ENBRIDGE GAS DISTRIBUTION INC. RESPONSE TO ENVIRONMENTAL DEFENCE INTERROGATORY #12

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, page 1

Please fully describe the methodology and assumptions for Enbridge's annual residential, commercial, apartment and industrial customer load growth forecasts from 2013 to 2025 inclusive in the GTA Project Influence Area. Please provide all written analyses and spreadsheets justifying the forecast.

RESPONSE

The Company does not measure peak hourly or daily consumption for the vast majority of its customers. Peak hourly load growth is derived from actual customer consumption volumes extracted from Enbridge's billing system. The customer consumption volumes are used to derive the peak hourly consumption forecast.

An extract of 24 months of actual customer consumption volumes and corresponding temperature readings are used in a mathematical regression to determine the base load and heat load for each customer. The base load and heat load are aggregated to sector (residential, apartment, commercial, industrial) within each municipality every year. These two values collectively result in peak hourly consumption estimates that are applied accordingly within the study area for the forecast period. A summary of peak hour consumptions broken down by customer sector and municipality is included in the response to Environmental Defence Interrogatory #13 found at Exhibit I.A4.EGD.ED.13. The customer additions forecast has been provided in the response to Environmental Defence Interrogatory #2 found at Exhibit I.A4.EGD.ED.2. A summary of total load in the influence area and by customer sector is included in the response to Environmental Defence Interrogatory #13 found at Exhibit I.A4.EGD.ED.13.

The network analysis model also factors in the declining average use consumption trend. The declining average use is calculated through a mathematical regression using

the last five years of derived peak hourly consumption estimates by municipality by, customer sector. This declining average use values are then applied to forecast customer additions throughout the study period. The network analysis models are refreshed on an annual basis to factor in updated values for peak hourly consumption.

For the purposes of the GTA Project an additional reduction factor was also applied to the future load additions. This reduction factor is explained in Environmental Defence Interrogatory #13 found at Exhibit I.A4.EGD.ED.13 part c).