EB-2020-0091 Natural Gas IRP Framework

Pollution Probe Presentation February 19, 2021

Intro & Context

- Pollution Probe includes input and collaboration from a range of consumers, municipalities, associations and other stakeholders as it participates in this proceeding.
- A transparent and effective IRP Framework may be one of the most important things the OEB does this decade for Ontario and its energy consumers.
- Effective IRP is needed to support a Modern, Reliable and Sustainable Energy Sector in Ontario
- Effective IRP is not 'Business as Usual' or old fashioned siloed planning.
- Energy planning and implementation needs to be consumer-centric, fuel agnostic and aligned with community energy and emissions planning across Ontario.
- Building an effective IRP Framework is a difficult task and the record in this
 proceeding has been enhanced due to the flexible approach by the OEB.
- Presentation Day (P.O. #7)
 - Presenting parties will have the opportunity to provide their perspective on how IRP should work.
 - The OEB expects that the Presentation Day will allow it to assess whether there is the breadth and scope of evidence on which to establish the IRP framework.

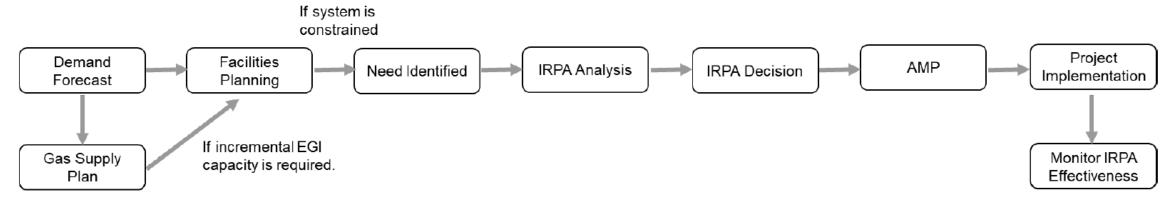
A Compelling Need to Modernize Planning and Requirements

Old Fashioned Paradigm	Modern, Reliable and Sustainable Paradigm
Utility-Centric Planning	Consumer-Centric Planning
Siloed planning and processes	 Includes current and emerging Policy considerations (including energy and emission planning)
Little or no integrated planning	 Open and transparent Stakeholder communication
Short-term decision making	and input
Urgent facility applications	Long-term decision making
 Opaque process with little detail of IRP considerations included in OEB applications (e.g. IRP Screenings, DSM 	 Promotes the best option for Ontario consumers
analysis, etc.)	 Requires all relevant information and material in initial filing
Little to no meaningful Stakeholder consultation	 Regular transparent continuous improvement process
Favours pipeline solutions	 Transparency, transparency and more transparency
 Puts the burden on the OEB and Intervenors to discover relevant information through the proceeding 	ransparency and more transparency

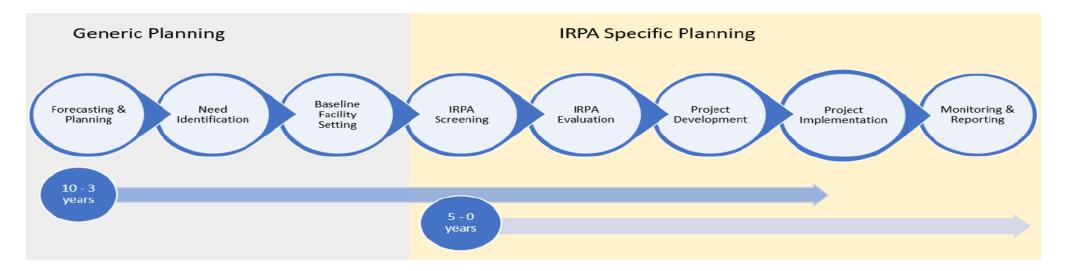
Why an OEB mandated IRP Framework?

- Over the past decade+ the OEB has indicated that it expects consideration of non-pipe (e.g. IRP)
 options and solutions Little to no progress
- Enbridge has indicated it requires OEB guidance and direction to move forward. Enbridge does not have policy, procedure or manual (including sections in other manuals) related to IRP"(Reference: EB-2020-0091 Exhibit I.PP.1)
- "Currently no one single department "owns" the assessment/screening process in its entirety.
 Enbridge Gas intends to determine clear accountabilities for future IRP/IRPA assessments through process mapping exercises informed by the IRP Framework ultimately established by the Board for Enbridge Gas through this proceeding." (EB-2020-0091Exhibit I.PP.2)
- "it should not be surprising that Enbridge Gas's definition of natural gas IRP has evolved since it filed its original IRP Proposal in 2019 to reflect: (i) its learnings from IRP processes and strategy in other North American jurisdictions; (ii) the scope of IRP to be considered by the Board as part of this proceeding as established by the Board in its Decision on Issues List and Procedural Order No. 2 (dated July 15, 2020); and (iii) continued development of IRP-related perspectives and processes within the Company." (EB-2020-0091 Exhibit I.STAFF.1)
- "Enbridge Gas evolved its thinking on binary screening related to IRP assessment in the period between filing its original 2019 IRP Policy Proposal and the October 15, 2020 Additional Evidence."
 (EB-2020-0091 Exhibit I.STAFF.8, Page 2)
- Status quo will not change without a clear and effective IRP Framework and OEB Direction

Silos, processes, etc.



Reference: Exhibit I.Staff.2



Reference: Exhibit B Figure 2.1

The Value of Case Studies – If you don't remember the past, you are condemned to repeat it.

Project	Issues	Outcome
London Line Replacement EB-2020-0192 Note: Identified as an exemplar project in EB-2019-0091, Exhibit I.PP.1 (b)	 Over 90 km of existing pipelines were among the oldest in the system. Some alternative assessment, but analysis did not align with DSM Framework or OEB's expectations for option assessment. "The OEB was assisted in its findings by the rigour of the analyses requested by the intervenors" Two existing pipelines downsized by one smaller pipeline. 	" the OEB agrees with Environmental Defence that Enbridge Gas has an obligation to conduct a more rigorous Integrated Resource Planning assessment at the preliminary stage of projects development in future cases. As OEB staff also notes the failure to present detailed analyses makes it unlikely that Enbridge Gas would select an alternative including DSM or other non-build project option. The OEB acknowledges that more direction is likely to be provided to Enbridge Gas in future leave to construct projects as part of the ongoing IRP proceeding. In the interim, however, the OEB believes that all parties would be assisted if Enbridge Gas would, in the future, undertake in-depth quantitative and qualitative analyses of alternatives that specifically include the impacts of DSM programs on the need for, or project design of facilities for which Enbridge Gas has applied for leave to construct. " – EB-2020-0192 OEB Decision, Page 20

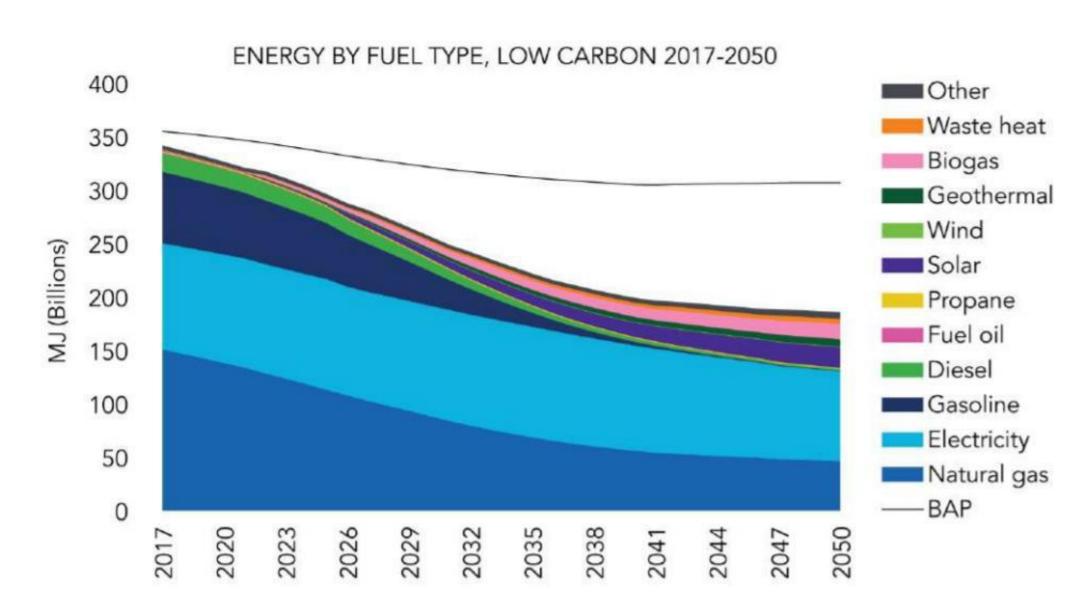
The Value of Case Studies – If you don't remember the past, you are condemned to repeat it.

Project	Issues	Outcome
Dawn-Parkway Expansion EB-2019-0159	 IRP options prematurely screened out OEB set a thorough process to review the proposed project. Application withdrawn 	 Saved over \$200 million in capital costs Avoided major environmental and socio-economic impacts OEB process helped to avoid excess capital / stranded assets
Branchton Relocation EB-2020-0065	 Project driven by assumption that current pipeline does not meet CSA Z662. Assumption questioned during the proceeding Potential to set a precedent affecting all existing assets 	 Application currently on hold while Enbridge reassesses project need and regulatory requirements
NPS 20 Waterfront Relocation EB-2020-0198	 Controversial \$70 million pipeline project Inadequate stakeholder consultation Did not consider reasonable options in the study area 	 Enbridge requested to withdraw the LtC to reassess options Conflict with required timing for Don River Flood Project and Port Land development OEB has asked for input

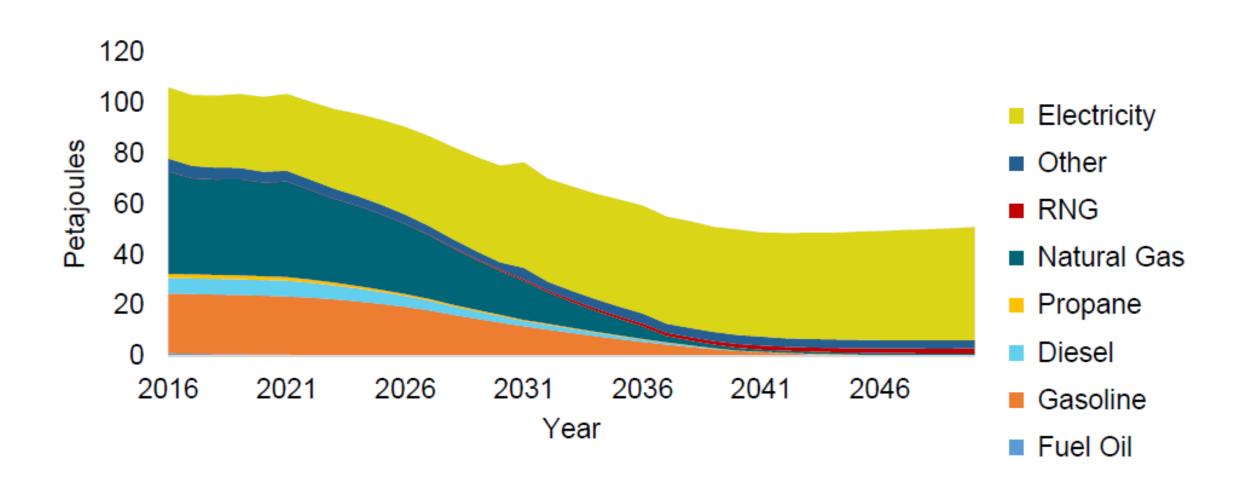
A Sample of Additional Information and Best Practices

Document	Relevance
City of Toronto – Transform TO Plan (Sample of a municipal energy and emissions plan)	 Provides energy and emissions forecasts out to 2050 in alignment with current gas infrastructure planning. Natural gas is both the largest contributor to total emissions within the buildings sector, and the city overall. Of the emissions within buildings and transport, natural gas accounts for 41%. Projected decline in natural gas consumption for space heating is the result of both increased efficiencies in buildings, and fuel switching space heating away from natural gas to heat pumps and district energy. By 2030, 2040 and 2050 natural gas consumption for space heating in residential and non-residential buildings declines by 60%, 84% and 16% respectively, all over 2011 levels.
City of Ottawa Energy Evolution (Sample of a municipal energy and emissions plan)	 Renewable natural gas use equates to 12% of emissions reductions by 2050. The highest emitter by fuel type was natural gas (used in buildings), with 38% of total emissions. IRP options needed to deliver plan.

City of Toronto Transform TO Report, Figure 33



City of Ottawa Energy Evolution Report, Figure 23



A Sample of Additional Information and Best Practices

Document	Relevance
BRITISH COLUMBIA UTILITIES COMMISSION – Resource Planning Guidelines (2003)	 An example of gas IRP right in our backyard since 2003. Has been updated through utility and BCUC proceedings since 2003. Consultation has been an important component (expectation) for improvement - " utilities should normally solicit stakeholder input during the resource planning process. Methods could include stakeholder collaboratives, information meetings, workshops, and issue papers seeking stakeholder response".
ConEdison Interim Benefit Costs Analysis Handbook for Non-Pipeline Solutions (2018) Note: Board Staff in their IRs also flagged additional public documents that related to IRM for gas and electric utilities.	 ConEd has 1.2 million gas customers. Some examples of non-pipeline solutions are renewable natural gas (RNG), local gas storage, including compressed natural gas (CNG) and liquefied natural gas (LNG), environmentally advantageous fuel switching, and demand response. Evaluate projects and programs within the broader context of a portfolio (rather than as individual measures or investments), allowing for consideration of potential synergies and economies across the portfolio. Includes Non-Energy Benefits to consumers and enables policy consideration, similar to NSPM.

A Sample of Additional Relevant Information and Best Practices

Document	Relevance
IESO Regional Planning Process Review – Straw Man Design (2020)	 An examples from IESO on IRP process improvement activities. IESO considers municipal energy planning and even launched an Indigenous Community Energy Planning Program to compliment the Province of Ontario program. Final Report released February 3, 2021.
IESO Engagement Principles	 Best Practice Consultation with stakeholders – see Appendix. Effective IRP demands open and effective stakeholder engagement. Enbridge Gas did not seek direct external stakeholder feedback on its IRP Proposal prior to it being filed with the Board (Exhibit I.PP.3).
Ontario Environment Plan	 Policy alignment. Supports DSM and community energy and emissions planning.
Ontario Municipal Energy Plan - An integrated approach for energy and emissions planning	A municipal energy plan is a comprehensive long-term plan to improve energy efficiency, reduce energy consumption and greenhouse gas emissions, foster green energy solutions and support economic development.

IRP and Community Energy and Emissions Planning

- Energy planning needs to be holistic, community focused, including effective policy consideration.
- Municipal energy plans are required under O. Reg 397/11 and other Provincial requirements.
- Energy and emissions planning is supported through policy and programs including the Municipal Energy Plan Program.
- Municipal energy and emission plans exist for municipalities across
 Ontario. They are fuel agnostic and integrated from a consumer level.
- Significant public/stakeholder engagement and consultation completed.
- Current planning and OEB applications do not adequately consider these plans.
- OEB requirement that the 5 Year Gas Supply Plan Scorecard include effective Policy metrics - 1/3rd of the scorecard and areas for improvement.

The IRP Technical Conference brought significant value to help understand what is known and unknown

- Due to the patchwork of evidence since the IRP Proposal was filed,
 Stakeholders were confused about what is being asked for and what the next steps are.
- "... there's a lot of complicated questions that hopefully will become more clear when we have a framework, and one of those questions is what IRP investments will Enbridge be including within its capital budget ..." TC
- EBO 188 and EBO 134 are not currently sufficient to enable effective IRP.
- Enbridge to provide a list of what it considers next steps to be.
 - OEB develops IRP Framework
 - Proceed with pilots
 - File 10 Year AMP
 - Stakeholder Day
 - IRP Annual Reporting

Conclusions

- Effective IRP is needed to support a Modern, Reliable and Sustainable Energy Sector in Ontario.
- It is not 'Business as Usual', significant change is required from the approach and processes of the past.
- IRP is consumer-centric and the scope outlined in PO #2 supports an industry wide focus rather than utility-centric.
- Needs to align with broader energy context including municipal energy and emissions planning.
- EBO 188 and EBO 134 are not currently sufficient to handle effective IRP.
- The Enbridge IRP Proposal no longer relevant. Many loose ends still need to be sorted out (e.g. capital treatment for NPAs - JT2.13). Next Step proposed in IRP Framework to provide "guidance'.
- Status quo with little to no consideration of IRP is not appropriate.
- Current and proposed approach for stakeholder consultation on project/portfolio IRP is opaque and inadequate.
- OEB IRP Advisory Committee (e.g. Vermont model) would help ensure continuous improvement and sufficient stakeholder input.

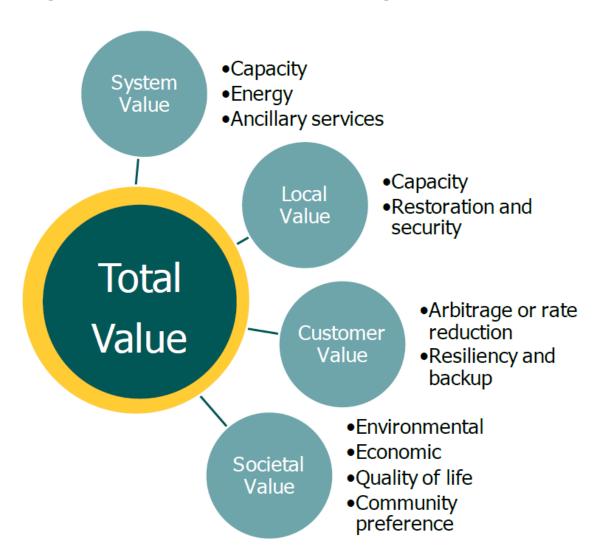
Next Steps for Consideration

- Complete testing of evidence and public input through oral hearing component
- Interim Decision can lay out the foundational elements and key requirements of the IRP Framework Requirements and put in place immediate requirements to make improvements.
- Continue to implement 'common sense' requirements (e.g. London Line Decision)
- OEB should establish an IRP Committee (experts and key stakeholders similar to Vermont System Planning Committee (VSCP) - Exhibit N2.GEC-ED Tab 1, page 2) to guide IRP Framework development and continuous improvement.
- Retain an expert firm to complete a draft IRP Framework document in a consultative manner with interested stakeholders. Leverage all best practices available and ensure best long-term outcomes for Ontario consumers.
- Circulate draft for comments and present to all stakeholders.
- In parallel, identify pilot opportunities for 2021+
- Update related OEB policies and guidelines as required (e.g. EBO 188/134, etc.)
- Continuous improvement approach (e.g. IESO approach)

Questions?

IESO Regional Planning Process Review February 2021

Figure 11 | Sample Value Streams that Make Up an NWA's Total Value



Regional Planning NWA Objectives

- Draft Straw Man Design Slides 94

Understanding the Need and Data Gathering

- Quantify, in greater granularity, the temporal, locational, and end-use characteristics of the need
- Standardize methodologies for evaluating needs between regions

Enabling a Fair Comparison

• Develop an evaluation framework to capture, to the extent they can be realized, the full range of NWA benefits to ensure a fair comparison between options

Enabling Market Solutions

 Communicate relevant information in sufficient detail to enable proponents to design and propose solutions

Empowering Local Community Choice

• Build public knowledge to facilitate meaningful dialogue

Terminology

The OEB has noted a number of different terms being used within the overall process of IRP. The OEB intends to use the term IRP as encompassing of all of the activities. For clarity regarding terminology, the following terms are used in this Decision and Procedural Order regarding different components of IRP (Procedural Order #2):

IRP Framework: Guidance or requirements for IRP for Enbridge Gas established by the OEB.

IRP Plan: A plan filed by Enbridge Gas in response to a system need. IRP Plans would follow the guidance established in the IRP Framework. The preferred IRPA (defined below) identified in an IRP Plan would be compared to one or more alternatives to demonstrate it is the best option.

IRP Alternative (IRPA): A potential solution considered under the IRP Plan in response to a specific system need of Enbridge Gas. IRPAs determined by Enbridge Gas to be the preferred solution to meet the system need would likely be brought forward for approval from the OEB. The OEB notes that the potential Alternative solutions would also likely include consideration of a facility project.