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Nalcor Energy Response to Grant Thornton Question 2.6

Question:

Please confirm that the 2010 and 2012 PLFs include both (1) a different economic input forecast scenario based on either the Interconnected or Isolated options as prepared by the Department of Finance and (2) a price elasticity factor? If price elasticity was included, please reference in the models where included. If not included, please explain rationale for not including in PLF model.

Response:

1) The 2010 Planning Load Forecast was based on the NL Department of Finance's Base Case economic forecast that reflected a forecast for the provincial economy without the development of the Lower Churchill project. A provincial economic forecast that included the development of the Lower Churchill project was provided by the NL Department of Finance but was not used for the PLF process. The NL Department of Finance's forecast for the provincial economy that included the development of the Lower Churchill project was modestly higher than the Base Case economic forecast and would have resulted in modestly higher loads being forecast under identical electricity price futures.

The 2012 Planning Load Forecast, included two load forecasts that were based on different economic forecasts prepared by the NL Department of Finance; an Interconnected Island case and an Isolated Island case.

(2) Please note that this question has been interpreted to be with respect to the elasticity of electricity price. It is confirmed that both the 2010 Planning Load Forecast model and the 2012 Planning Load Forecast model for the Island system included price elasticity factors. Within both 2010 PLF and 2012 PLF models, price elasticity factors were included for the following load sectors:

1. The residential electricity consumption sector of Newfoundland Power's service territory;

2. The residential electricity consumption sector of Hydro's Island Rural service territory;

3. The general service\commercial electricity consumption sector of Hydro's Island Rural service territory.

Neither the 2010 PLF nor 2012 PLF models included electricity price elasticity factors for:

1. The general service\commercial electricity consumption sector of Newfoundland Power; or

2. Hydro's Island industrial customers.

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A price elasticity factor for the general service\commercial electricity consumption sector of Newfoundland Power was not included because a statistically significant relationship between electricity price and electricity consumption levels for this customer group was not able to be analytically established. The lack of statistical significance for this customer group has always been interpreted to be indicative of an inelastic or low price elasticity that was not measureable.

A price elasticity factor for Hydro's Island industrial customers was not included because the limited number of customers and diverse nature of the industrial customer's business precluded the ability to statistically measure a single electricity price elasticity factor for this customer group. This limitation was compensated for by doing a sensitivity analysis case based on the loss of an industrial customer.

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