

**Nalcor Energy Response to Grant Thornton Question 5.2****Question:**

*Manitoba Hydro International's report dated January 2012 stated "NLH staff should partner with Newfoundland Power to develop a coordinated load research program that is designed to develop load shape information by sector and by end-use." Has any research program been completed to date with Newfoundland Power regarding this recommendation? If so, please provide supporting materials of the research program. If research was completed, please provide any changes in load forecasting methodology as a result of research program.*

**Response:**

There has not been a coordinated load research program that is designed to develop load shape information by sector and by end-use since the recommendation by Manitoba Hydro International (MHI) in January 2012. The intent of such load research would be to facilitate the development of an end-use load forecasting approach. The last coordinated load research program between Newfoundland and Labrador Hydro (NLH) and Newfoundland Power was conducted in the mid 2000's and provided load shape information by retail rate classification which subsequently provided load shape information for residential and commercial sectors but not by end-use. This load research information was primarily used for customer rate design purposes.

NLH recognizes there would be benefits from completing such load research and to forecast customer load requirements on an end-use basis, similar to those benefits outlined by MHI in their January 2012 report. However, the benefits associated with end-use forecasting models result from higher administrative costs associated with developing and maintaining an end-use forecasting system.

Contrary to the MHI recommendation, reviews of NLH's load forecasting methodology completed by Ventyx in 2014 and Power Advisory LCC in 2015, both concluded that there was not a clear justification for NLH to adopt an end-use forecasting system. The Ventyx review concluded that based on their experience, the complexity and time to generate an end-use forecast would not significantly improve the demand forecast in the mid-term. The Power Advisory review concluded that end-use models are likely not justified for the NL system given the incremental cost.

The opposing recommendations of the load forecast reviews with respect to end-use load research and modelling has resulted in NLH choosing to maintain the existing load forecast approach.

Please see accompanying reports by Ventyx and Power Advisory LLC.

**Reference Docs:**

- GT RFI Q5.2\_2014 Newfoundland and Labrador Hydro Planning Process Review – VENTYX FINAL March 21.docx

- GT RFI Q5.2\_Power Advisory – Review of NL electricity system 2015.pdf

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