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July 22, 2020

BY RESS AND EMAIL

Ms. Christine Long
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Long:

Re: Enbridge Gas Inc. (Enbridge Gas)
Ontario Energy Board File No.: EB-2020-0091
Integrated Resource Planning Proposal – IRP Study

In accordance with Procedural Order No. 2 issued by the Ontario Energy Board ("OEB" or "Board") on July 15, 2020, enclosed is ICF Canada's ("ICF") Final Report on Natural Gas Integrated Resource Planning: Initial Assessment of the Potential to Employ Targeted DSM to Influence Future Natural Gas Infrastructure Investment (the "IRP Study"), dated May 18, 2018.

Background

As part of its 2015-2020 DSM Plan, Enbridge Gas (formerly Enbridge Gas Distribution Inc. ("EGD")) put forward a comprehensive IRP Study outline. In its Decision and Order regarding Enbridge Gas's (formerly EGD and Union Gas Limited ("Union")) 2015-2020 DSM Plans, the OEB asked EGD and Union (together the "Utilities") to jointly complete a scope of work for an IRP Study. Specifically, the Board, in its decision on the 2015-2020 DSM Plans found:

> "As indicated in the DSM framework, it is appropriate that the gas utilities study and submit a methodology for assessing the appropriate role for DSM as part of infrastructure planning at the mid-term DSM review."[1]

Accordingly, the Utilities jointly engaged ICF to conduct an IRP Study that outlines how to include DSM as part of future infrastructure planning activities. The IRP Study, discussed in more detail below, was critically important to understand: (i) the feasibility of deferring or avoiding future distribution facility reinforcement projects by reducing customer demands; (ii) unresolved policy/process issues; and (iii) next steps in the development of IRP in Ontario.

The Utilities filed the IRP Study executive summary on January 15, 2018, as part of the OEB's Mid-Term Review on the 2015-2020 DSM Framework (EB-2017-0127/0128). The full IRP Study was filed in response to interrogatories in EGD's Bathurst leave to construct application (EB-2018-0097).[2]

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[1] EB-2015-0029/0049, OEB Decision and Order, January 20, 2016, p. 83.
[2] EB-2018-0097, Exhibit I.EGDI.SEC.1, Attachment 1, October 11, 2018.

The IRP Study "…includes a review of industry experience, an overview of the facilities planning process, an assessment of the potential impact of DSM programs on peak hour demand, the potential to use DSM to reduce new investments in utilities infrastructure, and a review of the policy changes that would facilitate the incorporation of DSM into the facilities planning process."[3]

Conclusions

The conclusions of the IRP Study, set out at pages 163 to 169 herein, include:

Industry Experience

- Limited activity has been undertaken in other North American jurisdictions designed to reduce natural gas transmission and distribution costs using targeted DSM and demand response. In addition, the measured data needed to determine the potential impacts of DSM on new facilities requirements is generally unavailable.

- Geo-targeted DSM programs are likely to be more cost-effective for the electric industry than they are for the natural gas industry, and the electric industry experience provides relatively limited value as an example for the gas industry.

Natural Gas Facilities Planning

- The primary goal of natural gas facilities planning is to ensure that the utility infrastructure is reliable – of sufficient size and installed at the appropriate time to provide reliable natural gas service during peak demand periods at system design conditions consistent with reasonable costs. Failure to meet peak period demands imposes considerable safety risks and could result in loss of gas supply to firm utility customers during extreme cold conditions, leading to societal and economic costs to the utilities and their customers.

- The natural gas facilities planning process requires significant advanced planning to ensure facilities are available at the time they are needed. As such, the facilities planning process is designed to identify expected requirements about five years prior to the time the capacity will be needed to allow sufficient time for the project planning and design, regulatory review, and construction to be completed.

- There are significant economies of scale associated with the construction of facility investments. Downsizing a specific project is likely to lead to only modest cost savings and if a project proves to be undersized relative to future system growth, additional facility investments are likely to be much more expensive than increasing the size of the initial project.

- The cost-effectiveness of DSM programs as an alternative can differ widely for different facility investments based on the size of the project, characteristics of the existing system and areas impacted by the project.

Policy and Planning Changes Required

- Implementation of geo-targeted DSM will require a specific planning and regulatory framework, developed for the express purpose of reducing natural gas infrastructure, including such changes as:
    - **Cost recovery guidelines** for overlapping DSM and facilities planning and implementation costs, and criteria for addressing DSM impact risks.
    - Approval to invest in and recover the costs of the **Advanced Metering**

[3] IRP Study, p. 163.

Infrastructure ("AMI") necessary to collect hourly data on the impacts of DSM programs and measures.
    - **Changes in the approval process** for DSM programs to be consistent with the longer lead time associated with facilities planning.
    - **Clarification on the allocation of risk** associated with DSM programs that might or might not successfully reduce facility investments.
    - **Guidance on cross-subsidization** and customer discriminations inherent in geo-targeted DSM programs that do not provide similar opportunities to all customers.
    - **Guidance on how to treat conflicts** between DSM programs designed primarily to reduce investment in new infrastructure and DSM programs designed to reduce carbon emissions or improve energy efficiency.
    - **Guidance on how to treat uncertainty** associated with energy-efficiency programs outside the control of the Utilities, that impact peak hour and peak day demand.

Additional Research Required

- Additional research is necessary before the Utilities would be able to rely on DSM to reduce new facility investments as part of their standard facilities planning process, including:
    - Collection (through AMI and Automated Meter Reading) and evaluation of measured hourly demand data at a customer level to more accurately assess the impact of DSM measures and programs on peak period demand is needed to determine the cost and implementation potential of DSM measures and programs.
    - Assessment of the reliability of geo-targeted DSM to reduce peak hour demand growth through specific in-field pilot studies is the best approach to resolve issues of risk associated with relying on DSM to reduce peak hour demand. Similarly, assessment of the cost of geo-targeted DSM implementation through in-field pilot studies is also necessary.

As set out in its 2021 Dawn Parkway Expansion Project application (EB-2019-0159) at Exhibit A, Tab 2, considering the conclusions of the IRP Study set out above and recognizing the OEB's direction in recent decisions on applications for leave to construct and in the OEB's Mid-Term Report, Enbridge Gas brought forward its IRP Proposal in order to establish the IRP policy guidance necessary for the assessment of IRP alternatives ("IRPAs") as non-facility alternatives to capital projects and to demonstrate that IRP was not a viable alternative to defer or avoid the 2021 Dawn Parkway Expansion Project.

The above noted submission has been filed electronically through the OEB's RESS and will be made available on Enbridge Gas's website at:
https://www.enbridgegas.com/Regulatory-Proceedings

If you have any questions, please contact the undersigned.

Sincerely,

Adam Stiers Digitally signed by Adam Stiers
Date: 2020.07.22 10:57:45 -04'00'

Adam Stiers
Technical Manager, Regulatory Applications

cc.: D. Stevens (Aird & Berlis)
M. Parkes (OEB Staff)
M. Millar (OEB Counsel)
EB-2020-0091 (Intervenors)