**IN THE MATTER OF** an application by Enbridge Gas Distribution Inc. for: an order or orders granting leave to construct a natural gas pipeline and ancillary facilities in the Town of Milton, City of Markham, Town of Richmond Hill, City of Brampton, City of Toronto, City of Vaughan and the Region of Halton, the Region of Peel and the Region of York; and an order or orders approving the methodology to establish a rate for transportation services for TransCanada Pipelines Limited;

**AND IN THE MATTER OF** an application by Union Gas Limited for: an Order or Orders for pre-approval of recovery of the cost consequences of all facilities associated with the development of the proposed Parkway West site; an Order or Orders granting leave to construct natural gas pipelines and ancillary facilities in the Town of Milton; an Order or Orders for pre-approval of recovery of the cost consequences of all facilities associated with the development of the proposed Brantford-Kirkwall/Parkway D Compressor Station project; an Order or Orders for pre-approval of the cost consequences of two long term short haul transportation contracts; and an Order or Orders granting leave to construct natural gas pipelines and ancillary facilities in the City of Cambridge and City of Hamilton.

# INTERROGATORIES OF ENERGY PROBE RESEARCH FOUNDATION ("ENERGY PROBE") ON THE EVIDENCE OF ENVIRONMENTAL DEFENCE (PREPARED BY ENERLIFE CONSULTING) EXHIBIT L.EGD.ED.1

July 5, 2013

## EB-2012-0451 EB-2012-0433 EB-2013-0074

### Enbridge Gas Distribution and Union Gas Limited

## **ENERGY PROBE RESEARCH FOUNDATION**

#### **INTERROGATORIES**

### ON THE EVIDENCE OF ENVIRONMENTAL DEFENCE

**Energy Probe 1** 

Ref: Exhibit L.EGD.ED.1, Page 1

Preamble: Enerlife forecasts an annual average peak demand reduction potential through DSM of 48  $10^3$ m<sup>3</sup>/hr at the top quartile level which is considered readily attainable in the timeframe involved.

Please provide additional analysis to demonstrate this reduction is readily attainable in the timeframe involved.

**Energy Probe 2** 

**Ref:** Exhibit L.EGD.ED.1, Page 1, Table 1

Preamble: Table 1 provides the DSM potential by customer sector.

- a) Please provide the underlying calculations for the commercial  $(30.3 \ 10^3 \text{m}^3/\text{hr})$  and apartment sectors  $(9.5 \ 10^3 \text{m}^3/\text{hr})$ .
- b) Please confirm the timeframe assumed to achieve these savings.

**Energy Probe 3** 

Ref: Exhibit L.EGD.ED.1, Page 2

Please summarize the advantages and disadvantages of Enerlife's Performance-Based Model compared to the approach used by Marbek Resources Consulting Inc. in the DSM Potential Study conducted for Enbridge in 2009.

Ref: Exhibit L.EGD.ED.1, Page 2

Preamble: The evidence states "Working with other parties, Enbridge can readily identify and target the largest gas savings potential customers in each sector, and support them in understanding and achieving the considerable energy and cost savings potential in their buildings."

Please identify the "other parties" and explain their potential roles.

# **Energy Probe 5**

Ref: Exhibit L.EGD.ED.1, Page 3

- a) Please confirm the number of years that Enerlife has energy use by buildings data in its database.
- b) Has Enerlife conducted multi-year projects for the apartment sector? If yes, please provide details.

## **Energy Probe 6**

Ref: Exhibit L.EGD.ED.1, Page 4

Preamble: Enerlife provides benchmarking results for offices, schools, hospitals, retail, recreation and apartments, and overall potential gas savings resulting from reaching the median and top-quartile gas consumption levels.

- a) For the apartment and commercial sectors, please discuss the timeframe needed to reach median savings and top-quartile savings.
- b) For the apartment and commercial sectors, please provide the investment needed to reach median savings and top-quartile savings.

Ref: Exhibit L.EGD.ED.1, Page 5

Preamble: Enerlife indicates the present value of avoided commodity costs for attaining the median performance target is \$734 million and for the top quartile target is \$1,094 million.

Please provide the calculation for both performance levels.

**Energy Probe 8** 

Ref: Exhibit L.EGD.ED.1, Page 5

Preamble: The evidence states "Enbridge's current DSM programs capture 0.6% of their annual volume, while the Performance-based Model forecasts capturing 1.6% of the annual volume for the median target and up to 3.5% for the top quartile target as savings".

Please provide the underlying calculations for the Performance-based Model forecasts.

**Energy Probe 9** 

Ref: Exhibit L.EGD.ED.1, Pages 4 & 5

Preamble: The potential annual DSM savings potential for the apartment sector differs between Figure 2 and Figure 3. Please explain.

**Energy Probe 10** 

Ref: Exhibit L.EGD.ED.1, Page 6

Preamble: The evidence indicates the previous Peak Breakdown numbers inform the Peak Hourly Demand Forecasts. Since this breakdown is not known for each sector, the same breakdown is used for Apartment, Commercial, Industrial and Residential.

Please discuss the impact on the results if a different breakdown was used for each sector.

Ref: Exhibit L.EGD.ED.1, Page 10, Figure 10

The Baseline with Full Load Growth (Enbridge) and Baseline with Discounted Load Growth (Enbridge) is not shown on Figure 10. Please provide a revised Figure 10 with this information.

**Energy Probe 12** 

Ref: Exhibit L.EGD.ED.1, Page 12

Preamble: Enerlife indicates the work involved in equipment repairs and replacement, right-sizing and rebalancing, refurbishment and reprogramming, typically provides relatively short payback periods.

Please discuss payback periods for each sector from the customer perspective and based on experience, the payback periods customers find reasonable to take action.

**Energy Probe 13** 

Ref: Exhibit L.EGD.ED.1, Pages 12-13

Preamble: Enerlife piloted an approach in 2012 that began with identification of buildings with the greatest potential for savings and level of reduction possible.

- a) Please provide the key milestones for the pilot in 2012 and the corresponding timelines.
- b) Please discuss the uptake in terms of implementation of the customized gas conservation action plan and identify the savings achieved.

**Energy Probe 14** 

Ref: Exhibit L.EGD.ED.1, Page 13, Figure 13

Please explain how the last two columns were derived. Please explain how the relative potential savings were determined for each customer sector (i.e. 100% of potential savings for apartment sector).

Ref: Exhibit L.EGD.ED.1, Page 1

Preamble: Enerlife concludes that all load growth in the GTA area can be completely offset through commercial and apartment DSM and that overall demand can be significantly reduced with the addition of residential and industrial DSM.

- a) Please discuss potential obstacles to DSM implementation.
- b) Please discuss the impact on offsetting load growth under the following scenarios:
  - 1. 25% shortfall in commercial and apartment DSM
  - 2. 50% shortfall in commercial and apartment DSM
  - 3. 75% shortfall in commercial and apartment DSM