AMPCO Responses to Interrogatories from Electricity Distributors Association (EDA)
2009-2010 Transmission Rate Application
EB-2008-0272

Interrogatory # 1

Ref: AMPCO pre-filed evidence page 12

Issue: 7.1 Is the proposal to continue with the status quo charge determinants for Network and Connection service appropriate?

AMPCO's proposed transmission rate design recommends that a customer's monthly transmission demand charges be determined based on the customer's coincident peak demand on the days of the 5 highest peaks in Ontario demand in the previous year.

a) Please provide the rationale for choosing 5 highest peaks rather than choosing 12 highest peaks or some other number.

b) Please explain and provide evidence as to how this proposal would avoid or defer capital spending on Hydro One's Transmission Network.

c) Please identify areas where Transmission Network congestion would be reduced through this proposal.

d) If the transmission rate is based on the average of a customer's 5 Coincident peak demands in the previous year, what would be the impact of transmission rate increase on a customer whose business is on the decline in the current year and whose demand for electricity is also decreasing?

Response:

a) There is no set formula for selecting a specific number of peaks. However, AMPCO looked at three criteria. Any rate design based on peak demand runs the risk of omitting days of very high demand from the charge determinant or, conversely, picking up days when the peak demand is relatively modest. AMPCO's proposal, by focussing on the five highest peaks days in each year, is intended to reduce the use of relatively low "peak" days as charge determinants. Table 7 on page 14 of AMPCO's evidence shows that no "peak days" below 23,309MW would have been selected for determining the demand charge if this proposal had been in place since 2003. On the other side, all peaks in the 2003-2008 period in excess of 25,816MW would have

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been captured as charge determinants under this proposal. Since the network has experienced and managed a high of 27,005 MW in this same period, 25,800 seems a reasonable break point.

The other two criteria involved in selecting the number of peaks involves costs to customers that practice demand response and benefits to all customers as a consequence of the responsive customers engaging in "peak hunting". The more peak days one uses in determining the customer's charge, the more attempts customers must make to reduce their demand. Demand response is inherently expensive, as it involves deferring or foregoing production, with consequent inefficiencies or lost sales. For each additional day of "peak demand" that must be "hunted", 3 to 6 more days must be spent exercising demand response in order to provide a reasonable assurance of success. If the number of peaks to be sought were to increase, the total cost could soon exceed the benefit to the responsive customer. This would in turn reduce the number of customers involved in demand response, with a commensurate decrease in benefit to all customers. The use of 5 peak days was based on input from industries with the capacity to exercise at least some demand response.

b) Neither AMPCO nor any other party could provide detailed evidence on how this proposal would avoid specific capital spending. AMPCO's argument with respect to capital spending deferment rests on two logical pillars. The first is that networks are ultimately designed and built more to meet peak demand requirements than to meet energy throughput requirements. This necessarily implies that as peak demand increases over time, new investments will be required to service this demand. The second point is that, consistently practiced, demand response will reduce peak demand on the network (and all other assets serving the demand), thus mitigating the need for all investments that are needed to service demand growth.

c) Please refer to response to b) above.

d) Please refer to page 17, lines 15-17 of AMPCO's evidence.