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Regulatory Affairs



BY COURIER

September 7, 2010

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

Dear Ms. Walli:

EB-2010-0228 – Hydro One Networks Request for Fees Related to Distribution Generation Projects – Hydro One Networks Responses to Interrogatory Questions

Please find two (2) hard copies of responses provided by Hydro One Networks to Interrogatory questions.

Below is the Tab numbers for each intervenor

Tab	Intervenor
1	Ontario Energy Board
2	Vulnerable Energy Consumers Coalition
3	Canadian Manufactures & Exporters
4	Energy Probe

An electronic copy of the Interrogatories, have been filed using the Board's Regulatory Electronic

Sincerely,

ORIGINAL SIGNED BY SUSAN FRANK

Susan Frank

Attach

c. Intervenors (electronic Only)

Ontario Energy Board (Board Staff) INTERROGATORY #1 List 1

Interrogatory

Competitive Market for Joint Use of Poles

1. Hydro One Distribution has requested a decision from the Ontario Energy Board as to whether joint use charges require Board approval. Hydro One Distribution states that “each generator has the option of supplying its own support structure by constructing, installing, and maintaining its own utility poles.”¹ Board staff needs clarification of this point.
 - a. Is Hydro One Distribution stating that the generators have the economic alternative to construct poles in situations where Hydro One Distribution already can accommodate the generators?
 - b. Is Hydro One Distribution stating that where it has existing support structures that are not technically sufficient to include the generator’s assets that there is an economic alternative for the generator to construct and maintain its own support structures?
 - c. Is Hydro One Distribution suggesting that a ceiling for negotiated rates is the avoided cost of a generator constructing its own parallel transmission line?

¹ Exhibit B, Tab 1, Schedule 1, page 8, lines 1-2.

² Exhibit B, Tab 1, Schedule 1, page 8, lines 4-6.

Response

- a. It is Hydro One’s understanding that generators do have the alternative to construct their own pole line. However Hydro One is not privy to information about the economics of this alternative, which may vary from case to case, and Hydro One does not view it as preferable to joint use.
- b. It is Hydro One’s understanding that generators do have the alternative to construct their own pole line. However Hydro One is not privy to information about the economics of this alternative, and does not view it as preferable to joint use.
- c. No.

Ontario Energy Board (Board Staff) INTERROGATORY #2 List 1

Interrogatory

Competitive Market for Joint Use of Poles

Hydro One Distribution states that having generators erect their own facilities may increase the cost to Hydro One Distribution to connect new customers, as Hydro One Distribution may be required to enter into a joint use tenancy agreement for the use of a generator's pole². Please explain in what circumstances would Hydro One request access to the generator's pole?

Response

Hydro One can provide a couple of scenarios in which access to a generator's assets would be requested:

1. A generator may erect its own facilities on one side of a road allowance, with Hydro One's facilities on the other. In this scenario, Hydro One may need to gain access to the generator's pole(s) to cross over a road, if a distribution customer or different generator on the other side of the road requests a new service connection.
2. A generator may own an existing stand-alone pole line in an area with no existing Hydro One distribution customers adjacent to the line and therefore, no existing Hydro One facilities in close proximity to those of the generator. A request for a new electrical connection in this area could require Hydro One to expand its current distribution system, which may be less economically attractive than utilizing the generator's existing pole line.

In such circumstances, it would be prudent for Hydro One to enter into a tenancy agreement with the generator for use of its poles. This would enable Hydro One to serve other customers, including other generators, as needed.

Typically, however, Hydro One would prefer to own the pole(s) and enter into a tenancy agreement with the generator being the occupant. Then, if poles must be replaced (e.g. due to a motor vehicle accident or storm damage), Hydro One is in the position to supply and change them in a timely manner (whereas in a tenancy arrangement, it might be required to wait for the generator's contractors to do this work). Pole ownership by the distributor helps minimize power interruptions to distribution customers.

Ontario Energy Board (Board Staff) INTERROGATORY #3 List 1

Interrogatory

Competitive Market for Joint Use of Poles

The Board in its Decision and Order on the CCTA Application, RP-2003-0249, stated:

*“The Board agrees that power poles are essential facilities. It is a well established principle of regulatory law that where a party controls essential facilities, it is important that non-discriminatory access be granted to other parties. Not only must rates be just and reasonable, there must be no preference in favour of the holder of the essential facilities. **Duplication of poles is neither viable nor in the public interest [emphasis added]**”³*

The RP-2003-0249 Order and Decision also stated:

“There has been some evidence on both sides with respect to abuse. In the end the CCTA says that the electricity distributors do have monopoly power and the fact that the parties have been unable to come to an agreement for over a decade demonstrates the exercise of that monopoly power whether this results in abuse or not.

The Board agrees. A showing of abuse is not necessary to justify the intervention of this Board in this matter. The fact is the parties have been unable to reach an agreement in over a decade. This degree of uncertainty is not in the public interest.”⁴

The Ontario Energy Board Act (the “Act”), in setting the Board’s objectives for electricity, states that the Board should be guided by a set of principles, one of which is:

*“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 [emphasis added] to accommodate the connection of renewable energy generation facilities.**”⁵*

- a. Please explain why Hydro One Distribution suggests that duplication of the poles would now be viable and in the public interest.

b. Were the Board to refrain from regulating pole rental charges for generators, please explain the measures that Hydro One Distribution would put in place to ensure that any negotiations would not impair “the timely expansion or reinforcement of transmission systems and distribution systems to accommodate the connection of renewable energy generation facilities.”

3 Decision and Order, RP-2003-0249, page 3

4 *Ibid*

5 S.O. 1998, CHAPTER 15 Schedule B sec. 1. (1) 5.

Response

a. Hydro One does not suggest that duplication of poles would be viable or in the public interest. Hydro One encourages and supports Joint Use arrangements, as multiple pole lines are not preferred for aesthetic and economic reasons.

b. Hydro One Distribution believes that Joint Use negotiations would not impair “the timely expansion or reinforcement of transmission systems and distribution systems to accommodate the connection of renewable energy generation facilities.”

A distribution system expansion is a “modification or addition to the main distribution system in response to one or more requests for one or more additional customer connections that otherwise could not be made.”

Reinforcements entail the strengthening or enhancement of existing facilities to ensure a stable level of reliability.

Joint Use arrangements, on the other hand, are not intended to upgrade or modify the distribution system to meet the needs of electrically connected customers, nor to provide electrical reinforcements. The Joint Use partner attaches or affixes its own conductor and attacher to a utility’s poles. Hydro One and the Joint Use generator are electrically independent; the Joint Use arrangement simply provides increased utilization of Hydro One’s poles.

System modifications, either expansions or reinforcements, do not impact Joint Use partners. Conversely, Joint Use arrangements will not impact expansions or reinforcements.

Ontario Energy Board (Board Staff) INTERROGATORY #4 List 1

Interrogatory

Joint Use Rates

Board staff understands that Hydro One Distribution's proposal for establishing the level for the new joint use rates is based on the following:

- a. The methodology is the same as found in Appendix 2 of the RP-2003-0249 Decision and Order. The only values found in the appendix that would change are line G, the Capital Carrying Cost, and line I, the Allocation Factor. Please confirm that this understanding is correct. Otherwise, please clarify Hydro One Distribution's proposal.
- b. Line G (Capital Carrying Cost), in Appendix 2 of the RP-2003-0249 Decision and Order, will be replaced by the value in line A of Table 3 found at Exhibit B Tab 2 Schedule 1 which is labelled Cost of Power Space. Please confirm that this understanding is correct. Otherwise, please clarify Hydro One Distribution's proposal with supporting detailed calculations.
- c. Line I (Allocation Factor), in Appendix 2 of the RP-2003-0249 Decision and Order, will be replaced by the Generator % of Power Space Allocation in Table 4 found at Exhibit B Tab 2 Schedule 1 in order to establish the array of rates that vary by pole height and size of space. Please confirm that this understanding is correct. Otherwise, please clarify Hydro One Distribution's proposal with supporting detailed calculations.

Response

- a. Hydro One utilized the methodology which was used to establish the Local Distribution Company (LDC) Joint Use rate and which the OEB had approved in proceeding RP-2005-0020/EB-2005-0378. As a starting point, these inputs were used to establish the rate for 50-foot poles. That rate reflects a total power space shared equally between Hydro One and another LDC.

The LDC Joint Use rate calculation is based upon the RP-2003-0249 Telecom Joint Use decision. Using the assumption of two telecom attachers on a 50 ft pole, Hydro One calculated the proportion of power space. The power space allocation is illustrated below:

Notes		A	B	C		D
		Number	Telecom Allocation (%)	Non Power Space Allocation (%)		Power Space Allocation (%)
1		2	21.9	43.8		56.2
				A1 x B1		1 - C1

Hydro One has applied 43.8% to a 50-foot pole to determine the physical space requirements for non-power space (telecom, street lighting). The remaining physical space, 56.2% is deemed the power space, which is allocated between Hydro One Distribution and Generators or other LDCs.

With two distributors each using 10 feet of power space, each distributor would be responsible for 28.1% of the allocated power space on a 50-foot pole. Using this as a starting point and the approved, negotiated Joint Use rate of \$28.61 for LDCs, the total power space value for a 50-foot pole would equal two multiplied by \$28.61 or \$57.22.

In instances where a taller pole is required, the physical power space will be greater than the physical power space on a 50 ft pole, while the physical non-power space requirement will remain the same. The base proportional space allocation (43.8% and 56.2%) is relative to the 50 ft pole and was initially used to illustrate the two different types (power vs non-power) of space allocation.

The proposed development of the sliding scale focused on only the power space of the pole from there forward. Costs associated with a generator's requirement for increased pole height should be borne by the generator.

The \$57.22 rate was used as the basis for a 50- foot pole; however, as a generator's pole space requirements increase, the overall value of power space also increases. The total generator's power space was divided by total power space to determine their percentage of total power space. It should be noted that the 10 feet of power space required by Hydro One must be recognized. The chart below provides total values and percentages.

Total cost of space (50' pole) = \$28.61 x 2 = \$57.22		HONI \$ Cost	GEN Pole space + Factor	Total Generator \$ Cost	Total Power Space Cost = HONI \$ Cost + Generator \$ Cost
Poles Heights (ft)	HONI Pole space +Factor				
50	10ft / 50%	\$28.61	10ft / 50%	\$28.61	\$57.22
55	10ft / 40%	\$28.61	15ft / 60%	\$34.33	\$62.94
60	10ft / 33%	\$28.61	20ft / 67%	\$38.15	\$66.76
65	10ft / 29%	\$28.61	25ft / 71%	\$40.63	\$69.24
70	10ft / 25%	\$28.61	30ft / 75%	\$42.92	\$71.53
75	10ft / 22%	\$28.61	35ft / 78%	\$44.63	\$73.24

Total cost of space (50' pole) = \$28.61 x 2 = \$57.22		HONI \$ Cost	GEN Pole space + Factor	Total Generator \$ Cost	Total Power Space Cost = HONI \$ Cost + Generator \$ Cost
Poles Heights (ft)	HONI Pole space +Factor				
80	10ft / 20%	\$28.61	40ft / 80%	\$45.78	\$74.39
85	10ft / 18%	\$28.61	45ft / 82%	\$46.92	\$75.53
90	10ft / 17%	\$28.61	50ft / 83%	\$47.49	\$76.10
95	10ft / 15%	\$28.61	55ft / 85%	\$48.64	\$77.25
100	10ft / 14%	\$28.61	60ft / 86%	\$49.21	\$77.82

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- b. No. The \$57.22 value in line A of Table 3 found at Exhibit B, Tab 2, Schedule 1 which is labeled Cost of Power Space is the approved \$28.61 Joint Use rate for LDCs multiplied by two. The rationale behind this multiplication is that both Hydro One and the generator require a minimum of 10 feet of power space. Hence, this is the *total* value of the shared power space for this size of pole.
- c. No. See the response to a) above.

Ontario Energy Board (Board Staff) INTERROGATORY #5 List 1

Interrogatory

In Table 3 found at Exhibit B Tab 2 Schedule 1, line A, the explanation states that the cost of power space was negotiated with the EDA and is \$57.22.

- a. Please provide the calculation of this amount, with full explanation of the source and reasons for the amounts used and determination of \$57.22.
- b. Please state from which year these costs were developed.
- c. Do the capital and/or operating costs for poles vary by height?
- d. If the capital and/or operating costs for support structures vary by height, please explain why Hydro One is proposing just one set of costs based on fifty foot poles for Depreciation Expense, Pole Maintenance Expense, and Capital Carrying Cost as applied in Appendix 2 of the RP-2003-0249 Decision and Order.

Response

- a. This value was calculated using inputs from the RP-2003-0249 Decision. Assuming two Telecom Attachers in rural Ontario on a 50-foot pole, 56.2% of power space remains. The calculation is:

$$100\% - (21.9\% \times 2) = 56.2\%.$$

With 2 Local Distribution Companies each using 10 feet of power space (that is, an equal split of the 56.2%), each Local Distribution Company would be responsible for 28.1% of the allocated power space on a 50-foot pole. Using this percentage as a starting point in conjunction with the approved, negotiated Hydro One Joint Use rate of \$28.61 for Local Distribution Companies, the total power space value of a 50-foot pole would equal \$28.61 multiplied by two or \$57.22. Please also refer to OEB Interrogatory 4(a) for additional details.

- b. The costs were developed in 2005.
- c. Yes
- d. Hydro One is not proposing just one set of costs. The 50-foot pole was used as a base reference point. As outlined in Exhibit I, Tab 1, Schedule 4, part a, overall costs associated with the power space increase as space requirements increase; Hydro One has extrapolated the costs reflected in the base reference point (\$57.22) to determine the generators' rental rate for 5-foot increments.

Ontario Energy Board (Board Staff) INTERROGATORY #6 List 1

Interrogatory

The proposed range of rates for joint use is predicated upon generators requiring poles taller than 50 feet. Fifty feet is the basis for the current joint use rate. Board staff needs clarification of the proposal for allocating the incremental height and related costs above 50 feet.

In Exhibit B Tab 1 Schedule 1 Hydro One Distribution explains in Section 3.1.1 that the portion of available power space is 56.2% of the incremental height. In RP-2003-0249, the allotment for communication space was a fixed height, as was the allotment for street lighting. This gave rise to the percentage allocation of 43.8% for both communications and street lighting. That left 56.2% to be shared by Hydro One Distribution assets and other power providers. The proposal to allocate 56.2% of the incremental height to power space implies that 43.8% of the incremental height would be a cost for communications and street lighting.

- a. Please explain why any of the incremental height requested by generators should be borne by Hydro One Distribution customers?
- b. Please expand Table 3 of Exhibit B Tab 1 Schedule 1 to include each of the eleven proposed pole heights to provide a comparison of the incremental revenue requirement and the respective proposed revenues from generators. Please provide details of assumptions used in determining the costs and revenues.
- c. Hydro One's proposal to allocate 43.8% of the pole height to communications and street lights irrespective of pole height results in more space being allocated for these uses as height increases. Please explain why the allocator for communications and street lighting were not recalculated in order to maintain the fixed dimensional space required for their assets.

Response

- a. The incremental height should not be borne by Hydro One Distribution Customers/rate payers. It is for this reason that Hydro One has developed a formula that increases the generator contribution based on their required power space divided by total power space starting at the rate for a 50-foot pole.

b. The Table 3 is reproduced below to include the eleven pole heights referenced:

Table 3
Revenue Impact of New Joint Use Charge

		1	2	3	4	5	6	7	8	9	10	11
		Pole Height										
		50' (Status Quo)	55'	60'	65'	70'	75'	80'	85'	90'	95'	100'
A	Proposed Charge (Per Pole)	\$28.61	\$34.33	\$38.15	\$40.63	\$42.92	\$44.63	\$45.78	\$46.92	\$47.49	\$48.64	\$49.21
B	Approx. Poles	13,900	13,900	13,900	13,900	13,900	13,900	13,900	13,900	13,900	13,900	13,900
C	Forecasted Revenue	\$397,679	\$477,187	\$530,285	\$564,757	\$596,588	\$620,357	\$636,342	\$652,188	\$660,111	\$676,096	\$684,019
D	Revenue Change from Status Quo	\$0	\$79,508	\$132,606	\$167,078	\$198,909	\$222,678	\$238,663	\$254,509	\$262,432	\$278,417	\$286,340
		C1-C1	C2-C1	C3-C1	C4-C1	C5-C1	C6-C1	C7-C1	C8-C1	C9-C1	C10-C1	C11-C1

The 13,900 pole approximation is based on forecasted requirements of the potentially impacted generators referenced in Section 4.1 of Exhibit B, Tab 1, Schedule 1. This estimate is based on the distance between the generator and the proposed point of common coupling. Though the distance between poles may vary based on individual circumstances, there are approximately 14 poles per circuit km for smaller distribution connected projects. For larger transmission connected projects, which may require a larger conductor in some locations, Hydro One is required to install 18 to 22 poles per km to accommodate the weights.

Please note that Table 3 from Exhibit B, Tab 1, Schedule 1 provides, for demonstration purposes only, the potential incremental revenue from the change in the fee structure. A more reflective illustration would include a sampling of varied pole height. Below, Table 3-A, provides an estimate of the height distribution for the 13,900 poles, which may provide a more representative impact on external revenues.

Table 3 –A

		1	2	3	4	5	6	7	Notes
		50' Pole	55' Pole	60' Pole	65' Pole	70' Pole	75' Pole	80' Pole	
		\$28.61	\$34.33	\$38.15	\$40.63	\$42.92	\$44.63	\$45.78	
A	Approx. Poles % (based on 13,900)	15%	25%	30%	20%	5%	3%		
B	Forecasted Revenue	\$59,651.85	\$119,296.75	\$159,085.50	\$112,951.40	\$29,829.40	\$18,610.71	\$12,726.84	
C	Total of above Forecasted Revenue (Table 3-A)	\$512,152.45							B1+B2+ B3+B4+ B5+B6+ B7
D	Revenue Change from Status Quo (Table 3)	\$114,473.45							C1(Table 3- A) - C1(Table 3)

Also to be noted in this section is that for operational reasons, Hydro One has limited the height of a joint use pole to be 80 feet in length, which provides space for up to 5 circuits (total Hydro One and generator circuits). Although this methodology has been applied to derive rental rates for up to a 100-foot pole, any requirements above 80 feet must be examined on a case by case basis, to ensure the joint use arrangement is viable both financially and operationally. This examination includes consideration of the equipment required to maintain or replace the poles and attachments, if required. In some locations, joint use arrangements requiring a greater than 80-foot pole may not be viable; in these cases, requests for joint use arrangements may be denied.

- c. Hydro One has adopted an approach that utilizes a 50-foot pole to determine a base case for physical space requirements. Under this approach, Hydro One has applied 43.8% to a 50-foot pole to determine the physical space requirements for non-power space (for example, telecommunications or sentinel lighting.) The remaining physical space, 56.2% is deemed the power space, which is allocated between Hydro One Distribution and Generators/Local Distribution Companies.

In instances where a taller pole is required, the physical power space will be greater than the physical power space on a 50 -foot pole, while the physical non-power space requirement will remain the same. Please refer to Exhibit I, Tab 1, Schedule 4, part a for more details.

Ontario Energy Board (Board Staff) INTERROGATORY #7 List 1

Interrogatory

Joint Use Rates

Hydro One states that the terms for agreements with generators is typically 20 years. Hydro One Distribution is proposing to adjust the joint use fees annually and to rebase every 5th year. To adjust the joint use rates, Hydro One proposed a formula that adjusts the rate using the Consumer Price Index ("CPI"). The Board in the past has used the GDP- IPI as an inflator for both electricity and natural gas under the incentive regulation mechanism ("IRM") framework.

- a. Please explain why the CPI was proposed rather than the GDP-IPI.
- b. If the CPI or GDPI-PI were used, please explain why a productivity factor is not proposed.

Response

a. CPI was proposed for pragmatic reasons. Firstly, CPI is widely known and recognized, and is the most commonly referenced inflation index in the media. As a result, customers, including generators, are more familiar with the CPI calculation than GDP-IPI. Further, CPI is published monthly, it is subject to fewer and more minor future revisions compared to GDP-IPI and forecasts are widely available from banks, public institutions, etc. Finally, CPI is the adjustment mechanism that has been successfully negotiated and executed into 77 Local Distribution Company agreements. For these reasons, CPI seems to be the logical choice for use with generators.

b. Hydro One has not proposed a specific productivity/X factor adjustment because Joint Use arrangements present relative productivity gains and losses, simultaneously.

On the one hand, Joint Use presents an opportunity for more efficient use of existing facilities by accommodating multiple, distinct users on one pole.

From an operational standpoint, however, Joint Use presents some productivity challenges as it complicates standard work practices and may necessitate non-standard work equipment. For example, if Hydro One must change a damaged pole on which a generator is a tenant, it may have to make certain arrangements to accomplish the task while accommodating the generator's equipment. In these cases, a productivity loss may be experienced. Hydro One's varied service territory also

1 presents a number of unique topographical and operating circumstances which may
2 result in wide fluctuations with regards to the relative productivity impact.

3
4 For these reasons, Hydro One has not proposed a productivity/X factor adjustment,
5 other than the productivity loss accounted for in the base calculation.

6
7 Hydro One, however, is piloting practices that may lessen productivity losses due to
8 Joint Use. In the case of generator express collector lines, Hydro One is working with
9 generators on designs which position their lines either at the top of the pole or on the
10 field side. This will limit the impedance to Hydro One in its day-to-day operations
11 and lessen the productivity loss resulting from joint use.

Ontario Energy Board (Board Staff) INTERROGATORY #8 List 1

Interrogatory

CIA Fees

Hydro One is proposing two new CIA fees, one each for net metering generators and capacity allocation exempt generators.

- a. Please provide the cost analysis performed to determine the respective fees.
- b. Please explain the source (labour rates, facility costs, consumables, etc) and rationale for the items and calculations used to determine the fees.
- c. Please explain whether average, incremental or other cost types were used.
- d. If the costs are not based on the most recently approved costs, or costs that underpin the most recently approved Hydro One Distribution test year, please explain why the most recently approved costs were not used.
- e. Please explain and develop any forecast information used.

Response

- a. Hydro One does not have specific time studies for the new fees. A detailed cost analysis, however, was performed prior to Hydro One's last Distribution Rate filing (EB-2009-0096). This cost-based time study examined the resources required to complete Connection Impact Assessments for applications from large, medium and small generation projects. It supported the fees that were filed in the distribution rate filing for those types of assessments. At the time of the filing, however, the FIT program rules were under development. The detailed treatment of CAE projects was not yet settled and accordingly, Hydro One could not determine the possibility for streamlining these assessments. Hydro One also did not include costs for performing CIAs on net metering projects in that rate application, because at that time, the Company was not expecting to receive any more applications for these.
- b. The source data used in the study for the rates included in EB-2009-0096 was labour rates and overhead costs.
- c. The cost analysis for the rates used in EB-2009-0096 was based on average cost types which Hydro One believes provide a representative basis for typical projects.

1 d. A request for new CIA fees for CAE and net metering projects was not submitted
2 within the previous Distribution Rate Application for the reasons noted in response to
3 a) above. However, the time factor underlying the most recently approved fees is also
4 the starting point for the costing of CAE project assessments. Hydro One's time
5 requirements to review these projects, however, are lower than those for other small
6 generation projects. The changes in the Distribution System Code have allowed
7 Hydro One to study a CAE project as though it were the first to gain a capacity
8 allocation at a station; this made the Connection Impact Assessment (CIA) much less
9 complicated than a typical study for a generation project which would have one or
10 more other projects having allocated capacity ahead of it. Furthermore, Hydro One
11 was able to leverage more efficiencies, due to the large number of CAE projects from
12 the FIT Launch period, as well as the large number of CAE projects expected from
13 the Post-Launch period, Hydro One has streamlined its assessment and review
14 process, to move them through as quickly as possible. This streamlined process is in
15 keeping with the intent of the OPA, the OEB and the Government for these projects
16 as well.

17
18 With respect to CIA fees for net metering projects, Hydro One has found that its
19 assessments of these projects typically require about the same amount of work as that
20 for CAE projects. For this reason, Hydro One has requested the same fee.

21
22 e. Forecast information is only available from the OPA, as this agency administers the
23 program and, therefore, is the first to receive Feed-In Tariff applications.
24

Ontario Energy Board (Board Staff) INTERROGATORY #9 List 1

Interrogatory

Hydro One is proposing to reduce the current CIAs by 50% for any projects that have rescinded their applications and for all revised applications.

- a. Please provide the cost justification with supporting rationale for 50%.
- b. If there is no cost justification, please provide any surveys, studies or rationale to support the 50%.
- c. Who will subsidize the lower revenues, the distribution rate payer or the shareholder?

Response

- a. For proponents who have rescinded their original CIAs in order to re-apply under the FIT program, the justification to charge 50% of the original fee is based on the fact that Hydro One has already recently completed a CIA for the project (the aforementioned rescinded CIA). Since the OPA's FIT program prioritizes projects which are more "shovel-ready", Hydro One anticipates that proponents who have rescinded their initial applications will make few, if any, changes to their projects, so as to enable more efficient processing to meet their in-service date. As the Distribution System Code directs the complete re-submission of project applications with material changes, proponents also have an incentive to make as few changes as possible in their re-application.

As a result, Hydro One anticipates that very little would change in these CIAs, other than ensuring they meet the current standards, verifying that no distribution system changes have occurred in that part of the system and re-running the tests.

For those proponents who revise their CIAs, Hydro One justifies charging 50% of the original fee based on the general experience that this reflects the incremental amount of work required.

For example, during the assessment of a *new* project, the technical data is updated with the assumption that the project is *about* to be allocated capacity; the project is studied in context of all the other applications at the same station. For the assessment of a revision, however, Hydro One already has already obtained the required technical data. It therefore, must only update the specific component proposed for change, and re-run the tests in the CIA.

1 The proposed fee differential is tied to the anticipated lower resource requirements;
2 these charges are paid entirely by the generator.

3
4 When a proponent decides to make a change to its project that requires a revision to
5 its CIA, it is sometimes necessary to revise other CIAs that were completed
6 subsequent to the initial CIA of the revised project. As a result, the proponent
7 making the change is charged the CIA revision fee for not only their own CIA that is
8 being revised but also the CIA revision fee for all other CIAs that had to be revised as
9 a result.

10
11 b. Please see part a.

12
13 c. Preliminary work has already been done for proponents who have rescinded their
14 applications. As discussed in part a. above, Hydro One forecasts that performing CIA
15 revisions for these projects will, on average, require 50 % of the amount of work
16 undertaken for their original CIAs. The proposed fee differential reflects the
17 anticipated lower resource requirements for these assessments. Accordingly, there is
18 no loss of revenues; Hydro One believes it recovers all of the costs incurred in
19 performing these types of assessments

Ontario Energy Board (Board Staff) INTERROGATORY #10 List 1

Interrogatory

In EB-2009-0096 Hydro One was directed to implement CIA Charges – Small & Medium of \$10,335 and the CIA Charges – Large of \$10,405. The proposal in this application is to phase-in those charges with the following rates in effect prior to September 1, 2010:

CIA – small	\$3,000
CIA – Mid-Size	\$5,000
CIA – Large	\$6,000

- a. Please provide the cost justification with supporting rationale for the determination of these fees.
- b. If there is no cost justification, please provide any surveys, studies or rationale to support the lower rates.

Response

- a. Hydro One has no cost justification for these fees.
- b. The amounts were chosen based on the Company's judgement of what would be acceptable to generators, particularly in the context of other industry changes and cost pressures. The intent to use these fees through August 31, 2010, was simply to manage the transition to the higher cost structure for generators.

Ontario Energy Board (Board Staff) INTERROGATORY #11 List 1

Interrogatory

With the phasing-in of existing CIA's, revenues would be lower than expected. Who will subsidize the lower revenues, the distribution rate payer or the shareholder?

Response

Hydro One does not intend to recover the shortfall from generators or from its distribution ratepayers.

Ontario Energy Board (Board Staff) INTERROGATORY #12 List 1

Interrogatory

The proposed new rate for net metering and capacity allocation produces a new revenue stream for Hydro One. How does Hydro One propose to account these new found revenues?

Response

The revenue received from CIA fees for net metering and capacity allocation exempt projects is classified as external revenue. Forecasted external revenue earned through the provision of services to third parties is used to offset the revenue requirement from Hydro One Distribution's tariff and thereby reduce the required revenue to be collected from distribution ratepayers.

As noted in Exhibit I, Tab 1, Schedule 8, part a), Hydro One did not have sufficient information to forecast any significant level of activity, costs or revenues associated with these two types of projects in its recent distribution rate filing (EB-2009-0096). As such, these new found revenues are accompanied and offset by "new found" costs.

Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #1 List 1

Interrogatory

Reference: Exhibit B/Tab 1/Schedule 1, pages 1 - 4

Preamble: The Board Decision from EB-2003-0249 approved a pole rental rate of \$22.35 per pole per year.

- a) Please indicate what year's cost data was used in the Board's Decision.
- b) Please provide the basis for the current joint use rate of \$28.61. In doing so, please also fully explain the derivation of the \$57.22 value referenced at Exhibit B, Tab 2, Schedule 1, page 2 and Table 3.
- c) The OEB Decision makes no reference to a 28.1% space allocation factor. Please fully explain what the 28.1% represents and how it was determined.
- d) Please explain the derivation of the 29.1% factor used in the Board's Decision and referenced on page 5.

Response

- a) The Board's Decision utilized data from several years, ranging from 1991 through 1999. Please refer to Board Decision RP-2003-0249 (in particular, pages 8 and 9) for these details.
- b) Please refer to Exhibit I, Tab 1, Schedule 5, part a.
- c) Please refer to Exhibit I, Tab 1, Schedule 4, part a, and Exhibit I, Tab 1, Schedule 5, part a.
- d) Please note that the factor noted above should read 21.9%, per the referenced exhibit. The 21.9% factor was derived by the OEB and issued on Line I of Appendix 2, in the RP-2003-0249 Decision. The calculation of this factor itself is not explicitly detailed in this Decision, however.

Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #2 List 1

Interrogatory

Reference: Exhibit B/Tab 1/Schedule 1, pages 5-7

- a) Page 6 makes reference to shared space between the LDC and Hydro One Distribution. Please explain why these parties are sharing space as opposed to it being a generator and a LDC that are sharing space.
- b) The 29.1% factor used by the OEB was based on a 40' pole and 2.5 attachments. However, in the current Exhibit Hydro One has assumed a 50' pole and two attachments along with the LDC/generator. Please reconcile the use of 29.1% in the Hydro One calculations.
- c) If the 56.2% shared space factor is based on a 50' pole, why won't this factor change as the size of the pole changes. Presumably, with larger poles to accommodate generators the allocation factor applicable to communications/street lights will decline.
- d) Do the proposed rates account for the additional maintenance costs and productivity losses discussed at lines 6-12 or do they just account for the fact higher poles are required when generators also seek to connect and generators required a larger portion?

Response

- a) Hydro One used to establish the starting point. In areas of the province, where Hydro One and Local Distribution Companies have established Joint Use, the general configuration of those Joint Use poles is that each party has one circuit on a 50' pole. With generation coming on board in the province, Hydro One is experiencing more potential Joint Use with generators than Local Distribution Companies.
- b) Please refer to Exhibit I, Tab 1, Schedule 4, part a.
- c) Please refer to Exhibit I, Tab 1, Schedule 4, part a.
- d) Please refer to Exhibit I, Tab 1, Schedule 4, part a.

1 **Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #3 List 1**

2

3 **Interrogatory**

4

5 **Reference:** Exhibit B/Tab 1/Schedule 1, page 9

6

7 a) Why is \$57.22 the appropriate cost base to use for the rates to be implemented
8 January 1, 1010? Is \$57.22 based on 2010 costs?

9

10

11 **Response**

12

13 a) Please refer to Exhibit I, Tab 1, Schedule 4, part a.

1 **Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #4 List 1**

2

3 **Interrogatory**

4

5 **Reference:** Exhibit C/Tab 1/Schedule 1, page 2

6

7 a) Please provide the basis for the proposed \$3,000 charge for Net Metering projects and
8 Capacity Allocation Exempt projects.

9

10

11 **Response**

12

13 a) Please refer to Exhibit I, Tab 1, Schedule 8.

Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #5 List 1

Interrogatory

Reference: Exhibit C/Tab 1/Schedule 1, pages 3-4

- a) Prior to the EB-2009-0096 Decision, what was the CIA rate charged for small and mid-sized projects?
- b) What are the distinguishing features between these projects and the Capacity Allocation Exempt projects such that the latter warrant the lower charge?
- c) Why is August 31, 2010 the appropriate date on which to start charging the “full cost”?

Response

- a) Prior to the EB-2009-0096 Decision, Hydro One charged \$3000 for small projects and \$5000 for mid-sized projects.
- b) The Capacity Allocation Exempt projects are to be treated as though they are the first projects at a station to gain capacity. As a result, these projects often require less complicated studies than those required for projects that are treated as though they are later to gain capacity at a station; this distinction results in a more streamlined Connection Impact Assessment study. Please refer to Exhibit I, Tab 1, Schedule 8.
- c) Hydro One undertook pre-application consultations with generation proponents from the late fall of 2009 through the early spring of 2010. During this time, the Company quoted its lower costs then in use for CIAs, on the assumption that it would be able to process these applications prior to the May 1st, 2010 effective date for the new fees, should they be approved. Due to delays, however, many of these applications continued to arrive after May 1st. Hydro One believed it was appropriate, therefore, to request a transition period up through August 31st, 2010. This additional time would enable the Company to complete its assessments of these projects at the fee level previously discussed and avoid a sudden step-change in the costs for these proponents.

Canadian Manufacturers and Exporters (CME) INTERROGATORY #1 List 1

Interrogatory

Reference: Exhibit B, Tab 1, Schedule 1

The evidence at Exhibit B, Tab 1, Schedule 1, page 2, line 20 indicates that the rate currently being charged to generators for joint use of a 50-ft. pole is \$28.61 per pole. Please explain how this current charge relates to the annual pole rental charge of \$22.35 charged for the joint use of a pole for telecommunications purposes, being an amount shown in line K of Table 1 in the evidence at Exhibit B, Tab 1, Schedule 1, page 4. Is the calculation of the current \$28.61 charged to generators linked to the space allocation factor of 28.1% for LDC attachments, compared to the 21.9% allocation factor applicable to telecommunications attachments?

Response

Please refer to Exhibit I, Tab 1, Schedule 4, part a.

1 **Canadian Manufacturers and Exporters (CME) INTERROGATORY #2 List 1**

2
3 **Interrogatory**

4
5 **Reference:** Exhibit B, Tab 1, Schedule 1

6
7 Please explain how the proposed charges of \$38.15 for a 60-ft.pole, \$45.78 for an
8 80-ft. pole, and \$49.21 for a 100-ft. pole have been derived from the data
9 provided in Table 2 and either the annual pole rental of \$22.35 charged for
10 telecommunications attachments, or the \$28.61 currently charged for LDC
11 attachments to 50-ft. poles.

12
13 **Response**

14
15 Please refer to Exhibit I, Tab 1, Schedule 4, part a.

1 **Canadian Manufacturers and Exporters (CME) INTERROGATORY #3 List 1**

2
3 **Interrogatory**

4
5 **Reference:** Exhibit B, Tab 1, Schedule 1

6
7 In a format comparable to Table 1 at Exhibit B, Tab 1, Schedule 1, page 4, lines A
8 to H inclusive, please provide the line items and Total Direct and Total Indirect
9 Costs for pole lengths ranging between 55-ft. and 100-ft.

10
11
12 **Response**

13
14 Hydro One did not calculate each line item and all Direct and Indirect Costs for each
15 individual pole length. As explained in Hydro One's response to OEB Interrogatory 5(d),
16 the 50-foot pole was used as the starting point. Hydro One then used the total generator
17 power space divided by total power space times the starting value of \$57.22 to determine
18 the generator's rental rate for 5-foot increments.

Canadian Manufacturers and Exporters (CME) INTERROGATORY #4 List 1

Interrogatory

Reference: Exhibit B, Tab 1, Schedule 1

Please provide details of the variance account described at page 10 that Hydro One proposes to use to track joint use revenues in excess of the amount currently charged of \$28.61 for a 50-ft. pole with such revenues to be used to off-set future rates for its distribution customers. For example, will distribution customers receive a credit towards future rates of \$9.54 for every generator that chooses to attach to a 60-ft. pole? (the proposed charge of \$38.15 for a 60-ft. pole exceeds current charge of \$28.61 for a 50-ft. pole by \$9.54 per pole).

Response

Hydro One will defer to the Board's Decision with reference to tracking this revenue in a variance account. As noted in Hydro One's submission, referenced above, Hydro One is willing to track incremental revenues associated with any newly-approved rates in a variance account, and use these to offset future Distribution rates. In such a case, Hydro One agrees that the variance account would track revenues in excess of the \$28.61 approved LDC rate (consistent with the example provided above).

1 **Canadian Manufacturers and Exporters (CME) INTERROGATORY #5 List 1**

2
3 **Interrogatory**

4
5 **Reference:** Exhibit B, Tab 1, Schedule 1

6
7 Will the variance account apply in years beyond December 31, 2011?

8
9 **Response**

10
11 As noted in Exhibit I, Tab 3, Schedule 4, Hydro One will abide by the Board's Decision
12 with respect to any variance account. Hydro One anticipates that the variance account
13 will remain in place until the next Cost of Service filing.

14
15 In the next Cost of Service filing, projections of these and other external revenues will be
16 used to offset the future revenue requirement from Hydro One Distribution's tariff and to
17 thereby reduce the required revenue to be collected from distribution ratepayers,
18 consistent with the current approach for all categorized external revenue earned through
19 the provision of services to third parties.
20

1 **Canadian Manufacturers and Exporters (CME) INTERROGATORY #6 List 1**

2
3 **Interrogatory**

4
5 **Reference:** Exhibit B, Tab 2, Schedule 1

6
7 Will the annual COLA adjustment being proposed in Exhibit B, Tab 2,
8 Schedule 1, be recorded in the variance account as a credit to future distribution
9 rates?

10
11
12 **Response**

13
14 Hydro One defers to the Board's Decision with respect to the need for and details of any
15 variance account.
16

Canadian Manufacturers and Exporters (CME) INTERROGATORY #7 List 1

Interrogatory

Reference: Exhibit B, Tab 2, Schedule 1

What are the implications for distribution customers of Hydro One's request for varying fees for connection impacts assessments described in Exhibit C, Tab 1, Schedule 1, pages 1 to 4? In particular, what incremental revenue, if any, is likely to result from this proposal during the years 2010 and 2011, and is Hydro One proposing to track these incremental revenues in a variance account and use them to off-set future rates for its distribution customers?

Response

Please refer to Exhibit I, Tab 1, Schedules 8 and 12, for information regarding projections/forecasts and incremental revenues.

Hydro One sees no need for tracking this revenue in a variance account as it will be offset by equal and also unforeseen costs. The revenue received from CIA fees is classified as external revenue. As is the case with all categorized external revenue earned through the provision of services to third parties, projections of these revenues are used to offset the future revenue requirement from Hydro One Distribution's tariff and thereby reduce the required revenue to be collected from distribution ratepayers.

Energy Probe INTERROGATORY #1 List 1

Interrogatory

Ref: Exhibit B, Tab 1, Schedule 1, p. 1

Does Hydro One propose that it will erect all of the poles that approved generators request and are willing to pay the charge for?

Response

Yes. The basic premise is that Hydro One Distribution will attempt to utilize existing poles if sufficient to accommodate a generator. If a change to the existing pole line configuration is driven by generator needs, Hydro One Distribution will work together with the generator to determine the best arrangement to establish a common joint use pole line. The generator would be obligated to pay the incremental cost associated with this change

Energy Probe INTERROGATORY #2 List 1

Interrogatory

Ref: Exhibit B, Tab 1, Schedule 1, p. 1

Is it the case that only one new generator will connect to a given pole, or is it possible that more than one generator will seek access to the same pole? If the latter, what further arrangements if any are proposed?

Response

Yes it is possible more than one generator will connect to a given pole although this scenario would be very rare. Generators will pay rates based on the pole height and the associated power space they would require.

Energy Probe INTERROGATORY #3 List 1

Interrogatory

Ref: Exhibit B, Tab 1, Schedule 1, p. 4

Please explain the term “Net Embedded Cost per pole”.

Response

The Net Embedded Cost is derived from the Hydro One’s Poles & Fixtures account (Uniform System of Accounts). Included in this account are poles and other fixtures such as cross arms, insulators and hardware etc. Hydro One has taken 85% of the value of the account, which excludes an allowance for the value of the cross arms, insulators and hardware (approximately 15%), to derive the value of Hydro One Distribution’s pole inventory, only. This value is subsequently divided by Hydro One Distribution’s total pole inventory count to reach the average net embedded cost per pole.

Energy Probe INTERROGATORY #4 List 1

Interrogatory

Ref: Exhibit B, Tab 1, Schedule 1, p. 4

Please explain:

- (i) how the pre-tax weighted average cost of capital of 11.42% was derived, including the specific numbers used and**
- (ii) what conditions justify the continued use of this weighted average cost of capital.**

Response

- (i) This value was extracted from the Appendix 2 of the Board's Telecommunication Decision (RP-2003-0249.)
- (ii) The negotiated LDC rate, originally approved in RP-2005-0020/EB-2005-0378, was reapproved in the Board's Decision on Hydro One's last Distribution Rate application (EB-2009-0096), issued on April 9, 2010. For internal consistency, the OEB approved LDC rate has been used to establish the minimum requirements needed to accommodate a generator's joint use.

Energy Probe INTERROGATORY #5 List 1

Interrogatory

Ref: Exhibit B, Tab 1, Schedule 1, p. 4

Is Hydro One taxable in respect of the income it derives from sharing the use of its poles? If so, please provide a brief overview of the tax situation.

Response

Under the *Electricity Act, 1998*, Hydro One is required to make payments in lieu of corporate taxes to the Ontario Electricity Financial Corporation (OEFC). These payments are calculated in accordance with the rules for computing income and taxable capital and other relevant amounts contained in the *Income Tax Act* (Canada) and the *Taxation Act, 2007* as modified by the *Electricity Act, 1998*, and related regulations.

As such, the income that Hydro One derives from sharing the use of its poles will be included, similarly to that from other sources, in computing its taxable income.

Energy Probe INTERROGATORY #6 List 1

Interrogatory

Ref: Exhibit B, Tab 1, Schedule 1, p. 7

Hydro One suggests that the proposed charges may be unregulated because the joint use of the poles is a competitive service.

Does Hydro One provide other joint-use services on an unregulated basis?

Response

Yes, Hydro One's rates for Bell Canada and Local Distribution Company ("LDC") joint use attachments to its poles are based on a negotiated price, rather than rates approved by the OEB, due to other considerations such as reciprocal pole sharing arrangements and vegetation management services.

Energy Probe INTERROGATORY #7 List 1

Interrogatory

Ref: Exhibit B, Tab 1, Schedule 1, p. 7

Please clarify why the joint use of poles is a competitive service. Has Hydro One considered a regime in which generators bid for pole space?

Response

Hydro One believes that the rental of space on poles is a competitive service, as generators have an option to build their own pole line, and thus to select the preferred economic alternative for themselves. Please refer to Exhibit I, Tab 1, Schedule 1 and 2 for additional details. The construction of duplicative infrastructure is not Hydro One's preferred alternative, however, and the Company's position is to encourage joint use arrangements and one pole line.

Hydro One has not and is not considering a regime in which generators bid for pole space.

Energy Probe INTERROGATORY #8 List 1

Interrogatory

Ref: Exhibit B, Tab 1, Schedule 1, p. 8

Please explain why a “tenancy joint use agreement for use of a generator’s poles” could be necessary if each generator constructs, installs, and maintains its own utility poles.

Response

Please refer to Exhibit I, Tab 1, .Schedule 2.

Energy Probe INTERROGATORY #9 List 1

Interrogatory

Ref: Exhibit B, Tab 1, Schedule 1, p. 8

Does Hydro One consider that it would be realistic as an alternative to joint use and economically efficient for generators to construct, install and maintain their own poles?

Response

Please refer to Exhibit I, Tab 1, Schedule 1.

Energy Probe INTERROGATORY #10 List 1

Interrogatory

Ref: Exhibit B, Tab 1, Schedule 1, p. 8

If, as Hydro One indicates, the joint use costs are typically less than the sum of the stand-alone costs, does Hydro One maintain that the charge for joint use should equal the costs that a generator would save compared with stand-alone costs?

Response

No, the charge for joint use is based on pole power space required by the generator.

Energy Probe INTERROGATORY #11 List 1

Interrogatory

Ref: Exhibit B, Tab 2, Schedule 1, p. 2

What is the “asset base value” referred to? Is it the same as Net Embedded Cost?

Response

Yes.