Q. Further to the response to PUB-NLH-010, attachment #2, explain what action Hydro has taken in response to Manitoba Hydro International's statement that "*Best utility practices would incorporate end-use modeling techniques into the forecasting process so that electricity growth can be quantified for all major domestic end-uses".*

A. In response to Manitoba Hydro International's comments, Hydro reviewed its past decision regarding using econometric modeling versus end-use modeling.

In the early 1990's Hydro experimented on a trial basis with the use of an end-use forecasting model that had been developed for the provincial Department of Energy in the 1980's. Over the time frame in which Hydro used this end-use model it became evident that a much greater level of analytical effort was required to maintain this modeling approach compared to the traditional econometric approach being used. This was due to the additional customer end-use data detail required for forecasting end-use loads. In addition, it was perceived by Hydro at that time that end-use forecasting required a significant level of judgement with respect to future efficiency levels of end-use equipment that was not required with an econometric approach as the econometric forecasting approach could estimate overall efficiency changes from the historical data it relies on.

Due to operating cost considerations during the 1990's Hydro chose to discontinue adopting an end-use forecasting approach and instead continued to develop its econometric approach to load forecasting.

In its current econometric approach to its energy and peak demand forecasting, Hydro accounts for the most significant end-use on the Island Interconnected System which is electric heating. Both the energy and peaks loads experienced on the Island system have been dominated by this single end-use for the past two decades or longer and with the continued preference for electric heat by domestic customers it is not expected to change in the longer term.

For the reasons outlined above and the additional points provided below, Hydro has chosen at this time to continue to forecast energy and demand requirements using its existing econometric approach. Manitoba Hydro International had the additional observations on Hydro's current practice:

- Manitoba Hydro International concluded in its review of Hydro's peak demand forecasting performance that in the last ten years, the NP system peak demand forecast, which is the most important component of Hydro's system peak demand, has performed exceptionally well;
- Manitoba Hydro International indicated, *"The additional detail required to prepare an end-use forecasting methodology may improve forecast accuracy, but increased accuracy is not guaranteed because any forecast is dependent on the accuracy of the assumptions on which it is based.*"; and
- The majority of customer end-use loads that would be forecast with an end-use forecasting approach reside in NP's service territory and are not Hydro's customers.

As part of Hydro's ongoing review being undertaken by Ventyx, an assessment of Hydro's load forecasting processes will be completed and Hydro will be considering an end-use model further within the current review.