations) be enforceable as a mechanism to defer further work on CIAs for projects which would cause the limit to be exceeded. The original application date will be used to determine the order in which projects on the feeder and TS will be processed should openings come up.
3. That should the IESO determine that VAR/voltage support is inadequate at a TS, the reverse power limit that the IESO imposes (without VAR equipment) will be the limit that Hydro One will adopt (in lieu of the 60% trigger in clause 1 above).
4. The above limits will hold valid for all existing TSs.

Prepared by:
Mark Graham and Ravi Seethapathy
Hydro One Networks

March 16, 2007

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Compliance Office

May 31, 2007

Mr. Oded Hubert
Director - Regulatory Compliance
Hydro One Networks Inc.
483 Bay St., South Tower, 8th Floor
Toronto, ON M5G 2P5

Re: Hydro One Network's Connection Process for Distributed Generation

Dear Mr. Hubert:

I am writing this letter in response to your letter of March 15, 2007 which provided additional details concerning the issues associated with distribution connected generation, compliance with the obligations of the Distribution System Code ("DSC") and your proposals in that regard.

Your letter proposed the following:

1. A commitment By Hydro One to complete at least 25 generation connection assessments per month.
2. Posting of estimated wait times for Initial Feasibility Assessments (IFA) and Connection Impact Assessments (CIA) on the Hydro One Networks web site to inform prospective generators of the most up-to-date expected lead time requirements.
3. Posting of CIA wait list and generation queue information on a feeder/supply station basis on the Hydro One Networks web site.
4. The application of specific technical considerations and limits that would result in CIA applications for generation projects exceeding these limits, being placed in a holding queue.
5. You also indicated that where generation connections on the distribution system result in reverse flow of more than 10 MW into the transmission system costly IESO System Impact Assessments and Hydro One

Transmission Customer Impact Assessments will be required.

6. An expedited process for connecting generators < 500 kW that, because of their small size and minimal complexity can be designed and built with short lead times and should, therefore, not have to wait until other larger, more complex projects proceed.

As stated in my previous letter, I am concerned that Hydro One is not able to come into compliance with the DSC requirements immediately. However, I am of the view that the actions taken to date will be of significant help in alleviating the immediate concern with Hydro One's non-compliance. The ultimate goal of your proposed action plan must be to achieve compliance with the requirements of the DSC. My expectation is that Hydro One will continue to monitor the situation and implement further actions or adjust previous initiatives as necessary to be able to achieve the capacity to prepare CIAs for your prospective generation customers in an efficient and timely manner as prescribed in the DSC. I expect Hydro One to achieve compliance with the DSC requirements no later than November 1, 2007. In establishing my position in this matter, I recognize the considerable efforts to date and the need for additional time to correct the situation.

In order to monitor and assess Hydro One's progress toward reducing CIA wait times, I further request that Hydro One provide to the Compliance Office a monthly progress report summarizing:

- i) number of CIA applications currently awaiting assignment
- ii) number of new CIA applications received
- iii) number of new CIA applications completed
- iv) number of CIA revisions processed
- v) number of CIA applications put in the holding queue due to technical limits being reached

With respect to Hydro One's proposals set out in your letter, I am of the view that the additional information being posted to your website will be of assistance to prospective generators and lead to an improved working relationship. In regards to the technical limits that Hydro one is proposing, these may be reasonable at this time. The proposed technical considerations and limits may, however, benefit from additional knowledge and information gained by application to specific projects and I would expect Hydro One to monitor the application of these limits and to adjust them as necessary and in the spirit of the underlying principles under which they were initially developed. These technical considerations and limits should also be posted on the Hydro One Networks web site to keep all parties, including prospective generators informed.

The views expressed in this letter are mine and are not binding on the Board. Although no statutory power of decision has been delegated to me, I may seek enforcement action by the Board under Part VII.1 of the *Ontario Energy Board Act, 1998*, in relation to non compliance.

If you would like to discuss this matter or have any questions regarding the content of this letter, please do not hesitate to contact me at (416) 440-7628, or Gordon Ryckman, Senior Advisor, Compliance, at (416) 440-8109.

Sincerely,

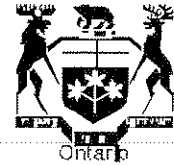


Brian Hewson
Chief Compliance Officer

c. Susan Frank, Hydro One

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Compliance Office

October 25, 2007

Mr. Oded Hubert
Director - Regulatory Compliance
Hydro One Networks Inc.
483 Bay St., South Tower, 8th Floor
Toronto, ON M5G 2P5

Dear Mr. Hubert:

Re: Hydro One Network Inc. Non-Compliance with the Distribution System Code

This letter is to inform Hydro One of my assessment and conclusion regarding its plan to come into compliance with the Distribution System Code ("DSC") as it relates specifically to the processing and delivering of required documents to the embedded generator applicant ("applicant") who is requesting distribution connection for its facility.

Sections 6.2.12 and 6.2.13 of the DSC requires the distributor to provide a connection impact assessment (CIA) within a prescribe time period depending on the size of embedded generator facility. Furthermore as per sections 6.2.16 and 6.2.17 of the DSC the distributor is required to deliver a detailed cost estimate within 90 days.

In May 2007 I informed Hydro One of my expectation that it achieve compliance with the DSC requirements. Hydro One was to provide an action plan demonstrating how it would come into compliance by November 1, 2007 and provide monthly progress reports summarizing all CIA processing activity.

The Compliance Office subsequently requested reporting of other processing issues and delivery of other required documents, such as detailed cost estimates and connection agreements.

I have completed my assessment of the four monthly reports provided to the Compliance Office by Hydro One. I understand the following from the progress reports and information provided:

- Hydro One's action plan included increasing staff to complete CIAs (15 new employees); implementing technical limits; streamlining the initial feasibility

assessments; adding a disclaimer on a CIA when no transmission system review is included; publishing web information – CIA delivery timelines, queue position and coordinating information workshops for other distributors.

- Hydro One's progress reports state that to date, 697 applications have been received in 2007. A total of 256 CIAs have been completed and 138 CIAs are outstanding. The average timeframe to complete a CIA decreased from seven months to five months.
- There are 303 applications for CIAs in which the generation would exceed one of the technical limits that Hydro One has imposed within its service area and it is Hydro One's intention not to issue a CIA for those projects until the technical limits are resolved.
- Hydro One has received 68 detailed cost estimate requests. In total 35 were completed with the average delivery timeframe of four months.
- Hydro One has committed to completing a total of 300 CIAs by December 2007.

Based on my review of the information Hydro One has provided I have concluded that Hydro One's actions to date have not resolved the issues of non-compliance with the DSC requirements for CIA and Cost Estimate process timelines. Outstanding CIAs have increased and concerns have been raised regarding Cost Estimates and the timing to complete these for the purpose of signing Connection Agreements with generators. Hydro One's responses have made it clear that it will not come into compliance by November 2007. I recognize that the number of applications has continued to at a high level and that there have been a number of unique issues for Hydro One to deal with, including the responsibility to undertake reviews for embedded distributors and distributors connected to transmission stations. My concern at this time is that there is a large backlog of CIAs, including those applicants that are presently on a waiting list for a CIA. In my view the plan has not shown (i) how the delivery times would improve and (ii) a specific plan to incrementally increase the number of completed CIAs and detailed cost estimates. I had anticipated that through your own monitoring Hydro One would have made adjustments to its plan to ensure more favourable results.

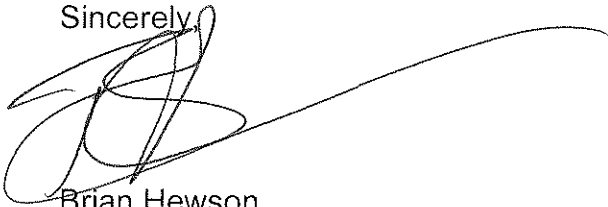
Therefore, I request that Hydro One provide a final response regarding the results of its plan. The response should address the issues that I have raised above in in prior correspondence on this matter as well as include information that indicates how Hydro One intends to achieve compliance. I request that Hydro One provide this response no later than November 5, 2007.

The views expressed in this letter are mine and are not binding on the Board. Although no statutory power of decision has been delegated to me, I may seek enforcement action by the Board under Part VII.1 of the *Ontario Energy Board Act, 1998*, in relation

to non compliance.

If you would like to discuss this matter or have any questions regarding the content of this letter, please do not hesitate to contact me at (416) 440-7628, or Dawn Hayle, Advisor at (416) 440-7721.

Sincerely,

A handwritten signature in black ink, appearing to be 'Brian Hewson', with a long horizontal flourish extending to the right.

Brian Hewson
Chief Compliance Officer

Copy: Susan Frank, Hydro One Networks Inc.

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Oded.Hubert@HydroOne.com

Oded Hubert

Director, Regulatory Compliance
Regulatory Affairs

November 5, 2007

Sent by email: Brian.Hewson@oeb.gov.on.ca

Mr. Brian Hewson
Chief Compliance Officer
Ontario Energy Board

Dear Mr. Hewson;

Re: Hydro One Networks Compliance with the Distribution System Code

I am responding to your letter of October 25, 2007 regarding Hydro One's non-compliance with the Distribution System Code (DSC) requirements for the processing and delivering of documents to applicants who request distribution connections for proposed generation facilities.

1) Hydro One's Action Plan: Hydro One has put a very high priority on Generation Connections, and has made significant effort to address our non-compliance with the DSC in this area. As early as June 2007 (see our June monthly progress report), Hydro One's efforts to hire and train additional staff to increase the output of CIA reports were yielding positive results. The number of CIA requests pending completion had dropped to 135, from 164 in February 2007. At that time, Hydro One stated that we would continue to reduce the backlog as long as the volume of new applications and requests for "reworks" continued at the rates experienced in the previous 4 months. I am providing further information below on the activity level of CIA applications since June, and on its impact on our efforts to reduce the backlog of CIA requests.

As you acknowledge in your October 25, 2007 letter, we have also streamlined the initial feasibility assessments, and have actively communicated information to generator proponents through both our web site and direct communications. While your letter also refers to "implementing technical limits" as part of our action plan, I do want to clarify that the implementation of technical limits was done strictly to protect the reliability and integrity of the distribution and transmission systems, and is independent of our activities to address compliance. Nevertheless, the technical limits have resulted in a number of applications not being processed at this time. Our monthly reporting to you, and the web site information for customers, have provided up-to-date reports on the number of applications that do not fall within the technical limits of the existing transmission system.

2) Monthly Progress Reports on Compliance Plan: As you acknowledge in your letter, Hydro One has provided monthly reports documenting our progress in moving toward compliance with the DSC. Here is a summary of the number of CIA requests each month since the June report, the number of projects eligible for a CIA, the number of CIAs completed and the number of CIAs awaiting completion as a result:

<u>Report</u>	<u># CIA Requests</u>	<u># Eligible</u>	<u># Completed</u>	<u># Awaiting Completion</u>
July	59	43	27	153
August	47	28	27	156
September	81	35	27	138*
October	80	34	36	136

* September decrease is due to 400 Amp technical limit reducing the number of eligible projects.

Through the end of June 2007, Hydro One was averaging 23 CIAs per month. Although Hydro One has since increased the output of CIAs, the number of applications has also continued to rise. In the first half of 2007, the average number of CIA applications was 40 per month. In the period from July through October, the average number of CIA applications was 66 per month. Due to this high level of applications over the last four months, the backlog of CIAs awaiting completion is not being reduced, despite the efforts of the company to increase resources and CIA output.

3) Hydro One Effort to Increase Output of CIAs: The Generation Connections Department has increased from 2.5 staff in early 2006 to 27 staff at this time to increase our ability to complete CIA studies and respond to other proponent needs (eg, IFAs, cost estimates, technical enquiries, and reworks). Hydro One has been able to significantly increase the number of CIAs completed in October to 36. This is not just a result of increased staffing, but also of staff training and of staff gaining experience after several months on the job. However, as we have previously discussed, it is not possible to hire new engineers and have them producing CIA studies within days or even weeks of being hired. The skill set required to perform CIAs is not readily available in the market or from academic institutions. Hydro One has recruited staff with varied skills and experience – but all require hands-on training with our experienced engineers before they are able to complete CIAs on their own. This has made it difficult to respond to monthly fluctuations in the number of CIAs to be completed, and it is certainly not possible to respond within any given month to an increase in the number of CIA requests. The complexity of individual CIAs has also increased as the number of generators on any particular feeder or TS has increased and approached the maximum thresholds.

Hydro One has used a combination of permanent and contract staff in the Generation Connections Department. It is difficult, and likely imprudent, to make a business case for hiring all permanent staff in work programs that fluctuate on a monthly basis and may not require long term staff levels to manage the work load. As a result, turnover of contract staff is another reality that we deal with. Due to labour relations limitations on the length of contracts of temporary employees, we will lose a number of experienced staff in the near future and will have to hire replacement workers who will require training and experience before they are fully competent to complete CIAs on their own. Nevertheless, Hydro

One will at least replace existing staff levels and will consider the need for increasing the permanent and contract staff level in Generation Connections.

4) Ability to Come into Compliance: As noted in your October 25th letter, the number of CIAs outstanding at the end of September was 138. At the end of October, there are 136 CIAs awaiting completion. Based on the information provided above, Hydro One cannot present a plan to come into compliance with the relevant sections of the DSC without knowing the number of applications that we will have to process in the future. Having a time-based formula in the DSC for the preparation and delivery of CIA studies has put Hydro One in an untenable situation from a compliance perspective. We do not believe that when the Board codified these requirements in the DSC, it had anticipated (nor could it have) the number of generation connection applications that has materialized since.

Accordingly, Hydro One intends to seek from the Board a formal exemption from those sections of the DSC that we are unable to comply with at this time. We will keep you informed of our plans in this regard.

Please feel free to contact Jim Malenfant (at 416-345-5907) or me if you have any further questions.

Yours truly,

Original signed by Oded Hubert

Oded Hubert
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Hydro One Networks

(Phone: 416-345-5240)