

ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO
ENVIRONMENTAL DEFENCE INTERROGATORY #13

INTERROGATORY

Issue A4: "What are the alternatives to the proposed facilities? Are any alternatives to the proposed facilities preferable to the proposed facilities?"

Reference: Ex. A, Tab 3, Schedule 4, pages 7 & 8

- a) Please provide the peak hourly consumption data, by municipality and customer type, that was used to forecast to future demand.
- b) Please provide the temperature information and the regression analysis that was used to determine peak hourly gas consumption at 41 DD.
- c) Please provide the reduction factor that was used to account for efficiency gains through DSM and customer losses through building demolition. Please provide a breakout of these two components of the reduction factor and fully explain how they were calculated.
- d) Does the DSM reduction factor just include DSM reductions due to Enbridge's DSM programs? Or does it also include DSM reductions due to other factors such as changes to building codes, the BOMA BEST Program, REALpac 20 By 15 Energy Benchmarking Program etc.? If not, please estimate the impact of all the other DSM programs and policies on the total annual demand and peak hourly demand for natural gas in the GTA Project Influence Area for each year between 2013 and 2025 inclusive. Please also explain how and to what extent, if any, the reductions from other DSM programs and policies are accounted for in Enbridge's forecast.

RESPONSE

- a) Peak load by sector is not measured on an hourly or daily basis. The Company does derive some of this data for network planning purposes as per the response to Environmental Defence Interrogatory #12 found at Exhibit I.A4.EGD.ED.12. The information provided below is the historical data as used for network planning.

Witnesses: C. Fernandes
E. Naczynski

Table 1 (please refer to Attachment) provides a summary of the derived peak hourly load in m³/hr from 2006 to 2025. This table shows peak load by customer type and municipality in the GTA Project Influence Area.

Data has only been provided for 2006 onward as EGD implemented a new load gathering system. Prior to 2004, load gathering was completed on a legacy main frame system and the archived data is not readily accessible. From 2004 to 2006 there were numerous changes in customer classifications which make year to year comparisons irrelevant due to changing base data. The load presented excludes unbundled customers.

- b) Please refer to Exhibit D2, Tab 4, Schedule 2 found in the Company's approved rate application EB-2011-0354.
- c) The reduction factor is designed to capture reduction of peak load due to energy efficiency measures. Energy efficiency typically accounts for resource reduction over a long unit of time, such as an annualized basis. It is not analyzed on time periods as short as a day nor an hour. Additionally, customer usage is not typically measured in short time intervals, with the typical customer having billing data available on a monthly basis. The reduction factor was developed using gate station daily demand trends in the GTA to account for the lower peak values aggregated from the network planning process as described in the response to Environmental Defence Interrogatory #12 found at Exhibit I.A4.EGD.ED.12.

Using monthly historical data, the reduction factor multiplier was found to be 0.65. This was applied to the aggregated incremental loads and was applied to specifically reduce the overall peak system load to incorporate the impact of efficiency measures across the GTA Project Influence Area.

- d) Please refer to answer c) above.

Witnesses: C. Fernandes
E. Naczynski