ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15 (Schedule. B);

AND IN THE MATTER OF an Application by Union Gas Limited pursuant to Section 36(1) of the *Ontario Energy Board Act, 1998*, for an Order or Orders approving the 2015 to 2020 Demand Side Management Plan.

EB-2015-0029/EB-2015-0049

Interrogatories From

The Association of Power Producers of Ontario (APPrO)

To

Ontario Energy Board Staff (Staff)

August 4, 2015

Question: 1

Reference: i) Evidence of Synapse page 1, 3, 4, 5
ii) Evidence of Synapse Section 6 Qualifications and Experience

Preamble: APPrO would like to better understand Synapse's expertise and evidence as it relates to large volume customers.

a) Does Synapse have any experience with designing and implementing energy efficiency programs for large volume customers in the size range of Enbridge's Rate 125, and Union's T2 and Rate 100 customers? If so, please describe and provide examples.
b) More specifically, does Synapse have any experience with designing and implementing energy efficiency programs for large-scale gas-fired power generation customers (i.e. up to 1,000 MW)? If so please describe.
c) Synapse identifies a significant free-ridership issue for large commercial and industrial customers and recommends Board action in relation to free-ridership and spillover (leakage). Please provide any and all Synapse expertise relating to: (i) the identification of free-ridership, competitiveness, spill-over, efficacy and cost-effectiveness issues associated with DSM programs for large volume customers, and (ii) the design of any programs or measures to address the issues outlined in c)(i) above.

Question: 2

Reference: i) EB-2012-0337 Exhibit C2 Tab A page 5, Navigant states:

> *In the US, large industrial customers such as power producers have the option of directly accessing inter-state pipeline system, and the vast majority of natural gas fired electric generators in the US are attached to the inter-state natural gas pipeline system. Where generators are connected to a distribution system, the natural gas distributors often negotiate separate contract rates for such customers to avoid economic by-pass. As a result, electric generators using natural gas as fuel are often not included in general industrial tariffs or subject to cost recovery mechanisms such as a DSM CRM.*

Preamble: APPrO would like to understand if Synapse's assessment of the accuracy Navigant's and its application to the Board's current DSM Framework as applied in this proceeding.

a) Does Synapse agree with Navigant above-noted statement? Please provide your response and supporting rationale.
b) Are there instances of economic bypass of the LDC by large volume customers that have occurred in Ontario? If so, was there a prudent economic rationale for doing so?

Question: 3

Reference: i) Synapse evidence
ii) EB-2012-0337 Transcript Volume 2 page 122 lines 10-15, extract from Union's oral argument:

> *So on to my first issue, Union's position. Union freely acknowledges that power generation customers possess expertise to undertake energy efficiency programs on their own that result in natural gas savings. In Union's submission, this fact should not be seen as a matter of controversy in this proceeding.*

Preamble: APPrO would like to understand Synapse's and Board Staff's views on large volume customer (including power generator) incentives to self-implement energy efficiency programs.

a) Please provide an itemization of any and all incentives that large volume customers have to improve their overall operational efficiency and reduce fuel consumption outside of any utility sponsored DSM program.
b) Can you confirm that each of the following are valid reasons for large volume customers to directly undertake and invest in energy efficiency and conservation measures:
    i. Increasing profitability and/or lowering costs through direct savings from lower fuel consumption, purchase and demand requirements
    ii. Complying with strict contractual product off-take and sale provisions including:
        1. Heat rate requirements
        2. Production efficiencies
        3. Maintenance, engineering and industry best practice standards
        4. Prudent operating standards
        5. Management standards (including but not limited to ISO)
        6. Reporting requirements
        7. Green or other labeling requirements
        8. The treatment or limited pass through of fuel costs
        9. Avoiding border measures on higher emission export products (including but not limited to measures such as the First Jurisdictional Deliverer measures on electricity importers into Quebec and California)
    iii. Complying with legislative and regulatory requirements including:
        1. General environmental regulations
        2. Specific facility environmental approvals and permits
        3. Emissions reporting and labeling requirements
        4. Carbon pricing regimes taking various forms including tax, cap and trade, and/or reduced carbon or carbon neutral procurement requirements
    iv. Enhancing competitiveness by lower production costs relative to competitors and imports
    v. Complying with voluntary initiatives including:
        1. Management performance and efficiency standards
        2. Corporate social responsibility measures

3. Optimizing investment in, and potentially deferring, untimely infrastructure, replacement, operations and maintenance costs
4. Reporting and green labeling standards, including but not limited to the CDP Program[1] and various Eco-labeling initiatives
5. Customer outreach and education measures

c) Please provide any and all examples of direct large volume customer energy efficiency and conservation measures that Synapse has worked on or otherwise encountered.

d) Please provide your view on the relative cost effectiveness, efficiency, end-use customer impact, and investment in any and all of the measures outlined in (b) and (c) above, relative to paying a third party utility a rate-regulated amount to effect efficiency measure and programs across the applicable industrial rate.

Question: 4

Reference: i) Evidence of Synapse Section 9.3.2 pages 123-125

Preamble: In Reference i) Synapse indicates that it is inherently difficult to estimate free ridership. APPrO would like to better understand the factors that influence free ridership and leakage (spillover) for DSM programs for large volume customers.

a) Please provide an itemization of any and all factors that can lead to free ridership and/or spillover for commercial or industrial customers.

b) Please advise whether each of the following factors would, if all other factors were held constant, tend to (a) increase the efficacy and effectiveness of direct energy efficiency and conservations measures of a large volume customer and/or (b) decrease free ridership and spillover among large volume customers in a DSM system:

i. Large volume customer (LVC) has full time staff dedicated to the operation and maintenance of their facilities
ii. LVC has employee incentive programs to seek out, report and improve the efficiency of their operations
iii. LVC is subject to potential border measures reflecting emissions or energy efficiency
iv. LVC has and facilitates a culture of conservation within the organization
v. LVC operates in a highly competitive environment
vi. LVC is required to comply with strict contractual product off-take and sale provisions pertaining to any or all of:
    1. Heat rate requirements
    2. Production efficiencies
    3. Maintenance, engineering and industry best practice standards
    4. Prudent operating standards
    5. Management standards (including but not limited to ISO)

[1] https://www.cdp.net/en-US/Pages/HomePage.aspx

6. Reporting requirements
7. Green or other labeling requirements
8. The treatment or limited pass through of fuel costs

vii. LVC is required to comply with legislative and regulatory requirements including:
1. General environmental regulations
2. Specific facility environmental approvals and permits
3. Emissions reporting and labeling requirements
4. Carbon pricing regimes taking various forms including tax, cap and trade, and/or reduced carbon or carbon neutral procurement requirements

viii. LVC is complying with voluntary initiatives including:
i. Management performance and efficiency standards
ii. Corporate social responsibility measures
iii. Optimizing investment in, and potentially deferring, untimely infrastructure, replacement, operations and maintenance costs
iv. Reporting and green labeling standards, including but not limited to the CDP Program[2] and various Eco-labeling initiatives

ix. LVC is undertaking customer loyalty, outreach and education measures

Question: 5

Reference: i) Evidence of Synapse page 84 Recommendation #1

> *To ensure that recommended measures are implemented, Union should (a) collect the costs for the technical assistance from the customer if a customer does not implement the recommendations from the technical assistance, then Union should; (b) require execution of an agreement including customer energy savings commitments; and/or (c) require implementation of all recommended measures that meet certain conditions (e.g., a payback period of 1.5 years or less).*

Preamble: In the above reference Synapse recommends that Union collect the costs of providing technical assistance if the customer does not implement the recommendations from the technical assistance.

a) Please confirm that the customer is in the best position to make decisions related to the implementation of any particular energy efficiency measures based on the operating characteristics of its particular plant, the customer's cost of capital, contractual requirements, legislative and regulatory permits and approvals, and other factors that Union may not be privy to. If not, please explain.
b) Please confirm that providing technical assistance will not always result in a 'recommendation' to implement a particular energy savings measure.
c) Please advise whether the utility, in any of the programs cited on p. 83 and 84 assumes the financial, legal, or other liability of the LVC customer if the recommended energy savings measure results in prohibited changes to the operating characteristics of particular plant, restricted capital expenditure, a breach of a contractual requirement, a breach of a legislative or regulatory permit or approval.

[2] https://www.cdp.net/en-US/Pages/HomePage.aspx

d) Please provide evidence of the relative costs and effectiveness of a LVC customer: (i) contracting directly for an energy assessment and audit and (ii) engaging a gas utility to indirectly undertake an energy assessment and audit on its behalf.
e) Does Synapse believe that requiring the customer to enter into an agreement to access technical assistance which contains penalty provisions may actually be a disincentive for customers to request technical assistance?

Question: 6

Reference: i) Evidence of Synapse page 84 Recommendation #2

> *It would be appropriate to at least conduct a process evaluation to examine the effectiveness of this offering and identify any modifications for offer training, specialized technical support, and audits by qualified Union Professional Engineers.*

ii) Exhibit B.T3.Union.APPrO.4

Preamble: In Reference i), Synapse recommends audits by Union professional engineering staff on the effectiveness of the offering. In Reference ii) Union notes that it is Union's professional engineering staff that will be delivering the services.

a) Is Synapse aware of any conflict of interest standards or avoidance measures that are applicable to the audit or the auditor(s)?
b) What are the potential impacts if the audit is conducted by either the same people that were, or the same department that was, responsible for delivering the DSM related services in the first place?

ALL OF WHICH IS RESPECTFULLY
SUBMITTED THIS
4th day of August, 2015

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