Natural Gas IRP

Presented at the 2019 ACEEE National Conference on Energy Efficiency as a Resource Jeff Mazzei





Agenda

- Introduction
- About Enbridge Gas Inc.
- About Integrated Resource Planning (IRP)
- IRP Policy Questions and Issues
- IRP Barriers to Implementation
- IRP Potential and Next Steps
- Valuing Non-Pipe Alternatives



About Enbridge Gas Inc. (EGI)

- Formed Jan 1, 2019 by the amalgamation of Enbridge Gas Distribution Inc. and Union Gas Ltd.
- North America's largest gas utility by volume
- 3.7M customers in Ontario
- 82,500 km of gas transportation and distribution main
- 66,150 km of service lines
- Supplies 40% of Ontario's energy needs, including 280 Bcf of storage



About Integrated Resource Planning (IRP) for EGI

- Formally kicked off in a 2014 Leave to Construct (LTC) proceeding
- Future LTC's require DSM to be considered as an alternative
- Resulting IRP Study filed in 2018
- The study was developed over the course of 24+ months and engaged an expert group to provide guidance along the course of development.
- The Study indicated that in certain circumstances deferral of distribution pipeline may be possible but that many policy questions remained.



IRP Policy Questions

- EGI is raising these questions in an imminent LTC filing in order to test and validate policy approaches that will enable future IRP planning
- Similar issues being addressed in the electricity sector by the Ontario Energy Board under the consideration of Distributed Energy Resources ("DERs")

Some of the key policy items include:

- Cross subsidization within customer classes
- Customer discrimination based on geographic location
- Rate impact of non-pipeline alternatives relative to pipe
- Thresholds above/below which NPAs are not considered
- Priority to defer future facilities instead of reduce annual volume/GHGs
- Risk allocation between stakeholders



IRP Barriers to Implementation:

- Empirical analysis of the interplay between Annual, Peak Day and Peak Hour volume demands
- Customer usage profiles (Pre and Post NPA)
- Reliability of demand deferral
- Difficulty of comparing value streams of NPAs to Pipe
- Lack of regulatory framework for all this



Valuing Non-Pipe Alternatives

- Marginal Cost per Unit of Capacity (Avoided or added)
- Rate Impact of unit capacity
- Risk premium for less reliable sources
- Average impact value or momentary impact value which is appropriate for Ontario rate payers?



What's Next:

- 1) A proactive filing by Enbridge Gas in 2019 that attempts to propose solutions and/or address the necessary policy issues
- 2) Continued involvement where appropriate in the Ontario Energy Board's policy development for the electric utilities around DERs
- 3) Continued involvement with Ontario's Independent Electricity System Operator around their Integrated Regional Resource Planning processes



Questions?

• Thank you for your time

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