AMPCO Responses to Interrogatories from School Energy Coalition (SEC)
2009-2010 Transmission Rate Application
EB-2008-0272

Interrogatory #1

Ref: Expert Report of Anindya Sen

a) Pg. 4: Professor Sen used HOEP as the major independent variables for his study. How do Professor Sen's elasticity results apply to transmission rates as opposed to HOEP rates?

b) Pg. 4: why do the Motor and Petrol industries show a positive elasticity of demand (3.4% and .1% respectively) for current HOEP rates?

c) How are Professor Sen's analysis affected by the fact that the HOEP rate is itself a function of overall demand in Ontario, which may suggest that the independent variable in his analysis is actually the dependent variable?

Response:

a) The shadow price of transmission cost savings resulting from demand response was calculated so changes in transmission rates could be expressed on the same basis as HOEP. In this way one can assume that a $1 per MWh effective change in transmission rates would have the same impact as a $1 per MWh change in HOEP, and that the elasticities estimated based on the relationship between HOEP and demand would provide a valid basis for estimating the effects of changes to transmission rates on demand.

b) The model is specified to consider only the relationship between HOEP and industry demand by sector. The counter-intuitive results obtained for the motor and petrol sectors suggest that there may be something specific in the operational and electricity consumption patterns of these industries which manifests as correlation between consumption and the HOEP but cannot be explained on that basis.

c) The use of month fixed effects in the model should be useful in correcting for the possibility of bias caused by simultaneity or endogeneity to the extent that such biases have a strong underlying seasonal component. In most specifications we find the expected negative coefficients of demand with respect to price.

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Interrogatory #2

Ref: Expert Report of Anindya Sen

Assuming HOEP rates remain constant, does AMPCO have an estimate of the anticipated savings to industrial customers (or other customers who are able to shift their demand away from peak) resulting from its proposal?

Response:

AMPCO has no estimate of other customers' potential to shift demand from peak to off-peak hours. The following table assumes, for simplicity, that other customers do not shift demand from peak to off-peak hours.

The Impact of Transmission Rate Changes on Other Customers

Average industrial demand response during summer months	-29	MW/year
Annual transmission savings per MW	$30,840	$/MW
Total annual industrial transmission savings	-$899,206	$/year
Total annual demand by other customers	132,334,189	MWh
Total summer demand by other customers	44,139,502	MWh
Transmission cost increase to other customers (applies to all MW in the year)	$0.0068	$/MWh
	$899,206	$/year
Net wholesale price change for all customers (applies only to MW during summer months)	-$0.1544	$/MWh
	-$6,813,147	$/year
Net effect on other customers	-$5,913,941	$/year

This table has been corrected to remove the demand response estimates for the motor vehicle manufacturing and petroleum refining sectors which were included in AMPCO's original submission.

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Interrogatory #3

Ref: Expert Report of Anindya Sen

Does AMPCO agree that, again assuming HOEP rates remain constant, the savings to industrial customers (or other customers who are able to shift their demand away from peak) means an increase for other customers?

Response:

AMPCO's response to SEC IR #2 shows a net benefit to other customers.

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Interrogatory #4

Ref: Pg. 16-17 of AMPCO main evidence (Implications for Other Transmission Customers):

a) Does AMPCO have an estimate of the anticipated savings to all customers that would result if its proposal were accepted and the ensuing change in transmission rates results in a decrease in the HOEP rate?

b) In particular, can AMPCO state whether these savings are likely to be greater than the cost of AMPCO's proposal to customers who cannot shift their consumption away from peak?

Response:

a) Please see AMPCO's response to SEC IR #2.

b) Although there are unlikely to be any customers who cannot shift consumption away from peak, AMPCO's analysis suggests a net benefit.