

Ms. Christine Long
Board Registrar
Ontario Energy Board
P.O. Box 2319, 27th Floor
2300 Yonge Street
Toronto, ON M4P 1E4

March 31, 2021

**Re: EB-2020-0091 Enbridge Gas Integrated Resource Planning
Pollution Probe Final Argument**

Dear Ms. Long:

In accordance with Procedural Order No. 9 dated March 5, 2021 for the above-noted proceeding, please find attached the written argument from Pollution Probe. Pollution Probe would like to acknowledge and thank all our partners and stakeholders that provided valuable input throughout the proceeding and assisted with identifying best practices and input to this submission.

Pollution Probe is also in receipt of the Environmental Defense (ED) letter dated March 7, 2021 which included comments relating to the scope of Reply Argument that the OEB has defined. Information, evidence and utility positions in this proceeding have varied from the beginning to the end of the proceeding and this is understandable given that integration of IRP is relatively new for Enbridge. In the Pollution Probe letter of comment filed November 9, 2020 several concerns were raised related to the fairness and equity for this broad IRP proceeding that will impact many stakeholders including Ontario consumers, municipalities, gas utilities (including Enbridge) and others. Pollution Probe has assumed that in the absence of an objection, all parties have accepted the position ED outlined. Should Enbridge need to include more up to date material or positions in the Reply Argument, it would be appropriate in Pollution Probe's view that parties could provide written comments on any new material or positions.

Respectfully submitted on behalf of Pollution Probe.



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ONTARIO ENERGY BOARD

Integrated Resource Planning Framework

POLLUTION PROBE ARGUMENT

March 31, 2021

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A) Overview and Context

Pollution Probe has generally followed the outline used by Enbridge Gas Inc. (Enbridge) in its Argument-in-Chief filed March 17, 2021. There were some sections that were oriented to what Enbridge has proposed rather than the issues outlined in the OEB's Issues List and in those cases Pollution Probe used a best fit approach to included related issues in those sections. There was also some repetition across sections (e.g. inclusion of discussion on Guiding Principles in both Sections C and E) and Pollution Probe attempted to consolidate comments in one location to the extent possible. In that regard, if Pollution Probe does not respond directly to an issue in one section, it does not mean that Pollution Probe accepts the wording in that section of the Enbridge Argument-in-Chief. In previous proceedings Enbridge has often assumed that where there is not specific opposition to a statement, that parties must agree. That approach is not valid in this case, since Integrated Resource Planning (IRP) is a complex set of issues and recommendations in one area will certainly have impacts on other elements of the IRP Framework. Pollution Probe has generally identified where it agrees with the IRP Proposal in part or whole.

Pollution Probe also includes a summary table by issue in the Appendix to this document. This provides a quick reference to the main recommendation per issue, but is not meant to replicate the level of details included in the sections below. Pollution Probe also included a related table of recommendations in the Appendix for specific issues covered during the proceeding and where Pollution Probe understood that clear recommendations would be of value to the OEB.

First of all, IRP is not a new concept, but it is a difficult and complex one, particularly as it related to making changes to 'old school' status quo elements of natural gas infrastructure planning that have been in place for the past century. Change is often difficult, but in this case change is inevitable, necessary and beneficial for Ontario consumers and communities. Being a monopoly is a double-edged sword. Monopoly industries often have a hard time changing in part because they are protected from many market realities that would put other industries out of business or force them to change with the times. Change is accelerating globally in the energy sector and the solutions from the last century are not going to meet the need of the next century, or even decade. Change is needed now more than ever.

IRP is simply about making wise long-term infrastructure decisions in a transparent and integrated manner. The OEB already has the mandate to make rates and infrastructure decisions in the public interest and consider consumer interests and relevant policy in those decisions. Natural gas is not an island, but just one of the energy options available to Ontario energy consumers. Cross-sectoral energy planning is already happening in municipalities across Ontario and there is no value in considering fuels in energy silos to meet the future clean energy needs of our communities. Natural gas IRP in Ontario is lagging best practice jurisdictions, but the OEB's IRP Framework based on the rich source of best practices (gas and electric) can help implement that changes needed to achieve a Modern, Reliable and Sustainable Energy Sector in Ontario.

No additional mandate is required and although different jurisdictions may have slightly different regulatory constructs, the best long-term outcomes for consumers is a common

goal. As we have seen in this proceeding, there are many examples and best practices already established to help lead the way. The shift required is illustrated in the Figure below.

Figure 1: A Compelling Need to Modernize Planning and Requirements¹

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

The gas IRP Framework is one of the most important initiatives the OEB will conduct this decade. Energy planning and implementation needs to be consumer-centric, fuel agnostic and aligned with community energy and emissions planning across Ontario. Anything else is sub-optimal, costly, and does not set Ontario up for successful energy future. There is an urgent need to modernize gas facility planning in Ontario. Pipelines built today will be paid for by Ratepayers beyond 2060² and occupy valuable municipal linear corridors³. The OEB has been signaling the need for change to the Enbridge planning process for over a decade and these previous decisions have been largely ignore. Pollution Probe understands that a summary of the history is going to be included in another submission and therefore Pollution Probe has not duplicated that effort here.

There are many recent examples where infrastructure applications were submitted without any consideration of viable alternatives or effective stakeholder consultation. In fact, Enbridge has conducted no internal assessment of IRP alternatives at all⁴. Within the last year, the OEB ordered a more thorough process for the recent Dawn Parkway Expansion Project⁵ which ultimately resulted in a withdraw of this unnecessary project, savings of over \$200 million to Ontario consumers and avoidance of significant environmental and socio-economic impacts. The OEB also confirmed in the London Line Replacement Project Decision⁶ that all future application will need to do a better job of considering IRP options if

¹ PollutionProbe_Presentation_IRP_20210218. Slide 3.

² Final Transcript EB-2020-0091 Enbridge IRPP Vol 1 March 1 2021, page 46.

³ The very same issue that led to Ontario's first Section 101 application in EB-2020-0160.

⁴ Final Transcript EB-2020-0091 Enbridge IRPP Vol 1 March 1 2021, page 35 and EB-2020-0091 Exhibit JT2.7

⁵ EB-2019-0159 Dawn Parkway Expansion LTC

⁶ EB-2020-0192

they are to be considered for approval. Other projects have been withdrawn during an active proceeding due to poor planning and a lack of project need⁷. Each of these projects comes with significant costs for Enbridge department overhead costs (recovered through capital overheads and O&M), Environmental Assessments (typically \$25,000 to over \$50,000 each), engineering studies (e.g. geotechnical, etc.), mitigation plans and mapping, surveys, etc. The cost of the status quo is much more than the lost opportunity to Ontarians for better energy solutions. Also the lifecycle costs for IRP alternatives can be much more economical than the lifecycle costs of gas infrastructure and gas fired equipment. For example, geothermal heating can be over \$70,000 per customer cheaper than the gas alternative⁸, plus the avoided costs for air conditioning. Effective IRP analysis and IRP alternatives are expected to bring significant net benefits to Ontario consumers and communities.

Enbridge's IRP Proposal filed in EB-2019-0159, which set the foundation for their position in this proceeding appears to have been a proposal designed to reject IRP assessment and support construction of the Dawn Parkway Reinforcement Project⁹. The IRP Proposal dismissed the need for effective IRP as unnecessary, even for a large and costly pipeline¹⁰. It was surprising to see such a position on one of the largest and most contentious pipeline projects proposed in Ontario in recent years¹¹. The IRP Proposal also included no consultation and was loosely supported by a study created¹² by ICF for Enbridge that was limited in scope and lacking a fulsome review of IRP best practices¹³. Even local best practices in Ontario¹⁴ and Canada¹⁵ were not in scope.

Pollution Probe understands the difficulty of changing the culture across departments at a large utility like Enbridge. Enbridge has learned through this proceeding and made some adjustments to its proposal to recognize a few of the best practices that have been available locally, in Canada and in North America for decades. IRP is not new, including gas IRP¹⁶. Tools such as the National Standard Practice Manual serve as a foundation for IRP-related assessments and has been embraced by leading utilities and regulators as representing a best practice menu for cost effectiveness tests to compare IRP options. The OEB's IRP

⁷ Recent examples include: EB-2020-0065, EB-2020-0198 and EB-2020-0188.

⁸ Estimated costs conservatively calculated from EB-2016-0004 OGA_Evidence_20160321 AS FILED and EB-2020-0091 Exhibit J2.5.

⁹ The IR Proposal suggested that the \$204 million large diameter pipeline should be exempt from IRP and ultimately the application was withdrawn by Enbridge in 2020.

¹⁰ EB-2019-0159 Dawn Parkway Expansion LTC

¹¹ See public record of letters and comments in EB-2019-0159.

¹² ICF confirmed that there was no RFP and the study was developed through discussion with Enbridge - Final Transcript EB-2020-0091 Enbridge IRPP Vol 3 March 3 2021, Page 166.

¹³ ICF has conducted two studies, but the titled "IRP Jurisdictional Review Report", filed on October 15, 2020 was the principal study from Enbridge supporting their IRP Proposal.

¹⁴ Example - PollutionProbe_IR_Appendix F-IESO Engagement_20210112 and PollutionProbe_IR_Appendix E-IESO Planning Process_20210112

¹⁵ Example - PollutionProbe_IR_Appendix C-BCUC Guidelines_20210112

¹⁶ Example - PollutionProbe_Presentation_IRP_20210218, slide 11.

Framework has the potential to modernize the requirements and put gas planning on the right track to meet Ontario's integrated energy needs.

B) Procedural Background

Enbridge originally submitted an Integrated Resource Planning (IRP) Proposal to the Ontario Energy Board (OEB) on November 1, 2019 as part of its Dawn-Parkway System Expansion Project Application (EB-2019-0159). In Procedural Order No. 1 in the Dawn-Parkway Expansion proceeding, issued January 30, 2020, the OEB determined that Enbridge's IRP Proposal would be heard separately from the Leave to Construct application and on April 28, 2020, the OEB issued a Notice of Hearing, that initiated a review of Enbridge Gas' IRP Proposal as a separate proceeding (EB-2020-0091).

On July 15, 2020, the OEB issued a Decision on the Issues List for the gas IRP proceeding and confirmed that the IRP proceeding will include broad consideration of the definition and goals of IRP, and the process and approach for incorporating IRP into Enbridge Gas's system planning process, including consideration of alternatives to Enbridge Gas's IRP Proposal. The OEB also indicated that although this proceeding began as an application by Enbridge Gas, the OEB has determined that it is appropriate to consider IRP for Enbridge Gas on a broader basis than the specific proposal that has been filed. In addition, certain matters may have broader relevance to the Ontario natural gas sector beyond Enbridge Gas.

On November 9, 2020, Pollution Probe filed a letter of comment, indicating that it had concerns that there may be gaps in the evidence and information that the OEB will need to make an informed decision based on best available information in this proceeding. Pollution Probe requested that the OEB consider additional procedural options to address this concern as it considered next steps. Pollution Probe suggested that the OEB could consider significant gaps following the interrogatory process and solicit ideas to fill those gaps.

Procedural Order No. 5 indicated that the OEB was receptive to any available studies or evidence from other jurisdictions on the approach to IRP being placed on the record through the interrogatory process. The OEB would also be open to the filing of any existing studies or evidence related to IRP for the electricity sector in Ontario through the interrogatory process, with the aim of obtaining any views the responding party may have with respect to those documents.

The OEB provided for written interrogatories on filed evidence on or before January 12, 2021. The OEB also provided for a transcribed, virtual technical conference on February 10-12, 2021 and a transcribed, virtual presentation day on February 19, 2021 for all interested parties to provide information and perspectives relevant to the proceeding. A virtual oral hearing was held March 1-4, 2021.

Enbridge Gas filed its argument-in-chief on March 17, 2021 and Intervenor and OEB staff are required to file final arguments by March 31, 2021. Following that Enbridge was provided an opportunity to file reply argument by April 21, 2021.

On March 7, 2021 Environmental Defense (ED) filed a copy of a letter submitted to Enbridge's legal counsel requesting that Enbridge address all issues up-front in its argument-in-chief rather than wait to address certain issues in reply. No parties objected to the approach proposed by ED in its letter.

C) Purpose of Enbridge Gas's IRP Framework Proposal

In this section Pollution Probe indicates what an effective IRP Framework requires and compares that to the Enbridge proposal. Enbridge's IRP Proposal is not representative of the changes required for the OEB to implement effective gas IRP in Ontario. The OEB indicated that "...it is appropriate to consider IRP for Enbridge Gas on a broader basis than the specific proposal that has been filed. As such, the OEB recognizes that parties may have perspectives on IRP that differ significantly from Enbridge Gas's proposal"¹⁷. Some best practices adjustments were made to the Enbridge IRP Proposal over the course of the proceeding, but much more is required.

Enbridge indicated it requires OEB guidance and direction¹⁸ to move IRP forward and Enbridge would not develop an IRP Framework if it was not directed by the OEB. To date, Enbridge Gas has not used a formal IRP screening tool or prescribed process to evaluate IRP alternatives for facilities projects¹⁹. Enbridge does not have policies, procedure or manual (including sections in other manuals) related to IRP²⁰. Currently no one single department "owns" the assessment/screening process in its entirety. Enbridge 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 through this proceeding²¹. Additionally, Enbridge does not have any metrics related to IRP²². Status quo will not change without a clear and effective IRP Framework and oversight. An OEB IRP Framework is essential to changing the status quo. The IRP Proposal and related 2018 ICF IRP Study²³ included no consultation and was limited in scope and lacking a fulsome review of IRP best practices²⁴. Even local best

¹⁷ EB-2020-0091 Procedural Order No. 7. Page 2.

¹⁸ REVISED Final Transcript For EB-2020-0091 EGI Feb 11 2021, page 137.

¹⁹ EB-2020-0091 Exhibit JT1.16

²⁰ Reference: EB-2020-0091 Exhibit I.PP.1

²¹ EB-2020-0091 Exhibit I.PP.2

²² EB-2020-0091 Exhibit JT2.17

²³ ICF confirmed that there was no RFP and the study was developed through discussion with Enbridge - Final Transcript EB-2020-0091 Enbridge IRPP Vol 3 March 3 2021, Page 166.

²⁴ ICF has conducted two studies, but the titled "IRP Jurisdictional Review Report", filed on October 15, 2020 was the principal study from Enbridge supporting their IRP Proposal.

practices in Ontario²⁵ and Canada²⁶ were not in scope. Starting with an IRP Proposal that included no stakeholder consultation or input²⁷ sets a very poor foundation for the consultation approach that Enbridge has taken without specific OEB direction. During the proceeding Enbridge indicated that it will intend to undertake some sort of stakeholder consultation in the future, but the scope and value of that proposed stakeholder engagement is opaque and does not appear to meet reasonable best practices, including those leveraged by IESO and other utilities for the equivalent IRP assessments on the electricity side.

Based on evidence filed by OEB Staff (Guidehouse Report), Green Energy Coalition/ED (Energy Futures Group report) and multiple documents filed by Pollution Probe, there are clear examples and best practices for IRP that were clearly missed by Enbridge and ICF in the IRP Proposal. The IRP Proposal should be in no way considered adequate to meet the minimum expectations and needs for gas IRP in Ontario or should it be considered based on best practices in Ontario, Canada or North America. That was the concern raised by Pollution Probe in its letter filed November 9, 2020²⁸. Although not an exhaustive consultation, Pollution Probe thanks the OEB for the opportunity provided to file samples of best practices and relevant materials to supplement the record in this proceeding. Pollution Probe also thanks its partners and the stakeholders that helped identify these sample sources.

During this IRP proceeding Enbridge filed multiple additions and changes to its IRP Proposal²⁹ and indicated that details related to many elements will still need to be assessed and developed following the proceeding. Enbridge confirmed that through the changes over the course of this proceeding, the IRP Proposal initially filed no longer represents the Enbridge position³⁰. It has been difficult to follow what Enbridge intends to do if their request was accepted by the OEB and what that would really change against the status quo outcomes. Enbridge has not endorsed IRP to date and will apply IRP in the manner that the OEB directs³¹.

The IRP Framework needs to be responsive to the issues raised by the OEB, consumers, communities and related stakeholders. For any capital investments proposed today, it needs to be viewed in the light of whether it is in the public interest and is the most appropriate energy solution for Ontario consumers and communities over the long-term life of those

²⁵ Example - PollutionProbe_IR_Appendix F-IESO Engagement_20210112 and PollutionProbe_IR_Appendix E-IESO Planning Process_20210112

²⁶ Example - PollutionProbe_IR_Appendix C-BCUC Guidelines_20210112

²⁷ REVISED Final Transcript For EB-2020-0091 EGI Feb 12 2021, page 4-6 indicated that the 2018 ICF Study was the only IRP Proposal consultation. Page 48 confirms that ICF did no consultation as part of the IRP Study.

²⁸ PollutionProbe_Comments_20201109

²⁹ Final Transcript EB-2020-0091 Enbridge IRPP Vol 1 March 1 2021, pages 186-188.

³⁰ REVISED Final Transcript For EB-2020-0091 EGI Feb 11 2021, page 174.

³¹ REVISED Final Transcript For EB-2020-0091 EGI Feb 11 2021, page 166.

assets. If the answer is no, then Ontarians are being undeserved and saddled with long-term costs for sub-optimal assets.

Pollution Probe encourages the OEB not to establish a financial threshold or limits on the need to conduct effective portfolio IRP. The entire portfolio of future projects needs to be assessed together to be effective. Enbridge indicated that there are over two thousand (2,000) projects in the Company's Asset Management Plan ("AMP") totaling over \$6 billion of costs for Ratepayers in the next 5 years alone³². Stripping out all projects below a large project \$10 million threshold as proposed by Enbridge is directly counter to the principles of IRP since it would remove the ability to assess the portfolio as a whole. There are many projects below a \$10 million threshold that can be avoided or improved and the OEB has seen cases where Enbridge has split projects that should have been otherwise assessed together³³. Eliminating a specific threshold removes the opportunity for gaming and optimizes IRP at the portfolio level as it is done by IESO, Fortis, ConED and other utilities and jurisdictions.

Enbridge also recently filed for Leave to Construct approval of the Branchton Relocation Project³⁴ which is below \$10 million. A thorough assessment of that project would not have occurred if there was not an opportunity for stakeholder review of that project. As a result of issues raised in the proceeding, Enbridge reassessed and ultimately withdrew that project avoiding costs to Ratepayers and impacts (including to Provincial Wetlands) that would have occurred otherwise. There are many other projects³⁵ potential in the same situation and the cumulative impacts are enormous. The Branchton Relocation Project alone had the potential to impact billions of dollars of future costs since it could have set a new precedent to justify unnecessary capital replacements.

Pollution Probe recommends that the OEB address IRP in three discrete buckets, more specifically:

1. **Apply/Reinforce existing OEB IRP requirements:** The OEB has previously defined expectations for IRP-related requirements. This includes multiple DSM decisions and also in capital/facility decisions. More recently the EB-2020-0192 Decision stated "Enbridge Gas has an obligation to conduct a more rigorous Integrated Resource Planning assessment at the preliminary stage of projects development"³⁶. To date, many of these OEB decisions have been ignored and it appears that this most recent OEB Decision may also be ignored³⁷. Applying these requirements more thoroughly for all applications now would enhance the foundation

³² JT2.11

³³ EB-2020-0181 Procedural Order No. 3 and subsequent Enbridge withdraw letter dated and filed February 10, 2021

³⁴ EB-2020-0065

³⁵ JT2.11

³⁶ EB-2020-0192 OEB Decision, Page 20

³⁷ The EB-2020-0192 Decision was issued January 28, 2021 and on March 2, 2021 EB-2020-0293 was filed without including an effective IRP assessment as required by the OEB.

for IRP and ignoring them will undermine effective IRP and the changes needed. How the OEB handles each future application will establish whether IRP is successful or not. OEB development of the IRP Framework does not delay or negate any of the past OEB Decisions. Enbridge indicated that there are many projects it intends to bring before the OEB in 2021³⁸ and as noted above has already begun that process. Applying all the OEB requirements in place even before the IRP Framework is issues is complimentary to this proceeding.

2. **Implement an IRP Framework:** The OEB should implement a specific IRP Framework that compliments existing OEB requirement noted above and sets a clear expectation on the annual and project/portfolio planning requirements for Enbridge. The IRP Framework from this proceeding must have core expectations defined that would enable Enbridge to make the necessary changes prior to its 2022 rate application. This would include the updates to its Asset Management Plan (AMP) and Utility System Plan (USP), screening of the capital portfolio and identification of projects with IRPA potential vs. those Enbridge believe do not have IRP potential. Identification of capital projects along the (minimum) 10 year planning horizon would enable the opportunity to assess options before capital project applications are developed and filed.
3. **Continuous Improvement:** Over the longer term the OEB should continue to enhance the IRP Framework, including lessons learned from the proposed pilot projects. There are several IRP elements where Enbridge is not requesting a specific approval and where there is not enough information to make a decision at this time. This includes specific shareholder/capital treatment for ensuring that the right non-pipeline energy solutions are put in place to serve Ontario consumers. It is not practical or recommended to try to develop every possible elements of the IRP Framework now, but there are core elements that will need to be put in place in 2021. By developing an OEB IRP Advisory Group³⁹ similar to the model outlined by Energy Futures Group (Vermont example), the OEB will be well positioned to assess opportunities for enhancing the IRP Framework over time. Formal assessments with broader stakeholder input can be conducted on an occasional, recommended at every other year to start and then transitioning to every five years once a mature Framework is having the desired impact.

Proper IRP analysis and many of the of the IRP alternatives will require no incremental capital investment (e.g. rightsizing of pipeline replacements/relocations rather than assuming like for like). The Waterfront Project is a perfect example⁴⁰. Municipalities across

³⁸ Final Transcript EB-2020-0091 Enbridge IRPP Vol 1 March 1 2021, page 31.

³⁹ Enbridge is not proposing any formal committees related to IRP and that would be better suited for the OEB to administer. Final Transcript EB-2020-0091 Enbridge IRPP Vol 3 March 3, 2021, page 109.

⁴⁰ EB-2020-0198 – project was withdrawn to undertake a better project assessment.

Ontario have invested significant time and resources in energy and emissions plans (or equivalent, often referred to as community energy plans). These plans outline the collective input of their communities and many set a goal of net zero greenhouse gas (GHG) emissions supported by Council resolutions declaring a 'climate emergency'. Incorporating these real and urgent policy considerations should be reinforced in the IRP Framework. Additional assessment will be required to determine the best model to incent Enbridge to promote the capital investment (including private or municipal funds) needed for specific infrastructure (e.g. geothermal). Enbridge already indicated that it has a geothermal program offering advertised through its customer bill inserts and Enbridge Gas website⁴¹. This further illustrates the private business benefits of these programs and that there are non-utility solutions available to be leveraged. IRP needs to be mandated/incented (likely both carrot and stick elements) to ensure that the best solutions are planned for and implemented. Pollution Probe supports in principle that Enbridge should be rewarded for achieving the best outcomes for Ontario consumers and communities, similar to the current DSM Framework. Approaches can be tested during the proposed pilot projects.

Many of the best IRP alternatives already exist and do not require significant capital investment. They do however decrease regulated capital that Enbridge would otherwise plan to build and add to rate base⁴². These solutions include supply side alternatives and demand side alternatives. On the supply side, there are options to decrease pipe size and costs for relocation/replacement projects based on detailed demand and engineering assessments. 'Like for like' replacements are no longer prudent without a detailed grassroots assessment of the peak demand that these projects intend to serve. There are also capital projects in Enbridge's AMP that are simply not required. In the case of the Dawn Parkway project, a detailed reassessment determined that the project was not needed and the \$204 million project application was withdrawn. Ironically, that is the project Enbridge chose to leverage its IRP Proposal in support of. Similarly, the Branchton Relocation Project⁴³ (approximately \$9 million over two years) was withdrawn following a more detailed assessment requested by Pollution Probe during the proceeding.

On the demand side, the obvious opportunity is targeted Demand Side Management (DSM). Currently, Enbridge does not educate energy consumers on DSM programs or energy efficiency options during expansion projects when consumers are actively assessing investments in new energy systems⁴⁴. At least one of the proposed IRP pilot projects should be targeted DSM and should be coordinated with a willing municipal host. An obvious candidate would be the St. Laurent Phase 3 & 4 project that was withdrawn from the recent ICM proceeding after the OEB indicated that a more comprehensive assessment approach should be taken. More options are available and should be selected in 2021. During the

⁴¹ Copy of bill insert and website provided at PollutionProbe_Compendum_20210301

⁴² The OEB does not have a role to maximize capital spending. In fact the role is the opposite, to minimize capital spending required to meet consumer needs.

⁴³ EB-2020-0065

⁴⁴ EB-2019-0188 Exhibit I.PP.4b and c

proceeding Enbridge confirmed that the purpose of IRP is to defer, avoid, or reduce new utility infrastructure where you can do so at a lower cost, utilizing an alternative⁴⁵. If the pilots do not avoid a proposed capital project, they will not have achieved the intended purpose.

Enbridge indicates that “public policy is an important consideration for IRP”⁴⁶ and essentially all stakeholders including Pollution Probe agree. However, the consideration of what relevant public policy is and how it should be considered are significantly at odds with Enbridge’s IRP Proposal and proposed approach. Enbridge has taken a narrow and selective view on application of policy for purposes of IRP and capital projects. Application of this selective view assumes no impact to gas demand and maximizes capital expenditure and revenues. Of course, all utilities and corporations must (and hopefully do) comply with the law. Mandatory legal requirements are not considered an adequate application of policy. Inclusion of policy in decision making extends well beyond just following mandatory legal requirements. As an example, the OEB Environmental Guidelines for Location, Construction and Operation of Hydrocarbon Pipelines in Ontario, 7th Edition, 2016 (“Environmental Guidelines”) requires Enbridge to consider policy beyond mandatory legal requirements. As noted in the Guidehouse Report, while Ontario has established an Environment Plan targeting on reducing GHG emissions by 30% below 2005 levels by 2030, this is an economy-wide approach with no specific direction from the Province for the OEB to require the natural gas utilities to implement GHG reductions targets⁴⁷. Should this kind of municipal, Provincial or federal policy be considered? Of course, it should be. In fact, it was the principal evidence used by Enbridge to justify incremental capital for the Low Carbon Energy Project⁴⁸. There was nothing other than policy⁴⁹ and potential long-term low carbon benefits put forward to support that application and the OEB had the mandate to review and approved that project. There was no legal requirement to do the project and there was no demand or system issue requiring the capital expenditure. Pollution Probe supported that project, but it is ironic that public policy is used selectively.

Relevant policy exists at municipal, provincial and federal levels and it all needs to be considered. Municipalities across Ontario have developed energy and emissions plans that plot out the energy and emissions future for their communities. Ignoring this policy will result in poor investments and stranded assets. It is counter-intelligent and disingenuous to think that Enbridge will reduce its emissions to Net Zero by 2050⁵⁰, but that no other consumer, business or municipality in Ontario will reduce their emissions to Net Zero by 2050. Although Enbridge has not included any reduction in gas demand in its forecast, it agreed that its customers are likely to have similar goals to Enbridge for reducing emissions⁵¹. In fact, many have already begun that transition and reduction in

⁴⁵ Final Transcript EB-2020-0091 Enbridge IRPP Vol 3 March 3 2021, page 85.

⁴⁶ EGI_ARGChief_IRP_20210317, paragraph 26.

⁴⁷ Guidehouse Report, page 8.

⁴⁸ EB-2019-0294

⁴⁹ Including a letter from the municipality since its support their energy and emission goals.

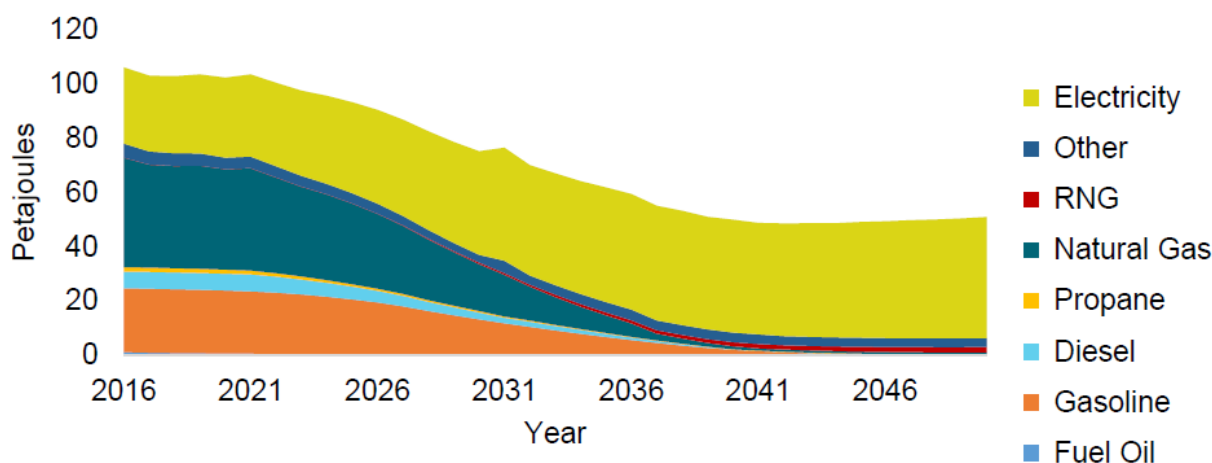
⁵⁰ Final Transcript EB-2020-0091 Enbridge IRPP Vol 2 March 2 2021, page 161.

⁵¹ Final Transcript EB-2020-0091 Enbridge IRPP Vol 2 March 2 2021, page 162.

the use of fossil fuels is the primary activity identified to achieve that goal. Based on recent a survey commissioned by Enbridge, 81% of consumers support shifting to cleaner energy sources and 86% indicate the need to move away from fossil fuels⁵².

As outlined in its testimony, Enbridge also expects Ontario consumers to pay for its stranded assets it builds today even if they are not needed in the future⁵³. The figure below shows the fuel profile for the City of Ottawa and this follows a similar profile found in other municipal plans⁵⁴. It is not be realistic to assume that nothing from these plans will occur. In fact, actions are already occurring. Natural gas demand reductions will be further compounded by the recent municipal resolutions by Ontario municipalities to phase out natural gas electricity generation⁵⁵. It was confirmed by an IRP expert that even a modest amount of switching from natural gas will have a large impact⁵⁶. Enbridge has confirmed that it believes that it is in the public interest to reduce GHG emissions⁵⁷. However, Enbridge still files applications assuming that there will be no decrease in natural gas demand over the next 40 years. More transparency is needed on the assumptions underpinning application demand assumptions and potentially a third party review of the Enbridge demand model.

Figure 2: Sample Municipal Energy & Emission Plan Profile⁵⁸



⁵² EB-2020-0066, Exhibit I.EP.15, Attachment 1

⁵³ Final Transcript EB-2020-0091 Enbridge IRPP Vol 3 March 3 2021, pages 36-37 and EB-2020-0091 Exhibit J2.8

⁵⁴ For illustrative purposes the City of Toronto curve is included in PollutionProbe_IR_Appendix A-Toronto Plan_20210112.

⁵⁵ Example - [Toronto City Council Calls for Ontario Gas Phaseout - The Energy Mix](#)

⁵⁶ Final Transcript EB-2020-0091 Enbridge IRPP Vol 4 March 4 2021, page 100.

⁵⁷ EB-2020-0066 Exhibit I.SEC.4

⁵⁸ City of Ottawa Energy Evolution Report, Figure 23. Filed as PollutionProbe_IR_Appendix B-Ottawa Plan_20210112.

D) Learnings from Other Jurisdictions

There is a long and deep foundation of information, materials and best practices to draw from related to IRP and even specifically gas IRP. In fact, through the education of Enbridge during this process, Enbridge has started to consider leveraging some of the best practice information, including some of the regional planning and consultation approach used by IESO in Ontario. It is critically important not to cherry-pick portions of best practices without consideration of the broader application. For example, the quarterly regional outreach done by IESO is only just one portion of its process and that alone would not achieve the desired outcomes for IRP. That is one of the reasons that IESO developed its Engagement Principles⁵⁹ that apply to the full range of input and consultation activities it conducts. Enbridge would need to include the local planning consultation done by utilities specific with municipalities in order to achieve an apples-to-apples best practice approach. Being granted monopoly rights to serve each municipality comes with a requirement to consult effectively with each municipality. Enbridge has also suggested that it may develop a utility BCA Handbook, similar to that already done by gas utilities such as ConED⁶⁰. Any suggestion that there is not suitable materials and best practice to draw from is simply not correct. ICF clarified that the scope of their report was limited, but based on their experience there are lots of examples and best practices to draw from⁶¹.

Given the importance of effective IRP inside and outside Ontario, the range of references continues to grow, providing a rich opportunity for the OEB to enhance the IRP Framework over time. Enbridge has suggested potential differences between gas and electric IRP, but there are more synergies than differences that can be leveraged between these approaches [Guidehouse recommendation for alignment & synergies]. As mentioned above, Enbridge has already started to embrace some of the electric IRP best practices (IESO Regional Planning Sessions and Enbridge has also started attending the OEB RPPAG sessions to expand their understanding of opportunities) and they should be leveraged to the maximum extent. Enbridge suggests that no jurisdiction has implemented an overall gas IRP framework and that none of the experts in this case have pointed to an example of a regulator-approved gas IRP framework that is similar in scope or content to what Enbridge Gas is proposing in this proceeding⁶². No two utilities or jurisdictions are ever exactly same. That was also the situation when the OEB assessed DSM best practices from jurisdictions like California⁶³. It would be surprising if other utilities or jurisdiction had an approved IRP approach that was equivalent to what is being proposed by Enbridge. Research and evidence provided on jurisdictions in this proceeding have just scratched the surface on what is being done in other jurisdictions. Based on the benchmarks cover in this

⁵⁹ PollutionProbe_IR_Appendix F-IESO Engagement_20210112

⁶⁰ See PollutionProbe_IR_Appendix D-ConED Interim BCA Handbook_20210112

⁶¹ Final Transcript EB-2020-0091 Enbridge IRPP Vol 3 March 3 2021, pages 170-171.

⁶² EGI_ARGChief_IRP_20210317. Page 11

⁶³ EBO 169 and DSM evolution in the 1990's provides a similar parallel for changes the OEB is facing for gas IRP today.

proceeding and leveraging more widely used tools such as the NSPM, adoption of an IRP approach like the one Enbridge is suggesting need significant enhancements to represent best practice.

Enbridge filed two reports from ICF Canada. The first report, titled “Natural Gas Integrated Resource Planning: Initial Assessment of the Potential to Employ Targeted DSM to Influence Future Natural Gas Infrastructure Investment”, was prepared in 2018 to be part of the filings of Enbridge Gas Distribution Inc. (EGD) and Union Gas Limited (Union) for the 2015-2020 DSM Plan process. The second report, titled “IRP Jurisdictional Review Report”, was filed on October 15, 2020. The 2018 IRP Report was developed in collaboration with Enbridge without a scope of work which seriously impacted the breadth and quality of information it could have provided on gas and electric IRP. ICF clarified the record for the OEB when it responded to questions and confirmed that there are over a dozen⁶⁴ utilities or jurisdictions that could have been looked at for IRP best practices, just based on the knowledge of the staff on the ICF panel.

In November 2020, OEB Staff filed evidence from Guidehouse Canada titled “Natural Gas Integrated Resource Planning in New York State and Ontario”. The Guidehouse Report sets out information about IRP practices in New York State, and compares those practices to the Enbridge Gas IRP Proposal. The Guidehouse Report describes Industry Best Practices for IRP as well as recommendations for the OEB to consider in reviewing Enbridge Gas’s IRP Proposal and evaluating opportunities to implement natural gas IRP in Ontario.

Guidehouse identified several best practices and key characteristics that should be considered for gas IRP. Pollution Probe has underlined a few key elements that it believes are important for the IRP Framework.

- Developing Benefit Cost Analysis (BCA) procedures that evaluate infrastructure, supply-side, and demand-side solutions with a similar set of assumptions and recognize the risks associated with traditional vs. emerging options can allow for a more transparent IRP process.
- Deploying a diversity of IRP solutions is important to reduce risks in achieving the project goals. Smaller IRP projects may be able to achieve goals in a shorter timeline by expanding existing energy efficiency (EE) or DR programs, whereas larger IRP projects may be best suited for market solicitations and new program developments that have longer timelines.
- Evaluation, Measurement and Verification (EM&V) of IRP initiatives is critical both to confirm demand reduction as well as to ensure customer compliance with program goals and requirements.
- New York State utilities have found the operational processes, program design, benefit-cost analyses, and other parameters for the Gas IRP solutions can be similar

⁶⁴ Final Transcript EB-2020-0091 Enbridge IRPP Vol 3 March 3 2021, pages 170-171.

to existing gas energy efficiency programs or electric Non-Wires Alternative (NWA) programs⁶⁵. The NWA pilots have suggested significant investment in organizational resources (e.g., dedicated time for cross-functional managers and experts, IT system development, internal training updates) is needed upfront to develop the necessary internal processes and operationalize the programs, but that can be useful across both gas and electric IRP solutions.

- Gas utilities recognize that core planning processes including gas supply and transportation planning, infrastructure maintenance and expansion planning, energy efficiency / demand-side management planning, and IRP planning are interconnected and interdependent. For this reason, gas utilities are seeking to identify how to integrate these processes and sequence the activities to ensure that each planning process properly captures the output of adjacent processes. Having regular discussion with regulator and stakeholder groups around the needs for capacity additions, IRP solutions, and program design plans can reduce uncertainty and facilitate success.
- Regulators need to design the proper incentives for utilities to pursue IRP solutions, including cost-recovery and sharing risk amongst stakeholders similar to a traditional infrastructure investment. Earnings Adjustment Mechanisms (EAMs) have been successful in New York State in aligning the goals of the utilities, regulators, and key stakeholders, although their long-term effectiveness is still uncertain.

Guidehouse also had several unique recommendations, including:

- The OEB should work to establish a common understanding amongst stakeholders for the gas IRP process and how benefits, costs, risks, and other parameters will be shared by shareholders, ratepayers, and other parties.
- Should the OEB and the Independent Electricity System Operator (IESO) consider developing a specific electric Non-Wires Alternative (NWA) framework in the future, the OEB should consider aligning Gas IRP and Electricity IRP frameworks to share the cost and resource investments to develop operational processes, program design, benefit-cost analyses, and other aspects of either IRP proceeding⁶⁶.

Pollution Probe chose not to commission a formal consultant study of IRP best practices because it could be duplicative with the evidence Enbridge was preparing, the ICF Report, the Guidehouse Report or the Energy Futures Report. However, it was identified that there is much more material available to help guide the OEB than what was available on the record in this case and Pollution Probe undertook an effort to find and share relevant best practices and materials. The material filed are listed below and if Pollution Probe had access to more resources it is highly likely that additional materials would have been sources. In the end, the materials available should provide a sufficient basis for informing

⁶⁵ In alignment with Energy Future Group's recommendation to leverage the NSPM and TRC+ test.

⁶⁶⁶⁶ Promotes leveraging IESO best practices and alignment over time to the extend practical.

the IRP Framework. Additional materials can be leveraged during the continuous improvement process and Pollution Probe is committed to supporting that process should the OEB see value.

- PollutionProbe_IR_Appendix A-Toronto Plan_20210112
- PollutionProbe_IR_Appendix B-Ottawa Plan_20210112
- PollutionProbe_IR_Appendix C-BCUC Guidelines_20210112
- PollutionProbe_IR_Appendix D-ConEd Interim BCA Handbook_20210112
- PollutionProbe_IR_Appendix E-IESO Planning Process_20210112
- PollutionProbe_IR_Appendix F-IESO Engagement_20210112
- PollutionProbe_IR_Appendix G-Ontario Environment Plan_20210112
- PollutionProbe_IR_Appendix H-Ontario MEP Guidelines_20210112

In November 2020, Green Energy Coalition (GEC) and Environmental Defence (ED) filed evidence from Chris Neme of Energy Futures Group (EFG) titled “Best Practices for Gas IRP and Consideration of “Non-Pipe” Alternatives to Traditional Infrastructure Investments”. In Pollution Probe’s view the expertise brought by Energy Futures Group and Mr. Neme was the most broad and helpful for development of the IRP Framework. Mr. Neme was deemed an expert on IRP and was able to provide information and suggestions that will help enhance the IRP Framework. GEC and ED will be recapping the material from Mr. Neme, so Pollution Probe has not replicated that here.

E) Approvals Sought by Enbridge Gas for the IRP Framework

For very good reasons, EB-2020-0091 is not a typical proceeding and aligns more closely with the generic reviews done by the OEB for EBO 169 and EBO 188. The OEB carried over Enbridge’s IRP Proposal from EB-2019-0159 to this proceeding and expanded the scope to ensure a more effective review of issues required to develop an IRP Framework. In Procedural Order No. 2 the OEB confirmed that “Although this proceeding began as an application by Enbridge Gas, the OEB has determined that it is appropriate to consider IRP for Enbridge Gas on a broader basis than the specific proposal that has been filed. In addition, certain matters may have broader relevance to the Ontario natural gas sector beyond Enbridge Gas”⁶⁷. Furthermore, in Procedural Order No. 7 the OEB re-confirmed that “...it is appropriate to consider IRP for Enbridge Gas on a broader basis than the specific proposal that has been filed. As such, the OEB recognizes that parties may have perspectives on IRP that differ significantly from Enbridge Gas’s proposal”⁶⁸.

The IRP Framework by its very nature needs to be more detailed and prescriptive than the approvals sought by Enbridge in order to achieve a minimum level of effectiveness. A summary of what Pollution Probe suggest are minimum requirements are included in the

⁶⁷ EB-2020-0091 Procedural Order No. 2. Page 5.

⁶⁸ EB-2020-0091 Procedural Order No. 7. Page 2.

Appendix. For example, the minimum level of stakeholder and consultation related to IRP has not been clearly defined in the Enbridge IRP Proposal and Enbridge is waiting for OEB direction before it takes any steps to enhance its processes. To-date, no stakeholdering (other than that provided by the OEB in this proceeding) has been conducted by Enbridge on its IRP Proposal. Enbridge has refused to include relevant stakeholders⁶⁹ (e.g. municipalities or Clean Air Partnership) on its stakeholder list to ensure that they have input into project alternatives that impact their communities. Impacted stakeholders have reached out to Pollution Probe for help and we have done our best job possible to include their concerns and feedback into this submission. Enbridge indicates elements that it is considering to do after the OEB determines the IRP Framework, but these elements are opaque and have no specific timing. A firm foundation will only come from inclusion of minimum requirements in the IRP Framework. Enbridge is always able to exceed those minimum requirements and in Pollution Probe's view should have undertaken many of these actions several years ago like IESO and others have done.

The IRP Framework will continue to be enhanced in Ontario and it is not practical or necessary to address all of the issues raised by Enbridge at this time. In fact, it is more beneficial for the OEB to reserve judgement on elements not required within the next few years so that learnings from the IRP Framework can help inform the best direction for those issues.

i) Guiding Principles

Enbridge's IRP Proposal was informed by four Guiding Principles (Reliability and Safety, Cost Effectiveness, Public Policy and Optimized Scoping) and additional criteria was added throughout the proceeding to narrow the scope of projects. Over the course of the proceeding additional criteria were added by Enbridge⁷⁰ that would potentially restrict the scope and value of the IRP Framework. There are several significant issues related to the application of binary criteria to scope projects out of IRP and these are further compounded by the specific criteria that Enbridge is proposing. A summary of these issues is included below.

- The proposed Enbridge criteria are binary and only scope projects out, rather than assessing opportunities from a portfolio perspective;
- Proposed Enbridge criteria are not objective, transparent and replicable. These would need to be common criteria used in assessment to ensure that the results are defensible;
- Proposed Enbridge criteria are opaque, subjective and will result in a different outcome depending on who applies them. Even Enbridge is not clear on what the criteria mean or how they will be applied;
- The criteria will be interpreted only by Enbridge without any consultation or objective oversight and Enbridge indicated that its departments, processes, policies (i.e. culture) is not currently aligned with making effective IRP decisions;

⁶⁹ REVISED Final Transcript For EB-2020-0091 EGI Feb 11 2021. Page 183.

⁷⁰ Final Transcript EB-2020-0091 Enbridge IRPP Vol 1 March 1 2021, pages 186-187.

- The proposed Enbridge criteria will screen out most or all of the opportunities to apply the IRP Framework. Many criteria on their own (e.g. safety or \$10 million threshold) will remove most of the projects and combined will remove essentially relevant projects.
- Reliability and Safety is not a guiding principle specific to IRP, it is just an overarching lens applied to everything Enbridge needs to do. For example, Reliability and Safety are an integral part of the Enbridge Integrity Program and it is redundant to include that as an IRP guiding principle. There are also no clear standards to apply these principles. For example, the London Line Replacement Project⁷¹ was a safety project from the perspective of Enbridge and Enbridge confirmed it would be screened out under their IRP Proposal⁷², but the OEB clearly indicated that IRP principles should have been applied more thoroughly on that project. There is an inherent conflict between the criteria Enbridge has proposed and what the OEB has stated should happen in its decisions.

Based on Enbridge's current criteria, it is possible that 100% of projects could be scoped out of consideration for IRP. As discussed earlier in this submission, Enbridge proposed that even the largest of projects (Dawn Parkway Project) would be exempt from any form of IRP consideration. In reality, most projects will be scoped out using the criteria proposed by Enbridge, leaving only a very small selective list of potential projects. Taking this siloed approach reinforces the status quo for capital planning and will not meet the intent or objectives of effective IRP. The binary criteria proposed will only support the status quo. In contrast, there is no need for the OEB to place restrictions on the effectiveness through subjective application of any criteria. The Framework simply needs to place the responsibility on the utility to apply the IRP Framework to its entire portfolio.

It is recommended that the Guiding Principles and binary criteria be dismissed by the OEB at this time. To the extent that practical experience with IRP identifies the need for a more logical set of principles or criteria, they can be revisited at that time. To draw a parallel to the OEB's Report of the Board: Framework for the Assessment of Distributor Gas Supply Plans (Gas Supply Framework)⁷³, there was no need for Guiding Principles to advance the Gas Supply Framework. The recommendations were based on the three foundational objectives, identified through the consultations, of increased accountability, transparency and performance measurement. Pollution Probe would suggest that those objectives would also apply to effective IRP.

ii) IRP Proposal Elements

As outlined above, Pollution Probe suggests that Enbridge's IRP Framework is inadequate to enable a minimal required level of effective IRP. However, Pollution Probe provides additional comments below to provide further context to the challenges with the elements proposed by Enbridge.

⁷¹ EB-2020-0192

⁷² Final Transcript EB-2020-0091 Enbridge IRPP Vol 1 March 1 2021, page 39.

⁷³ EB-2017-0129

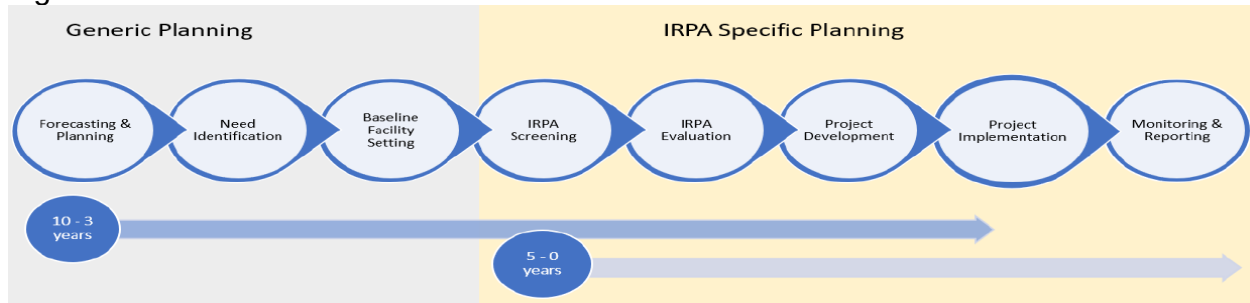
a) Types of Available IRPAs

There is no need to define a specific set of IRPAs as long as all relevant options are considered. Options will vary by situation and project. Example can be listed as illustrative by the OEB such as targeted DSM, supply side alternatives, renewable energy options, etc.

b) IRP Assessment Process

In general, the overview provided by Enbridge in Figure 3 below could be leveraged to start with. Adjustments may be required if the approach does not achieve the expected outcomes. Details within each element will need to be more transparent and should be covered in detail in the Annual IRP Report filed by Enbridge⁷⁴. It is expected that there will be a long list of gaps and areas for improvement identified at the start and a comprehensive list with timelines for mitigation should also be included in each Annual IRP Report.

Figure 3: IRP Timeline⁷⁵



1. Identification of Constraints: The diagram above does not specifically require a system constraint to be identified. Originally Enbridge had proposed that IRP would only be applied to system constraint projects, but during the proceeding Enbridge recognized that IRP would need to be applied to other types of projects including Relocation and Expansion projects⁷⁶. Any process of criteria that limits IRP to only areas of system constrain should be removed since that is only one type of opportunity to apply an IRP alternative. The figure above is more appropriate than the new diagram included in the Enbridge Argument-in-Chief⁷⁷.
2. Binary Screening Criteria: As outlined above, it is recommended that Binary Screening Criteria not be adopted. Application of any one or more of these criteria will dilute the scope and value of IRP⁷⁸. Application of all criteria cumulatively would guarantee that little to no projects end up considered for IRP, defeating the purpose of an IRP Framework.

⁷⁴ Could be combined with the AMP in time, but there is value in have a separate report to start with to ensure all relevant issues are addressed, including a plan for improvement.

⁷⁵ Exhibit B Figure 2.1

⁷⁶ nal Transcript EB-2020-0091 Enbridge IRPP Vol 1 March 1 2021, page 11.

⁷⁷ EGI_ARGChief_IRP_20210317. Figure 1, page 17.

⁷⁸ nal Transcript EB-2020-0091 Enbridge IRPP Vol 1 March 1 2021, page 193.

3. Two-Stage Evaluation Process: As outlined above, it is recommended that Two-Stage Evaluation Process not be adopted. Application of this subjective process would lead to the same issues identified for the binary criteria. The TRC+ test is recommended as the screening to be used for IRP purposes. It can be easily and effectively applied at the portfolio or project (e.g. LtC) level. It is also well known to the OEB and stakeholders. The TRC+ test is a proxy for the Societal Costs Test (SCT) adopted by the OEB in EBO 169. If the OEB adopts the SCT and uses the TRC+ test as the current proxy, there will be alignment. The TRC+ is a best test for IRP analysis purposes⁷⁹ and aligns with best practice guidance⁸⁰. The DCF and DCF+ tests are not appropriate for broad IRP portfolio assessment or for a range of distribution and transmission projects. The proposed DCF+ test is confusing and does not follow the sequence used by the DCF test in recent OEB proceedings⁸¹. Furthermore, the DCF+ test suggested by Enbridge is based on the DCF assessment from EBO 134 which was not meant to be used for purposes of IRP assessment. EBO 134 was confirmed by Enbridge to apply only to proposed 'transmission' projects and EBO 188 to only apply to its 'distribution' projects⁸², which means that a DCF Test based on EBO 134 was not designed to be applicable to the vast majority of projects in the Enbridge IRP. Very few, if any of the 6000+ projects in the Enbridge AMP/USP are classified as 'transmission' projects. Of course, the tests under EBO 188 and EBO 134 will continue to apply for the purposes they were designed for, but are not appropriate for IRP analysis.
4. Periodic Review: Although IRP is not new for gas utilities in other jurisdictions (e.g. New York or British Columbia) or for Ontario electricity (i.e. IESO), it is new for Enbridge. Enbridge appears to be struggling to effectively evaluate planning options and implement established IRP solutions such as DSM as an alternative to increased capital project proposals⁸³. Significant enhancements on training, processes, policy and culture are urgently needed and have not happened without OEB direction. During the next 5 years regular review and improvements will be required to ensure that the IRP outcomes are being achieved. This will require formal IRP review, as well as review and reinforcement during annual rate case and facility proceedings. If there is no credible attempt to apply the IRP Framework (and related previous OEB Decisions), the OEB will have to reassess options. The OEB should expect to revisit the IRP Framework on a bi-annual basis for approximately the first 5 years while the bugs are worked out. Each subsequent review should be more focused and less intensive if Enbridge is making progress over that period.
5. At this point it is recommended that Enbridge file an Annual IRP Report outlining how IRP has been integrated into its planning process, AMP and USP development.

⁷⁹ GEC-ED_Presentation_2021-02-19 corrected. Slides 13-16.

⁸⁰ Widely accepted National Standard Practice Manual

⁸¹ Each stage of DCF only includes a portion of benefit and cost assessment and has not been applied with all stages at once. Example includes EB-2019-0159 EGI_APPL_updates_v2_20200131 Exhibit A, Tab 2, Schedules 2-6 (different schedule per DCF stage test and not done in an integrated manner)

⁸² Final Transcript EB-2020-0091 Enbridge IRPP Vol 3 March 3 2021, page 91.

⁸³ One recent example is outlined in the EB-2020-0192 Decision.

It is recommended that the OEB develop an IRP Advisory Group to provide regular review and input similar to the model outline by Energy Future Group for Vermont. This will enable the OEB to assess and improve application of the IRP Framework at a high level. In addition, it is recommended that Enbridge implement an IRP Consultative with interested stakeholders to provide quarterly consultation and input as Enbridge assesses its portfolio at a more granular and regular basis. This could help reduce some of the project issues identified earlier in this document.

c) Stakeholder Outreach and Engagement Process

The limited stakeholdering approach proposed by Enbridge will not meet the needs of effective IRP or the relevant stakeholders across the Enbridge service areas. A more robust, open and transparent model is required.

Many of the issues in facility or ICM applications could have been avoided if there was more transparency and better stakeholder consultation conducted prior to filing those applications⁸⁴. The proposed stakeholder outreach and engagement process Enbridge proposes for IRP is not much different than the approach it currently uses. That approach does not work and recent examples have proven that. Municipalities and other stakeholders have indicated that they not being consulted in a meaningful manner, including on specific projects that directly link to their energy and emissions plans. Market participants were not consulted on the IRP Proposal and due to the OEB public hearing process, many of those stakeholders have begun to have input into the process⁸⁵.

The mandatory level of stakeholder outreach and engagement needs to be significantly greater and more transparent than status quo. Enbridge's suggestion that all sessions are open to whoever wants to show up does nothing to ensure that stakeholders are aware of those sessions or informed of them in advance⁸⁶. Below are recommendations on elements that should be included as a minimum level required for Enbridge.

- Adoption of the best practice IESO Engagement Principles⁸⁷ (at least until the OEB IRP Advisory Group can recommend any adjustments)
- Stakeholder session on draft annual AMP/USP prior to filing.
- IRP Consultative to meet a minimum of quarterly
- Website to post information related to IRP and ability for real time stakeholder comments or feedback

⁸⁴ Just in the last 12 months, lack of consultation led to important elements being missed prior to filing and ultimately application withdrawals for EB-202-0198, EB-2020-0065 and EB-2019-0159.

⁸⁵ Example - OGA_Ltr of Comment_EGI IRP_20210304

⁸⁶ REVISED Final Transcript For EB-2020-0091 EGI Feb 11 2021. Page 183.

⁸⁷ PollutionProbe_IR_Appendix F-IESO Engagement_20210112. Confirmed by all expert witness panels as representing best practice.

- Posting of the stakeholder list, presentations and minutes of completed consultations on the IRP website⁸⁸
- Posting of all upcoming consultation events and ability for stakeholders to be added to the stakeholder list and notified of upcoming events⁸⁹
- Annual Regional Consultation (based on IESO best practices and acknowledged by Enbridge)

d) IRPA Cost Recovery and Accounting Treatment Fundamentals

Approval of 'like-for-like' treatment of IRP alternatives is not required at this time and no projects or related costs are included in the scope of this proceeding. It is unclear how the proposed incentive would work and more assessment is required. There is also a significant lack of clarity in how any incremental costs would be tracked or cleared⁹⁰. Perhaps this is an area to assess during the pilot projects to provide some additional clarity. It would be best to assess alternatives and treatment using real examples. Enbridge indicated that where there is a market provider that can provide the capital, Enbridge would just be incented rather than capitalizing the full amount. This approach could be most cost effective for all parties.

e) Future IRP Plan Applications

Requiring an Annual IRP Report would provide visibility on what options are being assessed. When a specific IRP alternative is proposed, the specific details of the project should be provided at that time. Applying generic rules across all project options is not practical and not in alignment with current LtC or rate case practice.

f) Monitoring and Reporting

The Enbridge Annual IRP Report should provide a firm foundation for the direction of IRP assessment and the outcomes achieved, including specific scorecard⁹¹ results. Pollution Probe recommends that the OEB mandate a scorecard to track success and outcomes related to the IRP Framework. For the Gas Supply Framework, the OEB's considerations are⁹²:

- A focus on strategy and results, not activities.
- Demonstration that distributors consider opportunities for continuous improvement in their planning.

⁸⁸ This aligns with IESO best practices -

⁸⁹ Enbridge has refused to include stakeholders (e.g. municipalities or Clean Air Partnership) on a stakeholder list to ensure that they have input into project alternatives. Reference: REVISED Final Transcript For EB-2020-0091 EGI Feb 11 2021. Page 183.

⁹⁰ Final Transcript EB-2020-0091 Enbridge IRPP Vol 1 March 1 2021, page 197-198.

⁹¹ Enbridge has agreed that metrics for tracking make sense, but has not proposed any of its own metrics for a scorecard - Final Transcript EB-2020-0091 Enbridge IRPP Vol 3 March 3 2021, page 51.

⁹² EB-2017-0129

- Demonstration of value to customers.
- Performance metrics that will accurately measure whether the plans are cost-effective and reliable and support public policy.

Enbridge has no planning metrics related to IRP⁹³. Pollution Probe recommends that the OEB set an initial minimal set of scorecard metrics (see Appendix for recommendations) and indicate that Enbridge should add additional metrics in consultation with stakeholders. The OEB IRP Advisory Group could also be leveraged if Enbridge struggles with identifying additional meaningful metrics.

iii) IRP Costs Deferral Account

A Cost Deferral Account could be established, but the rule associated with clearance of the account would need to be further defined. IRP costs follow a similar profile to those of the annual AMP. They are not tracked⁹⁴ by Enbridge and are incurred by resources in each department like the AMP. These costs are already paid by Ratepayers in the annual capital and O&M costs approved to fund these overhead departments. If there are truly incremental costs related to IRP alternatives that provide a net benefit (TRC+) to Ontario consumers, then those costs are likely warranted as an alternative to the capital project that would have occurred.

iv) IRP Pilot Project Proposal

There is general agreement that two pilot projects should be developed by January 2022. Initial development of these pilots can begin immediately and are not dependent on the final details of the IRP Framework. One of the pilots should be specific to targeted DSM to avoid a pending capital project. After 30 years of DSM experience, that should be an easy pilot to establish. The second pilot should be related to an IRP alternative technology (i.e. renewable energy like geothermal). Initial pilot consideration should be shared through the IRP consultative to provide real time feedback. All pilots should align with a willing municipality and align with their emissions reduction goals. They could potentially be done through an RFP process in partnership with the Clean Air Council or AMO. Pollution Probe is already aware of municipalities that would be interested in participating. Pilot recommendations should be reviewed by the OEB IRP Advisory Group prior to application to the OEB for approval.

⁹³ EB-2020-0091 Exhibit JT2.17

⁹⁴ Final Transcript For EB-2020-0091 EGI Feb 10 2021, page 166.

v) AMI Acknowledgement

Metering is deemed as capital that is out of scope for AMP capital purposes⁹⁵. Enbridge confirmed that it would not look at metering capital in the AMP when assessing trade-offs for IRP options. Automated Metering Infrastructure (AMI) is already allowed and recovered through the annual rate case capital process and no OEB direction is required in the IRP Framework related to AMI. Enbridge has not undertaken or been able to reference any studies that show the economic benefit of AMI at this time⁹⁶.

Premise metering is less relevant than district metering for IRP purposes and a more detailed plan is required. Enbridge is able to come forward with a specific AMI proposal at any time (ideally as part of its annual rate case). Any generic endorsement of AMI by the OEB as part of IRP could be interpreted as permission for incremental capital expenditures that are not within scope for this proceeding.

F) Next Steps After Issuance of IRP Framework

Pollution Probe agrees that Enbridge should immediately undertake integrating the IRP Framework elements into the Company's existing asset planning process and other related forecast and planning processes. Integration will need to be even broader to be effective. Implementation of policy changes will help ensure that all departments and staff follow the principles in the IRP Framework, plus the other OEB decisions requiring improved planning and assessment.

Enbridge Gas should also engage with stakeholders, even in advance of the first AMP showing IRP analyses, in order to discuss and formulate appropriate IRP Pilot Projects. Technical working groups could be leveraged, but a broader IRP Consultative should be formed in ASAP to provide input and analysis into pilot options.

⁹⁵ Final Transcript EB-2020-0091 Enbridge IRPP Vol 1 March 1 2021, page 15.

⁹⁶ Final Transcript EB-2020-0091 Enbridge IRPP Vol 3 March 3 2021 - Day 3, page 17.

APPENDIX - OEB Issues List, and Pollution Probe position on each issue

	Issue	Summary of Pollution Probe Position
1	What is Integrated Resource Planning (IRP) and what should the comprehensive goals of IRP be?	IRP is a logical systematic approach for assessing short, medium and long-term project and portfolio decisions in order to optimize desired outcomes for consumers and other stakeholders. The outcomes will depend on the test and policies applied and in the case of the Societal Cost Test or TRC+ test, the perspective is a broad inclusion of benefits and costs from a wholistic consumer (i.e. society) perspective. During the proceeding Enbridge confirmed that the purpose of IRP is to defer, avoid, or reduce new utility infrastructure where you can do so at a lower cost, utilizing an alternative⁹⁷. For gas IRP, it is not necessary to define a specific definition as long as the outcomes are defined and the approach for assessing decision making. For Ontario gas IRP, the goals should be to optimize long-term consumer and community outcomes based on benefits using the TRC+ test as a proxy for the Societal Costs Test.
2	What is the appropriate process and approach for incorporating IRP into Enbridge Gas's system planning process, including scope, timing, stakeholder consultation, approval process and evaluation?	Additional details are included in the submission above. It is appropriate to incorporate effective IRP into Enbridge's regulatory requirements using the following stages. 1. Reinforce existing OEB IRP requirements - immediately 2. Implement an IRP Framework – in 2021 with EB-2020-0091 Decision 3. Continuous Improvement – ongoing via tools, governance and approaches outlined Stakeholder Consultation requirements should include: • Adoption of the best practice IESO Engagement Principles⁹⁸ (at least until the OEB IRP Advisory Group can recommend any adjustments) • Stakeholder session on draft annual AMP/USP prior to filing. • IRP Consultative to meet a minimum of quarterly • Website to post information related to IRP and ability for real time stakeholder comments • Posting of the stakeholder list, presentations and minutes of completed consultations on the IRP website⁹⁹ • Posting of all upcoming consultation event and ability for stakeholders to be added to the stakeholder list and notified of upcoming events¹⁰⁰ • Annual Regional Consultation (based on IESO best practices) An OEB IRP Advisory Group will provide evaluation review and recommendations on a regular basis to the OEB. Enbridge should hold quarterly IRP Consultative meetings focused on details planning related to project planning options, development of the Annual IRP Report and development of the Annual AMP/USP.

⁹⁷ Final Transcript EB-2020-0091 Enbridge IRPP Vol 3 March 3 2021, page 85.

⁹⁸ PollutionProbe_IR_Appendix F-IESO Engagement_20210112. Confirmed by all expert witness panels as representing best practice.

⁹⁹ This aligns with IESO best practices - [Monthly Engagement Update Posted \(ieso.ca\)](#)

¹⁰⁰ Enbridge has refused to include stakeholders (e.g. municipalities or Clean Air Partnership) on a stakeholder list to ensure that they have input into project alternatives.

	Issue	Summary of Pollution Probe Position
3	What, if any, OEB approvals are required under the IRP Framework, including for IRP Plans?	- Effective IRP requires OEB rules and direction in the form of an IRP Framework and related decisions, updated based on best practice continuous improvement. - Annual IRP Reports will be filed and reviewed, ideally in the annual rate case with the 10 year AMP/USP¹⁰¹. - Additional OEB applications for specific project or regulatory approvals should apply current and future IRP expectations. - For the first 5 years, the OEB should update the IRP Framework on a bi-annual basis. - If the OEB IRP Advisory Group identifies issues that can't wait for the bi-annual process, the OEB can undertake interim action to mitigate urgent issues.
4	Will the IRP Framework necessitate consequential changes to any other OEB policies, rules, or guidelines? If so, which policies, rules, or guidelines might be affected, and how should these changes be addressed?	- Due to the integrated nature of the issues, application of IRP principles should be reinforced throughout all relevant proceedings. - Following release of the IRP Framework the OEB should review other OEB policies, rules, or guidelines for impacts. Stakeholder consultation would assist in that process. - The OEB should initiate a consultation to review the OEB Environmental Guidelines and incorporate required reference for IRP related issues. - EBO 134 and EBO 188 remain in place and are decades old and should be reviewed together to identify areas for alignment. There has been a number of other decisions in the past 30 years that also impacts application of EBO 134 and EBO 188.
5	What are industry best practices for IRP, and how are they applicable to the Ontario context?	Many industry best practices have been identified from gas IRP and electricity IRP, in Ontario, Canada and North America. Best practices will continue to evolve and the OEB IRP Advisory Group will help ensure that the OEB remains informed as opportunities for continuous improvement are identified. Best practices are outlined in this submission including, - Consultation best practices are included in issue 2 above. - The National Standard Practice Manual and application of the SCT/TRC+ test for assessing IRP options. - Required policies, processes and scorecards.
6	What screening criteria and methodology should be adopted to evaluate and compare IRP Alternatives (IRPAs) with one another and with facility projects?	- In alignment with expert testimony and the National Standard Practice Manual, the SCT/TRC+ test is best practice to assess project and portfolio options, including economic and policy consideration. - The OEB should set the SCT as the foundational test and use the TRC+ test as the current proxy. This aligns with DSM and enables assessment options from a holistic perspective. - OEB requirements that were developed for other purposes (e.g. EBO 188/134) remain in place for the specific project types that they apply to. - It is not recommended that the OEB adopt screening criteria or the binary decision process. This would negate the benefits of IRP, particularly in the early stages of implementation.
7	What is the appropriate approach to the recovery of the costs resulting from an approved IRP	- Planning costs (i.e. related to development of AMP, USP or IRP) are not tracked by Enbridge. Project costs will need to be tracked once Enbridge proposes specific projects or pilots. - The OEB is not required to make a determination at this time.

¹⁰¹ Final Transcript EB-2020-0091 Enbridge IRPP Vol 3 March 3 2021, page 19.

	Issue	Summary of Pollution Probe Position
	Plan and the costs for additional investments to support IRP?	- It will be more appropriate to determine the approach based on specific proposals from Enbridge. - IRP costs, similar to portfolio costs for developing the AMP/USP are not tracked and are covered by the departments that provide those overhead services. - For specific IRP alternatives, the costs and treatment can be assessed once details are available in the application. Costs may vary by type of IRPA and it is not practical to assess how all options should; be treated at this time.
8	Who should bear the risk of an IRP Plan that does not accomplish its planned expectations and should there be consequences for not achieving planned expectations?	- The utility (i.e. Enbridge) carries the risk that it will not receive OEB approval for project recovery if it is not conducted in a prudent manner. It also carries the responsibility to do an IRP assessment. - Ontario consumers carry a portion of the risk if the OEB approves Enbridge costs for rate recovery. - Enbridge should mitigate risks for market solutions through ensuring that the right protections are included in the RFPs and contract documents. - Stranded assets are to be removed from rate base.
9	What incentives are appropriate to ensure effective IRP outcomes?	Incentives will vary by IRPA and can be assessed in more detail once the two pilot projects are submitted to the OEB for review and approval.
10	What is the appropriate approach for monitoring and reporting on the progress of IRP Plans, including consideration of metrics and a scorecard?	- Mandatory stakeholder consultation during IRP Report and AMP/USP development - Annual filing of Enbridge IRP Report (per best practice can be done as part of rate case or separate) - Report must include details on all consultation conducted and how input influenced decisions - Scorecard required and OEB should recommend minimum metrics and encourage the utility to enhance them

Additional Related Recommendations

	Issue	Recommendation
1	Pilot Projects	- Two pilot projects launched by January 2022. Consultation should start now. - One pilot project focused on targeted DSM and one focused on an IRPA technology solution. - Should align with a willing municipality with a energy and emissions plan targeting net zero emissions. Could be done through an expression of interest process in partnership with the Clean Air Council or AMO. - Consultation should occur with all relevant stakeholders to assess best pilot opportunities. - Draft pilot list should be reviewed by the OEB IRP Advisory Group to provide advice and recommendations prior to filing with the OEB for approval. - Pollution Probe is aware of willing host municipalities to work with on IRP pilots and is will to coordinate if there is a process established for expressions of interest.

	Issue	Recommendation
2	Cost Effectiveness Assessment for IRP Framework	- The OEB should continue to support the Societal Cost Test in alignment with EBO 169 for DSM. This is the most inclusive test for comparing alternatives from a consumer perspective. The current proxy used by the OEB is the TRC+ test. - The tests in EBO 188 and EBO 134 were developed for different purposes and remain in effect for specific project economic analysis. - DCF and DCF+ are not adequate for IRP analysis. - EBO 188 and EBO 14 are over 30 years old and have had a patchwork of changes through multiple proceedings. It is recommended that they be revisited jointly for a comprehensive review.
3	Guiding Principles / Binary Criteria	- No application of Enbridge guiding principles or binary criteria at this time. - Fine-tuning can be applied once experience has been gained from the first few years of applying the IRP Framework. - Application of limiting subjective criteria will negatively restrict effective IRP outcomes and opportunities at a portfolio level.
4	Advanced Metering Infrastructure (AMI)	- Premise metering is less relevant than district metering for IRP purposes. - No OEB direction is required in the IRP Framework or this proceeding related to AMI. - Enbridge is already able to deploy AMI and has used its annual capital envelop to include AMI investments. - Enbridge is able to come forward with a specific AMI proposal at any time (ideally as part of its annual rate case). - Any generic endorsement of AMI by the OEB as part of IRP would be interpreted as permission for incremental capital expenditures that are not within scope for this proceeding.
5	Timeline for IRP assessment for Enbridge portfolio	A minimum of 10 years must be used for assessment of IRP options.
6	Gaps and Continuous Improvement	- There is currently a long list of gaps and issues pertaining to Enbridge's ability to fully execute effective IRP. It is recommended that these be consolidated on a single list (similar to the DSM evaluation approach) and prioritized for mitigation. Examples include the lack of documented processes and policies at Enbridge related to IRP. - The list should be included in Enbridge's Annual IRP Report with an action plan on closing these issues. - The OEB IRP Advisory Group can also review the issues list since some issues may require OEB action.
7	Implementation of IRPAs	- OEB direction required. There is a lack of clarity on how Enbridge intends to implement IRPAs and treat related costs/incentives¹⁰². - The OEB will need to determine what is appropriate within the regulated utility and what is allowed outside the regulated utility. For non-regulated activities, the Affiliate Relationship Code would apply. The OEB is currently working through this assessment for DER. - This proceeding did not assess which IRPAs are available in the market and which are nascent. That assessment and consultation with market providers will be required prior to ruling on that elements.

¹⁰² nal Transcript EB-2020-0091 Enbridge IRPP Vol 1 March 1 2021, page 197-198.

	Issue	Recommendation
		Enbridge is open to an incentive for achieving the right IRP outcome. A share of the TRC+ generated has been successful previously and could be a model to look at. Pollution Probe is interested to provide input and solicit input from our partners when the OEB is ready to assess which incentive is best.
8	Capital Asset Life	- Currently most pipeline and related assets are amortized over 40¹⁰³ years. It is highly unlikely that most natural gas pipelines installed today will still be 'used and useful' in 2060 and beyond given that Ontario municipalities and consumers are projecting significant reduction of natural gas use well before 2060 (typically Net Zero by 2050). - This issue is very relevant to IRP and support implementation of IRPAs. However, it was not specifically in the scope of this proceeding and should be recommended to be thoroughly assessed by the OEB. Reducing amortization periods (e.g. reduce from 40 to 20 years) to be more in line with IRPS solutions would be of value.
9	Life Cycle Analysis	Enbridge raised that some alternative such as electrification include additional upstream or other costs that should be included in a comparison to natural gas options. Similarly natural gas has additional upstream costs or subsidies ¹⁰⁴ that would also need to be included to make an apples-to-apples comparison.
10	Enbridge Handbook	Pollution Probe encourages Enbridge to create a handbook or set of policies that would enable all departments to apply effective IRP decision making. This does not replace the need for stringent requirements under the OEB IRP Framework, but could help Enbridge internalize those minimum requirements and other best practices.
11	Adjudication of IRPA Decisions	If (contrary to Enbridge Gas's proposal) the Board was to determine that an adjudication of Enbridge Gas's decision not to pursue an IRP solution to meet an identified need/constraint should take place before the LTC application where the facilities solution is presented, then Enbridge Gas believes that such adjudication should take place in the year after Enbridge Gas has presented its determination not to pursue an IRPA. That would provide early clarity to Enbridge Gas as to how to proceed to meet the identified need/constraint. (EB-2020-0091 Exhibit JT1.5). Pollution Probe recommends that the OEB provide a process following the filing by Enbridge of each Annual IRP Report and AMP/USP for identification of areas where the Enbridge IRPA decisions require more assessment. Adjudication should be arranged prior to Enbridge filing an application (LTC, rate case or ICM) to save time and resources.

¹⁰³ Final Transcript EB-2020-0091 Enbridge IRPP Vol 1 March 1 2021, page 46.

¹⁰⁴ Including subsidies of over \$64,000 per customer for new communities - EB-2020-0091 Exhibit J2.5