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January 12, 2021

Ontario Energy Board
2300 Yonge Street
27th Floor
Toronto, ON M4P 1E4

Attention: Christine Long, Board Registrar

Dear Ms. Long:

**Re: Board File No. EB-2020-0091 – Enbridge Gas Inc.’s IRP Proposal
Ontario Sustainable Energy Association’s (“OSEA”) Interrogatories**

Please find enclosed the Ontario Sustainable Energy Association’s Interrogatories in the above-noted matter, which have been filed on the RESS.

Yours truly,

Raeya Jackiw

cc: Dan Goldberger, OSEA
Travis Lusney, Power Advisory LLC

Document #: 1874658

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act*, 1998,
S.O. 1998, c. 15, Sch. B, as amended;

AND IN THE MATTER OF the Ontario Energy Board's
proceeding on Enbridge Gas Inc.'s Integrated Resource
Planning ("IRP") Proposal

INTERROGATORIES OF ONTARIO SUSTAINABLE ENERGY ASSOCIATION ("OSEA")

January 12, 2021

OSEA IR 1

Reference: EGI Additional Evidence, Exhibit B, Page 13 and 14 of 46

Preamble: Figure 2.1 of the Enbridge's Additional Evidence summarizes IRP Integration at Enbridge Gas.

- a) When comparing IRPAs to facility alternatives, will Enbridge Gas test reasonable sensitivities to planning assumptions (e.g., variations in demand growth rates, policy impacts, technology advances)? If yes, please provide a description of how Enbridge will incorporate sensitivity analysis into the planning process.
- b) Enbridge Gas states that it incorporates DSM impacts into its annual demand forecast. OSEA supports the incorporation of DSM impacts early in the planning process. Please describe how the quantity and quality of DSM impacts are determined by Enbridge Gas. For example, does Enbridge Gas only assess committed (e.g., contracted) DSM impacts?
- c) Please describe how IRPA(s) for identified system needs will be developed, and specify how costs will be estimated, quantity of network demand calculated, and viability of solutions tested.

OSEA IR 2

Reference: EDI Additional Evidence, Exhibit B, Page 21 to 30 of 46

Preamble: In December 2020, the Federal Government of Canada announced the intent to raise the carbon price to \$170/tonne by 2030.¹

- a) Please describe how the federal carbon price announcement will influence Enbridge Gas' development of IRPA(s). Please comment specifically on the impact on the Innovative Technologies listed in Section 3 (Page 21 to 30 of 46) of Enbridge Gas' Additional Evidence.

OSEA IR 3

Reference: ICF IRP Study, ES-43

Preamble: The ICF IRP Study notes that changes in Ontario energy policy and utility regulatory structure necessary to facilitate the use of DSM to reduce infrastructure investments include “cost recovery guidelines for overlapping DSM and facilities planning and implementation costs, and criteria for addressing DSM impact risks.”

- a) Cost recovery is a barrier to DSM adoption, and OSEA supports the investigation of cost recovery guidelines for DSM. Please provide further details on the cost recovery guidelines required. Please comment on the following:
 - i. Cost recovery for expanded planning requirements
 - ii. Regulatory framework and cost recovery on developing IRPA(s) including the potential and cost of non-pipeline solutions and demand response
 - iii. Cost recovery and regulatory framework for comparing baseline facilities and IRPA(s) in meeting system needs cost-effectively

¹ Environment and Climate Change Canada, 2020. A Healthy Environment and a Healthy Economy: Canada's strengthened climate plan to create jobs and support people, communities and the planet at pg. 26, retrieved from: https://www.canada.ca/content/dam/eccc/documents/pdf/climate-change/climate-plan/healthy_environment_healthy_economy_plan.pdf.

OSEA IR 4

Reference: ICF IRP Study, ES-7 and ES-43; EGI Additional Evidence, Exhibit B, Page 36 and 43 of 46

Preamble: The ICF IRP Study notes that approval to invest in Advanced Metering Infrastructure (“AMI”) is needed to collect hourly data on the impacts of DSM programs and measures. The ICF IRP Study further notes that large customers can have a disproportionate impact on the demand on a network and the timing for additional capacity requirements.

In its Additional Evidence Enbridge Gas notes that “absent more granular consumption data that would be available from AMI implementation, more conservative derating factors will need to be applied towards consideration of a given alternative and, incremental evaluation policy and/or protocols may need to be designed and implemented at additional cost.”

However, Enbridge Gas is not proposing to deploy AMI at this time.

- a) Please explain Enbridge Gas’ rationale for not deploying AMI at this time.
- b) Please provide a high-level overview of what a deployment plan for AMI might include. OSEA is seeking to understand what Enbridge Gas envisions would be the major components of an AMI deployment plan.
- c) Has Enbridge Gas considered targeted deployment of AMI? For example, has Enbridge Gas considered targeting large customers that have a disproportionate impact on network demand; or attempting to deploy AMI at downstream nodes within the pipeline network below the gate station level? OSEA is seeking to understand what Enbridge Gas’ priorities are in the development of an AMI deployment plan.

OSEA IR 5

Reference: EGI Additional Evidence, Exhibit B, Page 45 of 46

Preamble: Enbridge Gas states that ultrasonic meters are expected to support AMI and are under review by Measurement Canada.

- a) OSEA supports the deployment of AMI to support DSM program Measurement & Verification (M&V) and DSM program design. Please describe why ultrasonic meters were selected as Enbridge Gas' preferred AMI technology.
- b) Are there other metering assets that have Measurement Canada support that are currently available for deployment by Enbridge Gas? OSEA is interested in understanding the benefit(s) of waiting for ultrasonic meter approval from Measurement Canada, as opposed to deploying existing alternatives.

OSEA IR 6

Reference: EGI Additional Evidence, Exhibit B, Page 26 to 27 of 46

Preamble: In its Additional Evidence, Enbridge Gas states that it will “keep a close eye on DR (demand response) pilots in the residential space.”

- a) Please describe how Enbridge Gas will “keep a close eye on DR pilots in the residential space.” Specifically, please describe what jurisdictions Enbridge Gas will be monitoring, and what information from the DR residential pilots Enbridge Gas will focus on.

OSEA IR 7

Reference: EGI Additional Evidence, Exhibit B, Page 27 of 46

Preamble: Enbridge Gas states that “commercial and industrial customers have been moving away from interruptible rates for the natural gas volumes as they value certainty of supply over the cost reduction.”

- a) Please provide details (e.g., customer surveys) supporting the increase in customer value of certainty of supply over the cost of reduction.
- b) Beyond value of certainty of supply, please identify other reasons why Commercial and Industrial customers may have moved away from interruptible rates. For example, OSEA's understanding is that a customer with interruptible rates requires a secondary fuel train at site to be eligible. The cost of maintaining a secondary fuel train at a site could be a determining factor in the shift to firm rates.

OSEA IR 8

Reference: EGI Additional Evidence, Exhibit B, Page 25 to 27 of 46;

Preamble: In Enbridge Gas' Additional Evidence, it is noted that Natural Gas DR programs are receiving more attention and sometimes replacing interruptible rates. DR programs may provide an opportunity for more acute targeting of interruptible demand aligned with the value of deferred capacity expansion.

- a) Please provide a summary of DR program types that have been explored by Enbridge Gas to date. Please include a description of the DR program, the potential for the program to achieve demand reduction, an estimate of program cost, and a confidence range for the potential demand reduction and cost estimate.

OSEA IR 9

Reference: EGI Additional Evidence, Exhibit B, Page 24 of 46

Preamble: Enbridge Gas notes that ground source heat pumps and electric air source heat pumps “provide a solution that could be deployed to mitigate the need to build new infrastructure or to reduce the amount of new infrastructure required. It should be noted that these solutions may also result in unintended and perhaps meaningful consequences to electrical transmission and/or distribution system(s) and their carbon intensity profiles.”

- a) Please explain how Enbridge Gas intends to account for consequences to the carbon intensity profiles of electrical transmission and/or distribution system(s) in evaluating the suitability of IRPAs.
- b) Please describe any efforts or activities where Enbridge Gas is coordinating with electricity system planners and stakeholders on IRPAs.

OSEA IR 10

Reference: EGI Additional Evidence, Exhibit B, Page 31 and 33 of 46

Preamble: For comparison of IRPAs to facility alternatives, Enbridge Gas suggests using a project horizon that aligns with the OEB-approved depreciable life of infrastructure asset(s) to which the IRPA is being compared. IRPAs may have a different depreciable life or have a contracted term (e.g., DR programs). Further, comparisons by project horizon require confidence in long-term demand forecasts which become less certain over the long-term.

- a) Please describe how Enbridge Gas intends to compare different project horizons for facility alternatives and IRPAs.
- b) Please describe how uncertainty in demand forecasts will be incorporated into the comparison of IRPAs to facility alternatives.
- c) Please provide annual demand forecasts for the past 10 years and actual demand for the 10 years.
- d) Please describe how the risk of stranded or under capacity assets will be managed through the planning process for solutions with longer project horizons. Put another way, please describe how the planning process will consider the risk of underutilized solutions.
- e) Please describe how Enbridge Gas will consider scalability of solutions when comparing IRPAs to facility alternatives. For example, facility alternatives typically have fixed additional capacity to the system such as a new pipeline; whereas IRPAs could be tailored to specific system need (e.g., larger quantity of DR procured to meet growing system needs).

OSEA IR 11

Reference: EGI Additional Evidence, Exhibit B, Page 31 and 33 of 46

Preamble: Enbridge Gas proposes to only proceed with an IRPA where the IRPA “can meet the demands of future system capacity, is more cost-effective than facility alternatives and meets the other important Guiding Principles...”

Enbridge Gas suggests that the Board consider incentivizing Enbridge Gas to prioritize investments in IRPAs by “adding an incentive for such successful investments, over-and-above the regulated rate of return earned (e.g., an incentive based on the net benefits achieved...)”

- a) Is Enbridge Gas proposing that the Board only incentivize Enbridge Gas to successfully implement an IRPA that is more cost-effective than facility alternatives?
- b) Would the incentive costs to customers be included in the assessment of facility alternatives to IRPAs?
- c) Please describe how an incentive would be determined for successful investments in IRPAs. Would the incentive be pre-determined for all IRPA solutions or would it be specific to the comparison between facility alternatives and IRPAs?
- d) Please provide examples from other jurisdictions where incentives have been used to support deployment of IRPAs.