Ontario Energy Board

Union Gas Limited and Enbridge Gas Distribution Inc.

Applications for approval of 2015-2020 demand side management plans.

Interrogatories on Board Staff Evidence Energy Probe Research Foundation

August 4, 2015

Union Gas Limited and Enbridge Gas Distribution Inc.

Applications for approval of 2015-2020 Demand Side Management Plans

Board Staff Evidence - Synapse Energy Economics Inc. Report

Interrogatories of Energy Probe Research Foundation

General

Exhibit L - OEB Staff 1 – Energy Probe -1

Ref: No Reference –Data/information Sources

- a) Please indicate the primary sources used by Synapse in conducting its work e.g. Published Materials (such as EGD and Union Annual Reports) and prior and Current Applications and Interrogatories.
- b) Please indicate whether, in conducting its work, Synapse met with EGDI and Union to clarify questions about the existing and proposed Programs Measures and Offers. If not, why was this not done?
- c) Is Synapse concerned that without checking facts, certain statements about programs and measures may not be accurate?

Exhibit L - OEB Staff 1 – Energy Probe -2

Ref: No Reference - Billing Analysis

- a) Please define the scope of a Billing Analysis as described in the Report.
- b) Please provide an example of a billing analysis for a Residential RA Program/Offer (Union/EGD preferred).
- c) Please provide billing analysis for a Residential MT Program/offer (EGDI/Union preferred)

Residential RA Programs

Exhibit L, OEB Staff 1 – Energy Probe - 3

Ref: L, OEB Staff 1, Synapse Report Page 32; Recommendations Page 32

Preamble: "Guiding Principle 5 encourages the utilities to achieve higher customer participation levels.

Requiring two measures per customer could decrease participation as customers that are able or willing to install only one DSM measure are turned away from the program. Guiding Principle 6 addresses minimization of lost opportunities, and as discussed above, this program requirement could result in lost savings opportunities".

- a) Please confirm the "as filed" participation levels and participation rates for each year of the plan for the EGDI Home Retrofit Program.
- b) For either a single "deep measure" or Phased approach (2 measures over the plan period) please provide the following:
 - Participation and Participation rates for each Synapse scenario.
 - The Incentive and other program budget increase.
 - The \$/CCM and Cost/Benefit compared to EGD Base plan.
- c) Does Synapse understand that the EGD RA Scorecard and Shareholder Incentive is a function of installation of two "deep measures"? [Exhibit B, Tab 1, Schedule 4, Page 10, Table 8: 2016 Resource Acquisition Scorecard].
- d) How would Synapse propose to amend the scorecard and provide details and compare the result in terms of achievement and shareholder incentive to EGDI's baseline proposal?

Exhibit L, OEB Staff 1 – Energy Probe - 4

Ref: L, OEB Staff 1, Synapse Report, HRP Recommendations Page 32

Preamble:

- 4. Enbridge should increase the offering incentive cap to be greater than \$2,000. For example, Enbridge could be consistent with Union's incentive cap of \$5,000.
- 5. Enbridge should reconsider its tiered incentive structure, and consider offering a sliding scale incentive structure that should start at a lower savings level than the current 15 percent savings. This would to accommodate some customers that could just install one measure at a time.

Please provide the Impact of these Recommendations on the EGD HRP:

- Participation Rates
- Incentives
- Budgets
- Achievement
- Scorecard and
- Shareholder Incentive

Exhibit L, OEB Staff 1 – Energy Probe – 5

Ref: L, OEB Staff 1, Synapse Report, HRP Recommendations Page 32

Preamble:

- 6. If Enbridge continues to offer a tiered incentive structure or offers a sliding-scale incentive, then it should lower the amount of savings required to achieve the various incentive levels or increase the level of incentives. As currently structured, a customer is required to achieve a significant reduction in usage in order to receive a relatively limited incentive amount.
- 7. Enbridge should consider providing incentives such that they are structured on a per square-foot basis, or on a percentage-of-total-project-cost basis for insulation measures. In addition, it should provide prescriptive incentives for other measures similar to Union's incentive structures. Such a structure provides flexibility to the customer, thereby allowing households of different sizes, shapes, and energy consumption to participate.
 - a) Please provide an example of a tiered incentive structure (indicate measure(s)) and the anticipated impact of Recommendation 6 on the following relative to EGDI's plan:
 - Participation and participation rates
 - Achievement CCM and Efficiency \$/CCM
 - b) For Recommendation 7, please provide example(s) and provide estimates of impact(s) on EGDI and Union:
 - Participation and Participation Rates
 - Incentives
 - Budgets
 - Achievements (CCM) and Efficiency \$/CCM)
 - Scorecard
 - Shareholder Incentive

Exhibit L, OEB Staff 1 – Energy Probe - 6

Ref: L, OEB Staff 1, Synapse Report Page 40

Preamble: Measure Mix. Both Enbridge and Union should consider providing incentives for measures other than thermostats and instant hot water saving measures.

- a) Please confirm specifically what Synapse recommends regarding PT and Water saving measures. Indicate how many homes will receive the offers. Provide the estimated participation rates and the Cost per home and total budget for each of EGDI and Union.
- b) For the other measures listed in the Reference, please provide a shortlist and indicate if based on Synapse's experience, if they will pass the TRC and PAC test.
- c) Please provide for shortlisted offers, ballpark estimates for the levels of participation rates and Budgets required.

Exhibit L, OEB Staff 1 – Energy Probe - 7

Ref: L, OEB Staff 1, Synapse Report, Pages 30-42- Residential RA Programs

- a) Please provide for each of EGD and Union a Summary Tabulation of Synapse-recommended Program changes over the 5 year plan period.
- b) For each major category (Single Family Retrofit, Residential Products) please provide estimates of resulting changes to Participation/participation rates, Budgets and Achievements (CCM). If possible, estimate Average Efficiency \$/CCM.
- c) Compare and contrast the Synapse changes/enhancements to the Program plans filed by EGDI and Union.
- d) Based on the above response please provide a revised Scorecard and Shareholder Incentive structure and estimates for each Utility.

Exhibit L, OEB Staff 1 – Energy Probe - 8

Ref: Synapse Report with Energy Futures Group:
Rate and Bill Impacts of Vermont Energy Efficiency Programs, for Vermont
Public Service Department

- a) Please indicate the relative roles of Synapse and Energy Futures in the Referenced Study.
- b) Please summarize how Rate and Bill Impacts should be evaluated for Participants and non-participants in Energy Efficiency Programs
- c) Using Synapse's experience in other jurisdictions, for example in Vermont as referenced above, please provide a framework and methodology for estimating rate and bill impacts for Participants and Non participants from the EGDI and Union DSM Programs over the period 2015-2020. Discuss the various components of costs and benefits (e.g. Avoided Costs) and assumptions in such an analysis.
- d) Please indicate, and provide details, if in Synapse's opinion, the required data are available in this case to conduct such an analysis. If so, should in Synapse's view, this analysis be done to inform the Board and Stakeholders regarding impacts for participants and non-participants, including whether the \$2.00/customer per month bill "cap" guideline is/is not appropriate as some intervenor experts suggest?
- e) Does Synapse have an opinion as to whether the budgets and resulting bill impacts proposed by EGDI and Union are appropriate?

Low Income Programs

Low Income Single Family

Exhibit L, OEB Staff 1 – Energy Probe - 9

Ref: L, OEB Staff 1, Synapse Report Page 59

- a) Please confirm whether under the existing LI programs, both EGDI and Union will provide funding for minor health and safety problem remediation.
- b) Please explain why the proposals set out at EGDI's Evidence [Exhibit B, Tab 2, Schedule 1Page 35] are not appropriate.

c) Please indicate your views on how much should the LI DSM Program spend to address health and safety issues -distinguish owned vs rented SF homes. Include in your response the line/delineation between health and safety improvements and DSM/Energy Efficiency improvements.

Exhibit L, OEB Staff 1 – Energy Probe - 10

Ref: L, OEB Staff 1, Synapse Report Page 62 Recommendation 2

Preamble:

- 2. Enbridge and Union should consider adding early replacement measures, heating equipment repairs, boilers, water heaters (including tankless and solar hot water), windows, duct sealing, duct insulation, and boiler reset control measures to their offerings.
 - a) Has Synapse screened any of the proposed measures? If so, please provide this information.
 - b) For each measure, please provide an estimate of the # participants, Measure cost (gross installed and DSM program cost per home.
 - c) Please provide the annual incremental cost/budget for each measure/offer and the total over the 5 year program assuming all measures screen positive at the portfolio level.

Low Income Multi-Family

Exhibit L, OEB Staff 1 – Energy Probe - 11

Ref: L, OEB Staff 1, Synapse Report Pages 62-63

- a) Please confirm and provide references for EGDI and Union existing offers for MF Social Housing (publicly funded Affordable MF Housing).
- b) Please confirm the EGDI MF Demonstration is for Market Rate Multi-Family housing.
- c) Please provide a list of Jurisdictions with LI DSM programs for Market Rate MF Buildings.
- d) For the Measures listed on Page 63 Is Synapse aware/not aware whether these have been screened by EGDI or Union at the Portfolio level. Has Synapse screened the measures listed? If so please provide the results.

e) For Market Rate MF Buildings (as opposed to Social Housing) please provide the criteria for LI Program enrollment and financial assistance in the jurisdictions listed on page 63.

Exhibit L, OEB Staff 1 – Energy Probe – 12

Ref. L OEB Staff .1 Synapse Report Pages 62-63

Preamble: Enbridge's incentive for custom measures is \$0.40/m3 (Enbridge Gas Distribution 2015b, Exh. B, Tab 2, Sch. 1, pp. 34) while Union's is \$0.10/m3 (Union Gas Limited, 2015a, Exh. A, Tab 3, App. A, p. 84).

While different service territories may warrant slightly different incentives—this can be acceptable as long as the difference is explained—the difference in incentives between Enbridge and Union is significant and the drivers of this difference are not explained. Union does not offer an incentive for operational improvements.

Please indicate, based on Synapse's knowledge of other jurisdictions, the range of incentives and provide a view whether an Incentive of 0.40/m3 or 0.10/m3 may be appropriate. Please indicate eligible measures in your response.

Aboriginal Offering (Union Only)

Exhibit L, OEB Staff 1 - Energy Probe - 13

Ref: L, OEB Staff 1, Synapse Report Page 64

Preamble: This offering provides measures offered in the Home Weatherization and Furnace End-of-Life Upgrade offerings for aboriginal customers. Its delivery model targets the Band Councils of each of the 13 Aboriginal reserves (Enbridge Gas Distribution 2015 b, Exh. A, Tab 3, App. A, pp. 77-80).

- a) Please confirm the Reference refers to Union's Evidence. If not, please provide the correct reference.
- b) Should this offer be included in the other Union and EGDI SF LI programs? If so, please indicate whether the measure is likely to screen positive (singly or at the portfolio level).

Residential Market Transformation Programs

Residential Behaviour

Exhibit L, OEB Staff 1 - Energy Probe - 14

Ref: L, OEB Staff 1, Synapse Report Page 72

Preamble: Note that Union includes its behaviour offering as part of its Resource Acquisition program, while Enbridge categorizes it as part of its Market Transformation program. Both utilities' offerings are addressed in this section on Market Transformation programs for ease of reference, and to be consistent with the Guidelines where it states that Market Transformation "programs should also focus on influencing consumer behaviour and attitudes that support reduction in natural gas consumption (Ontario Energy Board, 2014a, p. 13)."

- a) Synapse indicates that both EGDI's and Union's Behavior Offers are under RA. Please clarify this.
- b) Please indicate whether the offers are not consistent with OEB guidance and with other jurisdictions.
- c) Please comment on the Scorecard, Targets and Budgets for this Offer

Home Rating (Enbridge Only)

Exhibit L, OEB Staff 1 – Energy Probe – 15

Ref: L, OEB Staff 1, Synapse Report Pages 73

Please comment on the Scorecard and targets for this program

Scorecards and Incentives

Exhibit L, OEB Staff 1 – Energy Probe – 16

Ref: L, OEB Staff 1, Synapse Report Pages 101 and 102

Preamble:

1. The Board should continue to allow shareholder incentive metrics that motivate the utilities to save energy and increase customer participation in the DSM programs.

- 2. The Board should consider requiring the utilities to develop metrics or other mechanisms that focus on program cost-effectiveness. Such a metric would ensure that the utilities keep costs low while achieving significant savings
 - a) Please provide Synapse's assessment for each Utility's RA MT and Performance Scorecards, whether the proposed weightings between Savings CCM and Participants is/is/not appropriate.
 - b) Please provide the Metrics to be used for Cost Effectiveness Incentives e.g. \$/CCM. Indicate if the metric(s) are only applicable to RA programs or to other programs such as MT and Performance.
 - c) Please indicate how a \$/CCM incentive would be weighted relative to targets particularly for exceeding 100%.

Exhibit L, OEB Staff 1 – Energy Probe – 17

Ref. L OEB Staff .1 Synapse Report Page 105

Preamble: The Board should reject both Enbridge's and Union's proposed shareholder incentive target adjustment mechanisms because the overall five-year savings goal targets that the utilities are required to achieve should not be adjusted during the course of the plan.

Please clarify how adjustments to avoided costs, measures assumptions or free rider rates should be addressed during the term of the plan.