

**IN THE MATTER OF sections 25.30 and 25.31 of the Electricity Act, 1998  
AND IN THE MATTER OF an Application by Hydro One Networks Inc. for an  
electricity transmission revenue requirement**

**Final Argument of the Electricity Distributors Association**

**Introduction**

1. These submissions relate to Issue 7.1, in particular, whether the proposal to continue with the status quo charge determinant for Network service is appropriate. The EDA submits that the status quo charge determinant for Network service is indeed appropriate for the period covered by this Application.
2. In this proceeding, AMPCO proposes a change from the status quo – where the monthly charge determinant for the Network pool is the higher of a customer’s coincident peak demand or 85 percent of the customer’s peak demand, at each delivery point, during the peak period of 7:00 a.m. to 7:00 p.m. on weekdays of the month that are not holidays – to a “high five” methodology, such that a customer’s charge for demand on the Network be based on the customer’s coincident peak demand on the five highest days of demand in the previous year, regardless of when those five days occur (the “High Five Proposal”).
3. The EDA recognizes that the evidence demonstrates four basic propositions which AMPCO has pressed in this proceeding:
  - a. In general, the transmission system benefits from customers of the transmission system avoiding system peaks during the summer when the peaks are at the highest and the system is most stressed;
  - b. At a cost, select end-use transmission customers can implement a peak chasing program to avoid transmission system peaks;
  - c. The High Five Proposal will provide the incentive for one or more of these end-use transmission customers to work to reduce demand at transmission system peaks; and

- d. The transmission peak-chasing behaviour will likely cause a depression of the HOEP at such transmission system peaks.
4. The EDA submits that establishment of these four basic propositions does not lead to the conclusion that the High Five Proposal should now be implemented in Ontario. To the contrary, the following reasons overwhelming militate in favour of the status quo:
- a. There is no evidence that hourly transmission peak-chasing behaviour will provide transmission system benefits in Ontario as there is no evidence of capacity constraint on the transmission system;
  - b. Currently, transmission-connected LDC customers and transmission-connected end-use customers each pay approximately 6% of their wholesale bill for Network assets, which is equitable;
  - c. A change to the High Five Proposal will shift Network costs to LDC customers who cannot chase transmission peaks, which is unfair;
  - d. The current Network charge determinant is consistent with a conservation culture;
  - e. The paramountcy of power supply constraints in Ontario over transmission capacity constraints suggests that peak-shifting investment decisions should focus on load shifting in response to energy price signals, not transmission system peaks; and
  - f. Transmission system Network pricing should reflect the specific and actual costs of providing service to customers of all classes. Transmission rates should be based on transmission costs and should encourage efficient and effective use of transmission resources. It is neither necessary nor desirable to skew transmission rates to encourage lowering of commodity prices. The EDA submits that all of the various electricity supply cost components on the bill should be reviewed and considered separately. Commodity pricing should not influence transmission rate design.

## **The reality of Ontario's transmission grid makes the High Five Proposal inappropriate**

5. In RP-1999-0044, the Board stated as follows with regard to the Network charge determinant:

The Board considers that, for the commonly shared network transmission system, once the regulated assets are in place and recovery of historic sunk costs is the issue, the application of the principle of cost causality is not unequivocal. The particular circumstances of Ontario's network transmission system and other considerations, such as revenue requirement, efficiency and fairness, must also be weighed.

...

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 network transmission system either today or in the foreseeable future. The issue therefore of constructing a rate design which would avoid capacity expansion is of secondary importance. The fairness issue of recovering the sunk transmission system costs therefore becomes important. Exclusive reliance on the coincident peak method where some customers may be able to withhold demand in that period while others do not have such opportunity will result, in the Board's view, in unfairness.

RP-1999-0044 Decision with Reasons, paras. 3.4.24 – 3.4.27

6. The factors cited by the Board in RP-1999-0044 continue to make inappropriate exclusive reliance on the coincident peak method, in this case the "High Five Proposal", for the Network charge determinant. Admittedly, 10 years have passed since that Decision was rendered. That is not, however, a sufficient reason for a change to the Network charge determinant. Indeed, a consideration of the true state of Ontario's transmission grid at the present time discloses why, despite some apparent efficiency benefits from the High Five Proposal, it is not appropriate to implement the High Five Proposal.

7. First, there is no evidence at all in this proceeding that transmission investments for the period under consideration have been driven by capacity requirements placed on the Network.

Transcript, Volume 6, page 89, line 25 to page 91, line 26

8. Second, most often during transmission system peaks, the market energy price will also peak, such that any end-use transmission customers who can shift their demand will do so in response to the commodity price signal. The High Five Proposal would therefore just result in a “free ride” on the Network asset costs for those customers responding to high energy prices.

Transcript, Volume 5, page 45, lines 1-7

Transcript, Volume 5, page 10, lines 1-8

Transcript, Volume 6, page 134, lines 5-19

Transcript, Volume 6, page 192, lines 27 to page 193, line 5:

MR. MACDONALD: It can be. Usually you have commodity and transmission peaking at the same time.

In a summer where it is very cool, you might have transmission hitting a peak when prices are relatively low, and in that case you still need to respond. But that's a cool summer versus a very hot summer. You know, typically they're aligned, but there are times when they're not.

9. Third, the characteristics of Ontario's transmission grid at the present time and for the foreseeable future point to little benefit to the operation of the grid from a High Five Proposal. The Ontario transmission grid is characterized by the following:

- a. LDC demand largely drives overall system peak demand.

Transcript, Volume 5, page 74-75, lines 9-11

- b. LDCs have what can be described, at best, as a “very limited” ability to peak-shift. The end-use transmission customers that can react to pricing represent only about 10 percent of the system demand.

Transcript, Volume 5, page 10, lines 2-4

Transcript, Volume 5, page 74, lines 12-23

- c. Local distribution system peaks do not necessarily coincide with transmission system peaks.

MR. BUONAGURO: And would you also agree that the time these -- that the local peaks occur may not necessarily be the same as the timing of the system peak or even the relevant regional peak, but that they could be driven by very localized conditions or circumstances?

MR. BUT: That is correct.

Transcript, Volume 5, page 65, lines 7-12

10. It is true that each LDC has its own rates as determined by the Board. A commonality, however, is that LDCs' customers do not pay according to *transmission* system peaks. Rather, LDCs' customers pay according to the individual customer's non-coincident peak demand. LDCs pass on the wholesale transmission costs to their customers based on Retail Transmission Service Rates. Retail transmission rates are based on the type of metering device a customer has. For an interval metered customer, it is the individual customer's non-coincident peak demand in the month between 7:00 a.m. and 7:00 p.m. on weekdays. For a customer with a non-time-of-use demand meters, it is the customer's peak demand during the billing period. Finally, for a customer with an energy only meter, the billing determinant is the monthly energy consumed. In no case does the Retail transmission rate use coincident demand as its billing determinant. While AMPCO suggests that LDCs' customers should want to have the transmission cost signal offered by the High Five Proposal, the truth is, under current retail transmission rates, LDCs' customers would not see a High Five price signal in their bills. There is no reason to expect, therefore, that LDCs' customers would respond to High Five signals, even if they could chase transmission peaks.

Transcript, Volume 6, p.109, line 11 to page 111, line 8

11. While LDC demand largely drives overall transmission system peak demand, LDCs' customers would not see a High Five price signal on their bills. Accordingly, the High Five Proposal would make little impact on the transmission system.
12. Fourth, AMPCO contends that the current Network charge determinant is inconsistent with the current conservation culture in Ontario. The EDA submits that this is an unfair contention and the opposite is true. AMPCO acknowledges that, in order to find

transmission cost savings under the status quo, end-use transmission customers are given the incentive to reduce consumption during day-time hours during the work week. In fact, “there is no question that industrial demand is higher at night when prices are lower.” Nonetheless, AMPCO shrugs off that incentive as a “hypothetical scenario” where a customer foregoes daytime, workweek production.

Transcript, Volume 6, page 63, line 22 to page 64, line 2

Transcript, Volume 6, page 156, lines 18-28

13. AMPCO misses the point that, under the current charge determinant, customers are given a true incentive to come up with ways to reduce demand from the grid during working hours, and not simply shift consumption from one hour to the next; they have the incentive to use more energy efficient equipment or to build behind the meter generation if shifting to night-time or weekend production is not feasible. Therefore, while the current Network charge determinant does not encourage hour-to-hour peak shifting, it certainly does promote conservation.

### **System benefits from the High Five Proposal are not proven**

14. In cross-examination, a witness for Hydro One Networks Inc. stated that, in general, the transmission system benefits from customers of the transmission system avoiding peaks during the summer when the peaks are at the highest and the system is most stressed.

Transcript, Volume 5, page 10, lines 17-24

15. However, there is a cost to implementing a transmission peak-chasing program which is separate and apart from the cost of implementing a commodity peak-chasing program. Indeed, Mr. Macdonald from Gerdau Ameristeel was clear in responding to questions from Mr. Quesnelle that a transmission peak-chasing program is a separate tool from a commodity-peak chasing program.

Transcript, Volume 6, page 193, line 24 to page 194, line 6

16. There are approximately 65 end-use transmission customers with around 90 delivery points. However, AMPCO only brought forward evidence that one such customer, Gerdau Ameristeel, would implement a transmission system peak-chasing program if the High Five Proposal were to be implemented.

Transcript, Volume 5, page 7, lines 11-14

17. In light of the costs and learning curve associated with a transmission peak-chasing program, the EDA submits that it is not reasonable to assume that end-use transmission customers other than Gerdau Ameristeel would implement a transmission peak-chasing program if the High Five Proposal were to be implemented.

18. More importantly, AMPCO provides no evidence with respect to where transmission congestion occurs in relation to the location of end-use transmission customers who would allegedly implement transmission peak-chasing programs. There is, therefore, no evidence that the High Five Proposal will serve the ultimate goal, as characterized by AMPCO, of reducing unnecessary system expansion.

### **Fairness and Distributive Impacts**

19. The EDA submits that it is fundamentally fair that customers who make use of Network assets contribute to their embedded costs. While the current Network charge determinant allows for some customers to use Network assets for free (that is, those who can shift to night-time or weekend consumption), the High Five Proposal goes too far by encouraging free use of the Network assets for a select group of end-use transmission customers who are able to shift their consumption away from transmission peaks.

20. The status quo Network charge determinant results in a fair billing outcome. A typical LDC wholesale customer and a typical end-use industrial customer each benefit from the use of Network assets, and each currently pays approximately 6% of their wholesale bills for use of the Network assets.

Transcript, Volume 5, page 41, line 19 to page 42, line 14

21. AMPCO has not examined the distributive impacts resulting from the implementation of the High Five Proposal.

Transcript, Volume 6, page 206, line 22 to page 207, line 24

22. The EDA respectively submits that there will most certainly be distributive impacts from an implementation of the High Five Proposal. Assume the High Five Proposal is implemented and operates as posited by AMPCO. Some end-use transmission customers who can chase transmission peaks will do so to save transmission costs (“**Benefit Group 1**”). All customers who are purchasing HOEP during those “chased peaks” will benefit from reduced HOEP based on AMPCO’s analysis (“**Benefit Group 2**”). Because certain transmission-connected industrials are paying less for Network costs, LDCs will pay higher wholesale transmissions costs. As explained earlier, LDCs then must disburse those higher transmission costs to all of their distribution customers based on retail transmission rates. All of the LDCs’ customers bear the burden of the increase in transmission costs (“**Burden Group**”). The Burden Group is definitely not the same group as Benefit Group 1 (who are transmission-connected end-users), and is almost certainly not the exact same group as Benefit Group 2 (there is no reason to assume that those benefiting from lower HOEP at the chased transmission system peaks are the same customers that are paying higher transmission costs). The EDA submits that a part of the Burden Group, namely, the distribution-connected customers who are not buying HOEP at the chased transmission system peaks, constitute the “losers” under AMPCO’s proposal. In other words, all classes of LDC customers share in the increased transmission costs but only those who purchase electricity during the hours when the transmission peaks are chased will benefit from reduced HOEP.

## **Conclusion**

23. Mr. Roger, testifying for the Applicant, aptly stated why the High Five Proposal is not suitable at this time:

...there is enough incentive under the current charge determinants for customers to shift load to the off-peak.

We think also that the current charge determinants align with cost causality by ensuring that all customers contribute to the embedded costs of the transmission system and avoid concerns raised by the Board in RP-1999-0044, with the issue of free ridership.

We think it is fair and equitable, and it does not unreasonable disadvantage customers with limited ability to shift their demand off-peak. And customers are imposed similar peak demand on network facilities, pay similar service charges. And we also think the current approach is relatively simple and transparent.

Transcript Volume 5, page 73, line 16 to page 74, line 8

24. In light of the realities of Ontario's transmission system, it is unreasonable to place a premium on hourly transmission peak-chasing behaviour. Under the High Five Proposal, those that chase transmission system peaks will be winners and those that cannot and cannot benefit from the lower HOEP at times of the chased transmission peaks will be losers. The goal to avoid future transmission system investments is a laudable one, but as there is currently no evidence of a need to reduce transmission system peak demand so as to avert transmission system investments in Ontario, and the High Five Proposal will have distributive impacts, there is not sufficient justification for moving away from the status quo Network charge determinant, which is consistent with a conservation objective and better ensures that all those using the system pay for its embedded costs.

**ALL OF WHICH IS RESPECTFULLY SUBMITTED**

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