

**AMPCO Responses to Interrogatories from Ontario Energy Board Staff
2009-2010 Transmission Rate Application
EB-2008-0272**

Interrogatory #1

Ref: AMPCO Evidence

In the Board decision which set the current charge determinants (RP-1999-0044) the Board stated:

“A rate design aimed at customer demand reduction during the system’s coincident peak hours would meet the test of economic efficiency, but only if the network transmission system is generally capacity-constrained. This is not the case for the OHNC [Hydro One] network transmission system either today or in the foreseeable future.”
(paragraph 3.4.27)

Is AMPCO able to provide any evidence that Hydro One’s transmission system is currently capacity constrained?

Response:

AMPCO’s purpose in this proposal is not only to relieve existing or developing capacity constraints, but more importantly to forestall future capacity constraints in order to minimize unnecessary and costly increases in capacity. When RP-1999-00044 was being decided, there were no defined policies or policy objectives with respect to demand response. Since RP-1999-0044, both government and regulatory policy has evolved to address not only current capacity constraints but also to use demand response as an instrument to defer future capacity requirements. As an example, the OEB guidelines for Electricity Distributor Conservation and Demand Management (EB-2008-0037), which utilize a Total Resource Cost (TRC) test methodology for evaluation of CDM programs states explicitly “the TRC test assesses CDM costs and benefits from a societal perspective. The benefits are defined as “avoided costs”. This represents the benefit to society of not having to provide an extra unit of supply – typically expressed as kW and/or kWh. For electricity, supply costs include energy, and generation, transmission and distribution capacity. “ (page 8, paragraph 3.2.1)

With respect to the current constraints on Hydro One’s transmission system, please refer to Exhibit D2/Tab2/Schedule 3. Several of the development projects listed specifically refer to capacity limitations driven by current and prospective load growth, with D15-D18 being good examples.

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Interrogatory #2

Ref: AMPCO Evidence, Table 2, p. 6

It notes that Dr. Anindya Sen estimated “electricity demand elasticity with respect to electricity prices for five industry sectors”. Table 2 then focuses on elasticity estimates in relation to the HOEP. In estimating the demand elasticity for each sector, please explain if Dr. Sen has taken into account that the HOEP is only a portion of the total electricity price (i.e., about 20%) paid by all Ontario consumers?

Response:

While it may be true that a relatively small fraction of energy production relies entirely on revenues derived from IESO-administered markets, our analyses suggest that the average Hourly Ontario Energy Price (HOEP), after adjustments, has represented not less than 60 percent of the average annual delivered retail rate for electricity from 2003 to 2008. In 2005, the HOEP represented more than 80 percent of the average annual delivered retail rate for electricity in Ontario. The study objective was to evaluate the effects of the HOEP on demand and the results indicate that demand does respond to changes in the HOEP.

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Interrogatory #3

Ref: AMPCO Evidence, p. 6

The AMPCO Evidence notes *“Dr. Sen’s analysis finds a statistically significant relationship between real time price HOEP and real time demand”*.

Please identify how many AMPCO members connected to the transmission system are currently purchasing power in the spot market and how many are on a contract at fixed prices?

Response:

All transmission-connected customers’ bills are settled based on hourly metered allocated quantities of energy withdrawn (AQEW) and the Hourly Ontario Energy Price (HOEP) during each hour. The bills of customers who enter into contracts with third parties to fix power prices or otherwise hedge risk would still be settled on this basis, but those customers would settle separately according to the terms of any contract with the counter-party to that contract. In effect, this means that all transmission-connected customers, whether or not they have entered into a contract, would be exposed to the HOEP in each hour.

AMPCO has no information relating to whether or how individual members would enter into a fixed price contract.

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Interrogatory #4

Ref: AMPCO Evidence, Table 5, p. 10

Please provide the following information:

- 4.1) The percentage of AMPCO member load connected to the transmission system versus the distribution system. And of those connected to the transmission system, please identify the percentage of AMPCO member load in each of the five sectors identified in Table 5.
- 4.2) With respect to AMPCO members connected to the transmission system, please provide the range that the network transmission charge accounts for in terms of those AMPCO member total electricity bills.
- 4.3) For each of the five sectors identified in Table 5, please identify how many AMPCO members connected to the transmission system are involved in OPA demand response programs (e.g., DR1, DR2, DR3).

Response:

- 4.1) AMPCO has no information regarding the electricity consumption of individual members by sector, neither transmission nor distribution customers.
- 4.2) AMPCO has no information regarding the electricity bills of individual members.
- 4.3) AMPCO has no information regarding participation by individual members in OPA demand response programs.

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Interrogatory # 5

Ref: AMPCO Evidence, p. 12

The AMPCO Evidence notes *“AMPCO is recommending that a customer’s monthly transmission demand charges be determined on the basis of the average of that customer’s coincident peak demand on the days of the 5 highest peaks in Ontario demand in the previous year.”* In Hydro One’s previous transmission rate proceeding (EB-2006-0501), AMPCO also proposed what appears to be a similar change in the rate design. In EB-2006-0501, it was referred to as a *“five-coincident-peak”* approach (or 5-CP).

5.1) Is the current rate design proposal the same or does it differ? If the latter, please explain how it differs from the previous proposal.

5.2) In addition, has AMPCO consulted the IESO on the estimated cost to make the required information system changes in order to implement AMPCO’s current proposal? For example, in relation to AMPCO’s previous proposal discussed above, the Board’s EB-2006-0501 Decision states, *“The IESO, which is responsible for billing transmission charges for all transmitters, indicated that AMPCO’s 5-CP proposal would take a minimum of six months and cost \$150,000 to make the required information system changes.”* (p. 97)

Response:

5.1) The current proposal differs from that in EB-2006-0501 in that it does not attempt to specify the months in which the peaks would occur. This proposal recognizes that, while Ontario is gradually becoming a more pronounced summer peaking system, peak days still occasionally occur outside the summer months and that demand response in these periods is still beneficial.

5.2) AMPCO has not consulted with the IESO on this proposal, but notes that the IESO’s estimated cost would represent less than one quarter of one tenth of one percent of Hydro One’s 2009 network revenue requirement of \$688M.

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With respect to the time needed for conversion, it should be noted that any change would not take effect until 2010, providing time for the IESO to make whatever program adjustments are necessary. This proposal would rely on data that is currently collected by the IESO for the existing rate design. The calculations required to determine the prospective year charge determinant could be made with a spreadsheet as an interim measure if necessary.

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Interrogatory #6

Ref: AMPCO Evidence, p. 13

With respect removal of the “ratchet”, point #4 on page 13 of AMPCO’s Evidence states *“It is especially important that this incentive be in place for LDCs, since most of the demand growth in Ontario that is driving the expansion of the transmission asset base is occurring with these loads.”* In the Board’s EB-2006-0501 Decision (p. 96), it states *“Toronto Hydro pointed out that it and other local distribution companies (LDCs) have little or no ability to shift their demand away from the peak because LDCs have little control over when their customers consume power. They would, therefore, pay a larger share of Hydro One’s Network charges.”*

6.1) As such, is AMPCO aware of any new developments that have occurred since the EB-2006-0501 proceeding that would now enable LDCs to shift their demand away from the peak?

6.2) If so, please elaborate.

Response:

6.1) Toronto Hydro and other utilities appear to have made considerable progress since 2006 in terms of increasing their ability to reduce demand when necessary. The peaksaver program appears to be particularly effective. Most recently, Toronto Hydro noted that on July 8, 2008 it was able to reduce demand by some 33.8MW on just its residential and small business customer base. AMPCO believes that, with the incentive inherent in an improved rate design, Toronto Hydro could capture significant additional demand response from its larger industrial and commercial customers as well. The specific announcement by Toronto Hydro on the July 8 demand response can be found at:

http://corporate.torontohydro.com/newsroom/52000_air_conditioner_peaksaverr_controls_triggered_in_response.html

6.2) Please see response to 6.1) above.