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**July 22, 2021**

# Integrated Resource Planning Framework for Enbridge Gas

**EB-2020-0091 (Appendix A)**



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## 1 INTRODUCTION AND PURPOSE

This document describes the first-generation Integrated Resource Planning (IRP) Framework for Enbridge Gas. Within the energy sector generally, integrated resource planning usually refers to a planning process that evaluates and compares both supply-side and demand-side options to meeting an energy system need, and may also refer to consideration of multiple energy sources, and co-ordination or integration between multiple energy service providers. A definition of IRP specific to Enbridge Gas's operations is provided in chapter 2 ("Definitions").

This IRP Framework is a companion document to the OEB's July 22, 2021 [Decision and Order](#) on Enbridge Gas's Integrated Resource Planning proposal (EB-2020-0091), regarding IRP for Enbridge Gas. While the IRP Framework is intended to be fully consistent with the Decision and Order, in case of any discrepancy, the wording in the Decision and Order will prevail. The expectation is that enhancements and improvements will be made in the future on the basis of the experience gained in Ontario with pilot projects and other IRP activities, drawing on successes achieved in other jurisdictions, and future policy direction.

The IRP Framework provides direction to Enbridge Gas on topics to be covered in an IRP Plan (defined in chapter 2 ("Definitions")), and the OEB's requirements as Enbridge Gas considers IRP to meet its system needs. If Enbridge Gas has reasons for a specific IRP Plan to deviate from the IRP Framework, it should justify why deviations from the Framework requirements are appropriate.

The IRP Framework has been established for Enbridge Gas; however, it should also be used as a resource to guide EPCOR Natural Gas Limited Partnership when it examines infrastructure investments and potential alternatives.

## 2 DEFINITIONS

The following terms are defined in the IRP Framework:

- **Integrated Resource Planning:** A planning strategy and process that considers Facility Alternatives and IRP Alternatives (including the interplay of these options) to address the system needs of Enbridge Gas's regulated operations, and identifies and implements the alternative (or combination of alternatives) that is in the best interest of Enbridge Gas and its customers, taking into account reliability and safety, cost-effectiveness, public policy, optimized scoping, and risk management.
- **IRP Assessment Process:** The process used by Enbridge Gas to determine the preferred solution to meet specific system needs, including consideration of Facility Alternatives and IRP Alternatives.
- **Facility Alternative:** A potential infrastructure solution considered under the IRP Assessment Process in response to a specific system need of Enbridge Gas. In this IRP Framework, the term is synonymous with a traditional or conventional facility project. This would typically include a hydrocarbon line (as defined in the *OEB Act*) developed by Enbridge Gas, and ancillary infrastructure. Facility Alternatives determined by Enbridge Gas to be the preferred solution to meet the system need will often require approval from the OEB through a Leave to Construct application. For clarity, non-traditional solutions to system needs that include infrastructure developed by Enbridge Gas, such as injection of compressed or renewable natural gas, or storage of natural gas within the distribution or transmission system, are considered to be IRP Alternatives and not Facility Alternatives.
- **IRP Alternative (IRPA):** A potential solution other than a Facility Alternative considered in Enbridge Gas's IRP Assessment Process 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 (alone, in combination with other IRPAs, or in combination with a Facility Alternative) would likely be brought forward for approval from the OEB through an IRP Plan.
- **IRP Plan:** A plan filed by Enbridge Gas for OEB approval in response to a specific system need, that includes one or more IRPAs.

### 3 GUIDING PRINCIPLES

The OEB has adopted the following guiding principles for IRP. IRP Plans filed with the OEB should include a section to discuss how these guiding principles have been addressed.

- Reliability and safety – In considering IRPAs as part of system planning processes, Enbridge Gas’s system design principles cannot be compromised, and the reliable and safe delivery of firm contracted peak period natural gas volumes to Enbridge Gas’s customers must remain of paramount importance.
- Cost-effectiveness – IRPAs must be cost-effective (competitive) compared to Facility Alternatives and other IRPAs, including taking into account impacts on Enbridge Gas customers.
- Public policy – IRP will be considered in a manner to ensure that it is supportive of and aligned with public policy, and in particular the OEB’s statutory objectives for the natural gas sector.
- Optimized scoping – Recognizing that reviewing IRPAs for every forecast infrastructure project would be extremely time intensive, binary screening should be undertaken, to confirm which forecast need(s) should undergo evaluation of IRPAs, and to ensure a focus at the outset on efficient and effective IRPA investment.
- Risk management – Economic risks associated with both Facility Alternatives and IRPAs in meeting system needs are evaluated and appropriately mitigated. Risks and rewards are allocated appropriately between Enbridge Gas and its customers.

## 4 TYPES OF IRPAS

Demand-side programming may include IRPAs such as geotargeted energy efficiency programs, and demand response programs (which incent or oblige the customer to reduce or shift energy usage during peak periods). Demand-side IRPAs are expected to target specific constrained areas and (amongst other things) encourage customers to reduce peak consumption.

Interruptible rates can also be used to reduce peak demand. While approval of interruptible rates would be considered in a rebasing rate application, the impact of interruptible rates to meet a system need/constraint should be considered in an IRP Plan in combination with demand-side or supply-side alternatives.

Supply-side IRPAs could include injection of compressed natural gas into the pipeline system in a constrained area, or renewable natural gas sourced within the constrained area. Supply-side IRPAs may also include market-based supply side alternatives. This could include contractual arrangements requiring delivery of natural gas to specific points on Enbridge Gas's system that harness the capability of existing pipeline infrastructure (including non-Enbridge Gas pipelines) to avoid or defer the need for Enbridge Gas to build new pipeline infrastructure.

As part of this first-generation IRP Framework, the OEB has determined that it is not appropriate to provide funding to Enbridge Gas for electricity IRPAs. Enbridge Gas can seek opportunities to work with the Independent Electricity System Operator or local electricity distributors to facilitate electricity-based energy solutions to address a system need/constraint, as an alternative to IRPAs or facility projects undertaken by Enbridge Gas. The OEB is not establishing this as a requirement.

For both demand-side and supply-side IRPAs, Enbridge Gas should look to procure equipment or activities through the competitive market, where feasible and cost-effective.

Enbridge Gas should consider both combination IRP Plans (that may include multiple supply-side or demand-side IRPAs or an IRPA in combination with a Facility Alternative) and bridging solutions in its IRP assessment process if the bridging solution provides the best alternative in the near term, while exploring longer term solutions.

To support the analysis of IRPAs and promote more timely development of IRP Plans, Enbridge Gas shall provide a document on best available information for demand-side

IRPAs. This will be provided with Enbridge Gas's annual IRP report discussed in chapter 10 ("Monitoring and Reporting").

## **5 IRP ASSESSMENT PROCESS**

Enbridge Gas will use a four-step IRP Assessment Process to determine the best approach to meeting system needs, including whether to pursue IRPAs for an identified need/constraint. In a project-specific application (Leave to Construct or IRP Plan), Enbridge Gas is required to demonstrate that it has followed this process including the results of the analysis at each stage of the process.

### **1. Identification of Constraints**

### **2. Binary Screening Criteria**

### **3. Two-Stage Evaluation Process**

### **4. Periodic Review**

The OEB expects that Enbridge will integrate its IRP Assessment Process into its annual planning.

Within its annual IRP report, Enbridge Gas shall report on the results of its IRP Assessment Process, including reporting on those system needs where a negative result at step two (binary screening) or step three (technical/economic evaluation) resulted in a determination by Enbridge Gas for no further assessment of IRPAs.

### **5.1 IRP Assessment Process Step 1: Identification of Constraints**

Enbridge Gas shall identify potential system needs/constraints up to ten years in the future, and describe these in annual updates to the Asset Management Plan (AMP) to allow time for a detailed examination of IRPAs. The AMP is currently filed each year as part of Enbridge Gas's rate adjustment proceedings. The AMP process addresses all utility assets within Enbridge Gas's regulated operations.

An updated version of the AMP will be filed each year. The information filed within each AMP should include:

- a list of identified system needs
- the status of IRP Plan consideration for each system need
- the result of the initial binary screening
- details as to whether and why IRP Plans have been screened out at subsequent steps, with supporting rationale



- any material changes to the demand forecast, relative to the demand forecast that was assessed as part of the last rebasing application

The OEB expects that, for projects brought to the OEB for approval (both Leave to Construct projects and IRP Plans), the system need will have previously been identified in the AMP (although the preferred project to meet the system need may not have been determined at that time). For any previously unidentified needs, Enbridge Gas will need to provide an explanation as to why the project is needed at this time.

## 5.2 IRP Assessment Process Step 2: Binary Screening Criteria

The IRP Framework will include screening criteria, in order to focus on those situations where there is a reasonable expectation that an IRPA could efficiently and economically meet the system need.

Enbridge Gas will apply these binary screening criteria to identified system needs/constraints (as identified in step 1) to determine whether further IRP evaluation is appropriate. Binary screening would thus exclude some system needs from further IRP consideration. System needs where IRP is not screened out through this binary screening would next move to the two-stage IRP evaluation process.

The OEB has established the following screening criteria for the first-generation IRP Framework.

### Emergent Safety Issues

The first criterion deals with urgent or imminent issues. The safety and reliability of the gas system is paramount. Removing constraints that jeopardize this system performance does not allow time for the development and assessment of an IRP Plan.

- Emergent Safety Issues** – If an identified system constraint/need is determined to require a facility project for Enbridge Gas to offer safe and reliable service or to meet an applicable law, an IRP evaluation is not required. An example of such a system constraint/need, and an emergent safety issue, would be if an existing pipeline sustained unanticipated damage and needed to be replaced as quickly as possible to ensure the safety of local communities and Enbridge Gas’s broader transmission and distribution systems. Longer-term safety related system constraints/needs may be appropriate for an IRP Plan and should be considered on a case-by-case basis.*

### Timing

It takes time to assess and implement an IRP Plan along with demonstration that the constraint is being mitigated. Once a ten-year AMP consistent with the IRP Framework has been in place for several years, there should be fewer situations where a timing criterion is needed; however, for this first-generation IRP Framework, the OEB is establishing a timing criterion. The use of supply-side options might be possible to meet an identified need within a shorter period.

- ii. **Timing** – *If an identified system constraint/need must be met in under three years, an IRP Plan could not likely be implemented and its ability to resolve the identified system constraint could not be verified in time. Therefore, an IRP evaluation is not required. Exceptions to this criterion could include consideration of supply-side IRPAs and bridging or market-based alternatives where such IRPAs can address a more imminent need.*

### Customer-Specific Builds

Where the customer fully pays for the incremental infrastructure costs associated with a facility project, in the form of a Contribution in Aid of Construction, consideration of an IRP Plan is not required.<sup>1</sup> However, Enbridge Gas is encouraged to discuss demand-side management (DSM) opportunities with customers to potentially reduce the size of the build.

- iii. **Customer-Specific Builds** – *If an identified system need has been underpinned by a specific customer's (or group of customers') clear request for a facility project and either the choice to pay a Contribution in Aid of Construction or to contract for long-term firm services delivered by such facilities, then an IRP evaluation is not required.*

### Community Expansion & Economic Development

Given the goal of the Ontario Government's Access to Natural Gas legislation<sup>2</sup> to extend gas service to designated communities, Enbridge Gas is not required to develop an IRP Plan or consider alternatives to the infrastructure facilities to meet this need. However, Enbridge Gas is encouraged to discuss DSM opportunities with customers to potentially reduce the size of the build.

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<sup>1</sup> The incremental costs recovered through a Contribution in Aid of Construction are set at an amount that reduces the capital cost of a project for Enbridge Gas ratepayers such that the project becomes economically feasible, which generally requires a profitability index greater than or equal to one.

<sup>2</sup> *Access to Natural Gas Act, 2018*, S.O. 2018, c. 15 - Bill 32

- iv. **Community Expansion & Economic Development** – *If a facility project has been driven by government legislation or policy with related funding explicitly aimed at delivering natural gas into communities, then an IRP evaluation is not required.*

#### Pipeline Replacement and Relocation Projects

A minimum cost of the facility project that would be built to meet a system need (in the absence of IRP) is required to justify the time and effort to conduct an IRP evaluation and potentially develop an IRP Plan. Projects under \$2 million should be screened out unless the government makes regulatory changes establishing a \$10 million threshold for OEB Leave to Construct approvals, in which case, the criteria should use \$10 million to determine if an IRP evaluation is appropriate.

- v. **Pipeline Replacement and Relocation Projects** – *If a facility project is being advanced for replacement or relocation of a pipeline and the cost is less than the minimum project cost that would necessitate a Leave to Construct approval, then an IRP evaluation is not required.*

### **5.3 IRP Assessment Process Step 3: Two-Stage Evaluation Process**

For system needs progressing past the initial IRP binary screening, Enbridge Gas will determine whether to proceed with an IRP Plan through a two-stage evaluation. First, Enbridge Gas will determine whether potential IRPAs could meet the identified constraint/need. If yes, then Enbridge Gas will compare one or more IRP Plans to the baseline Facility Alternative, using a Discounted Cash Flow-plus (DCF+) economic test, to determine the optimum solution to meet the system need. It is expected that the two-stage evaluation process would commence sufficiently far in advance of the date that the constraint/need must be met in order to allow for time for an IRP Plan to be developed, approved, implemented and monitored for effectiveness in advance of the date when a facility project would be required.

#### **Stage 1: Technical Evaluation**

The first stage will look at the technical viability of potential IRPAs to reduce peak demand to the degree required to meet the identified system need, using best available information (including information on IRPAs from Enbridge Gas's annual IRP report), to determine whether an IRP Plan including one or more IRPAs would be a viable option. Enbridge Gas may use derating factors (i.e., assuming less than 100% of the forecast

peak demand reduction from the IRPAs would be delivered) or oversubscription of IRPAs to address uncertainty regarding forecast savings. These derating factors may be relevant to both the technical and economic evaluations. In any subsequent application for OEB approval of specific IRP Plans, Enbridge Gas should identify both the level of oversubscription and the supporting rationale.

## **Stage 2: Economic Evaluation**

The economic evaluation used to compare the IRP Plan(s) to the baseline Facility Alternative will consist of a three-phase DCF+ evaluation, including a focus on rate impacts, as identified in phase 1 of the DCF+ test.

The DCF+ test will be based on the three-phase economic test that Enbridge Gas is required to use to assess the costs and benefits of potential transmission system expansions, under the parameters established by the [Report of the Board on the Expansion of the Natural Gas System in Ontario](#) (the E.B.O. 134 report). The principles of this test are summarized in the OEB's [Filing Guidelines on the Economic Tests for Transmission Pipeline Applications](#). In the IRP Framework, the DCF+ test will include the following phases:

- Phase 1 assesses the economic benefits and costs from the utility perspective, and indicates whether the project is likely to result in future increases to utility rates.
- Phase 2 assesses the incremental economic benefits and costs incurred by customers from the IRP Plan(s) or Facility Alternative(s).
- Phase 3 assesses the incremental societal benefits and costs.

A Net Present Value will be calculated for each phase. Results from each phase will be presented separately for transparency, but will also be summed together.

The DCF+ results for the IRP Plan(s) and the baseline Facility Alternative will be compared to one another to determine which alternative is optimal. IRP Plans that included some combination of IRPA and facility project can also be tested using this approach.

Enbridge Gas has some discretion to select an alternative to meet a system need that does not have the highest score on phase 1 of the DCF+ test, as there may be considerations or factors that are important in phases 2 or 3, or are difficult to quantify. However, this will require justification if Enbridge Gas recommends a higher cost alternative.

The OEB accepts the categories of benefits and costs proposed by Enbridge Gas for the three phases of the DCF+ test (shown in Table 1) for the use of this test in the IRP Framework.

**Table 1: Discounted Cash Flow-Plus Test Costs and Benefits**

<b>Benefit/Cost</b>	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>
<b>Benefits</b>			
Incremental Revenues	X		
Avoided Utility Infrastructure Costs <sup>2</sup>	X		
Avoided Customer Infrastructure Costs <sup>3</sup>		X	
Avoided Utility Commodity/Fuel Costs <sup>4</sup>	X		
Avoided Customer Commodity/Fuel Costs <sup>5</sup>		X	
Avoided Operations & Maintenance	X		
Avoided Greenhouse Gas Emissions		X	
Other External Non-Energy Benefits			X
<b>Costs</b>			
Incremental Capital Expenditure <sup>1</sup>	X		
Incremental Operations & Maintenance <sup>1</sup>	X		
Incremental Taxes	X		
Incremental Utility Commodity/Fuel Costs <sup>4</sup>	X		
Incremental Customer Commodity/Fuel Costs <sup>5</sup>		X	
Incremental Greenhouse Gas Emissions		X	
Incremental Customer Costs		X	
Other External Non-Energy Costs			X
Notes:			
(1) Capital and Operations & Maintenance is inclusive of program administrative costs			
(2) Avoided or reduced infrastructure capital costs of the utility (e.g., smaller diameter pipe)			
(3) Avoided or reduced infrastructure capital costs of the customer (e.g., reduced Contribution in Aid of Construction)			
(4) Avoided or incremental fuel costs of the utility (e.g., compressor fuel and unaccounted for gas)			
(5) Avoided or incremental fuel costs of the customer (e.g., lower/higher natural gas use, lower/higher electricity use)			

Further work will be needed to refine the use of the DCF+ test in the context of IRP. The DCF+ test could be improved to better list and define the costs and benefits of Facility Alternatives and IRPAs, and clarify how these costs and benefits should be considered within the DCF+ test. This could include expanding the inputs to recognize increasing carbon costs, the risk that a constraint remains unresolved, and impact on gas supply costs. Enbridge Gas shall study improvements to the DCF+ test for IRP, and is encouraged to consult with the IRP Technical Working Group and to use the IRP pilot

projects as a testing ground for an enhanced DCF+ test. In particular, the IRP Technical Working Group should consider how different carbon pricing scenarios should be used in the DCF+ calculation. The OEB directs that Enbridge Gas file an enhanced DCF+ test for approval as part of the first non-pilot IRP Plan.

#### **5.4 IRP Assessment Process Step 4: Periodic Review**

Material changes may occur that could impact Enbridge Gas's determination as to how best to meet a system need. These may include changes occurring when implementing an IRP Plan after receiving project approval. Examples could include where the nature or timing of an identified need/constraint alters materially, or significant policy changes are announced by government or the OEB. In such cases, Enbridge Gas may review its IRP determinations, and may choose to discuss with the IRP Technical Working Group.

Updates of this nature should be provided by Enbridge Gas as part of its annual IRP report. If Enbridge Gas plans to increase its spending on an approved IRP Plan by more than 25%, it will need to request OEB approval for the change, as discussed in chapter 9 ("Future IRP Plan Applications").

## 6 STAKEHOLDER OUTREACH AND ENGAGEMENT PROCESS

### 6.1 Stakeholder Engagement Process

Enbridge Gas is required to use a three-component stakeholder engagement process to provide input into its IRP activities.

The three components will involve:

1. Gathering of Stakeholder Engagement Data and Insight: Seeking insights from stakeholders and various market participants by working within existing stakeholder engagement channels, on an ongoing basis, to mitigate incremental expenses and leverage existing relationships.
2. Stakeholder Days: Annual regional stakeholder events focused on IRP to discuss plans and progress with IRP, including specific discussion of needs/constraints identified in the AMP and the plans to address such items through IRP. These would be held on an annual basis shortly after Enbridge Gas files its AMP update within Phase 2 of the annual rates proceeding.
3. Targeted Engagement: Project-specific consultation dealing with specific IRPAs or IRP Plans (identified for a specific need in a specific geographic region), with stakeholders from the specific geographic area relevant to the IRPA. Project-specific consultation must be done in advance of seeking project approval from the OEB.

It is expected that Enbridge Gas will record comments from stakeholders and Indigenous groups participating in components 2 and 3 and the responses from Enbridge Gas to these comments. This information is to be filed in any subsequent IRP Plan/Leave to Construct application. Chapter 7 (“Indigenous Engagement and Consultation”) provides additional details on Indigenous engagement and consultation.

Enbridge Gas shall also establish a website to facilitate the broad sharing of information on IRP stakeholdering efforts.

### 6.2 Technical Working Group

In addition to the three-component stakeholder process, the OEB is establishing an IRP Technical Working Group led by OEB staff, similar to the Demand-Side Management Evaluation Advisory Committee. OEB staff will establish a terms of reference and select the membership. Establishment of the IRP Technical Working Group, including a terms

of reference, and the initial selection of working group members, shall be done by the end of 2021.

The IRP Technical Working Group has an objective of providing input on IRP issues that is of value to both Enbridge Gas in implementing IRP, and to the OEB in its oversight of the IRP Framework.

The OEB expects that the first priorities of the IRP Technical Working Group will be:

- Consideration and implementation of IRP pilot projects
- Enhancements or additional guidance in applying the DCF+ evaluation methodology

Additional topics to be examined by the IRP Technical Working Group could include:

- Learnings from IRPAs and IRP implementation in other jurisdictions
- Developing IRP performance metrics for the OEB's consideration
- Treatment of stranded assets in other jurisdictions

The IRP Technical Working Group will also be expected to review a draft of Enbridge Gas's annual IRP report, with the review coordinated by OEB staff. Enbridge Gas should provide a draft of the annual IRP report to the IRP Technical Working Group far enough in advance of its planned filing to the OEB to allow the Technical Working Group time to review and comment. A report from the Technical Working Group to the OEB should be filed by OEB staff in the same proceeding in which Enbridge Gas's annual IRP report is filed. The Technical Working Group report should include any comments on Enbridge Gas's annual IRP report, including material concerns that remain unresolved within the Technical Working Group, and may also describe other activities undertaken by the Technical Working Group in the previous year.

As the natural gas system operator, Enbridge Gas retains the sole responsibility to make final system planning decisions and to advance IRP Plans and/or Leave to Construct applications. While Enbridge Gas is expected to consider any input provided by the IRP Technical Working Group, the IRP Technical Working Group will not have "voting rights" that bind Enbridge Gas with regards to its system planning decisions.



## 7 INDIGENOUS ENGAGEMENT AND CONSULTATION

Enbridge Gas will make efforts to accommodate participation of Indigenous groups within its stakeholder engagement process and work with these groups as appropriate to address any concerns. The OEB endorses this approach and expects that Indigenous engagement will take place in cases where material Indigenous interests are engaged.

In addition to any broader stakeholder engagement with Indigenous groups, Enbridge Gas is required to conduct consultation with respect to any potential impacts to Aboriginal or treaty rights in relation to proposed IRP Plans (which may include the individual IRPAs considered) and Leave to Construct applications. Any concerns can be considered on a case-by-case basis when an IRP Plan or Leave to Construct application comes before the OEB for approval.

When Enbridge Gas requests approval for an IRP Plan or a Leave to Construct, it will be necessary for Enbridge Gas to follow the requirements in the *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario*<sup>3</sup> regarding Indigenous consultation, if applicable.

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<sup>3</sup> Ontario Energy Board, [Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario](#), 2016

## 8 IRPA COST RECOVERY AND ACCOUNTING TREATMENT PRINCIPLES

Costs for Enbridge Gas associated with IRP implementation fall into three categories:

- Incremental IRP administrative costs required to meet the increased workload related to IRP, including integrating IRP into Enbridge Gas's planning processes, completing the incremental stakeholdering, assessing identified system constraints for IRPA(s), and completing necessary IRP monitoring and reporting.
- IRPA Project costs including the planning, implementing, administering, measuring and verifying the effectiveness of specific investments in IRPAs.
- Ongoing operational and maintenance costs including the regular costs incurred to operate and maintain a specific IRPA investment after the project is in-service.

IRPA project costs, similar to the costs for infrastructure builds, will be eligible for inclusion in rate base where Enbridge Gas owns and operates the IRPA. Enbridge Gas should include in the project costs any physical assets acquired and costs directly attributable to the project consistent with how fixed assets are currently capitalized under US GAAP. Until rebasing, the associated revenue requirement of these project costs will be recorded in a capital costs deferral account for recovery annually or at rebasing as requested by Enbridge Gas.

Where Enbridge Gas proposes to make an enabling payment to a competitive service provider and does not own or operate the asset, these costs, if approved, will be included in the category of ongoing operational and maintenance costs and recovered as operating expenses. The OEB requires that Enbridge Gas select the most efficient and cost-effective option for its customers, between Enbridge Gas ownership and third-party ownership with an enabling payment. Until rebasing, these operating costs will be recorded in an operating costs deferral account for recovery annually or at rebasing as requested by Enbridge Gas. Incremental IRP administrative costs and other ongoing operational and maintenance costs will also be treated as expenses and recorded in this account.

The IRPA project costs eligible for inclusion in rate base will attract the same cost of capital as other rate based assets for Enbridge Gas. The depreciation period for the IRPA assets will align with the expected useful life of the asset, which will likely be the time over which the underlying IRPA is expected to provide peak load reduction.

Details about how these principles will be applied to specific IRPAs and IRP Plans will be determined in the IRP Plan applications. As part of an IRP Plan application, Enbridge Gas should provide details on which IRP Plan costs it believes are eligible for inclusion in rate base, versus those that should be considered operating expenses, with supporting rationale.

## 9 FUTURE IRP PLAN APPLICATIONS

When Enbridge Gas determines that an IRPA (alone, in combination with other IRPAs, or in combination with a facility project) is the best option to address a system need, it will apply for approval of an IRP Plan. The IRP Framework establishes a new approval process for IRP Plans, under section 36 of the OEB Act.

An IRP Plan approval from the OEB will operate as an endorsement of the IRP Plan, and approve the cost consequences. The costs would then be recovered, subject to a prudence review, through the IRP Costs deferral accounts annually and/or at Enbridge Gas's next rebasing application.

An IRP Plan approval will be mandatory if the forecast costs of the IRP Plan exceed the minimum project cost that would necessitate a Leave to Construct approval for a pipeline project (currently \$2 million, proposed to increase to \$10 million).

An IRP Plan application should include information similar to what is found in a Leave to Construct application, including:

- Purpose of the IRP Plan
- How the IRP Framework's guiding principles have been addressed
- Information on system need (forecast need/constraint being addressed)
- Discussion of alternatives (why the IRP Plan was selected, including the results of the economic evaluation)
- Description of the IRP Plan and IRPAs, including forecast impacts, costs, and implementation timing)
- Proposed approach to evaluation and monitoring
  - This could include a business case for any proposals for advanced metering infrastructure if this has not been assessed in Enbridge Gas's rebasing application
- Proposed approach to cost recovery (including details on costs Enbridge Gas proposes for inclusion in rate base, versus those that should be considered operating expenses, together with a supporting rationale)
  - Enbridge Gas should identify whether it intends to seek recovery of all or part of the IRP Plan costs, including rationale as to why these costs are incremental to activities included in existing rates
- Proposed approach to cost allocation (using the facility project that is being avoided, deferred, or reduced by the IRP Plan as a reference for the approach to cost allocation, as appropriate)

- In-service date, and any considerations that may apply regarding when the IRP Plan should be considered to be in-service such that Enbridge Gas is eligible for cost recovery
- Expected bill impacts
- Land and environmental issues (where relevant)
- A record of stakeholder engagement and Indigenous engagement and consultation (as appropriate)
- Conditions of approval

Prudently incurred costs associated with an approved IRP Plan will be eligible for cost recovery.

Enbridge Gas should seek approval for an adjustment to an IRP Plan, should the cost adjustment be an increase of greater than 25% of the approved cost. When seeking recovery of actual IRP Plan costs, Enbridge Gas will need to demonstrate that it has been prudent in managing its actions and resulting costs, as is typical for all requests for cost recovery.

Enbridge Gas will need to fully demonstrate the prudence of its actions particularly with regard to the risks of successful implementation of IRPAs and the potential for assets becoming stranded.

## 10 MONITORING AND REPORTING

Enbridge Gas shall file an annual IRP report with the OEB as part of its annual Non-Commodity Deferral Account Clearance and Earnings Sharing Mechanism application, the proceeding in which it may seek disposition of balances in the IRP Costs deferral accounts.

The OEB does not intend to approve the annual IRP report, but it could impact the OEB's findings on the disposition of amounts in the IRP Costs deferral accounts, or inform future proceedings.

The annual IRP report and the report from the IRP Technical Working Group are to be filed for information regardless of whether Enbridge Gas is seeking approval to clear any balances in the IRP Costs deferral accounts.

The annual IRP report should include the following information:

- A summary of IRP stakeholdering activities from the past year
- A summary of IRP engagement or consultation activities with Indigenous peoples
- Updates on IRP pilot projects underway
- Updates on incorporating IRP into asset management planning
- Updates on status of potential IRP Plans
- Updates on status of approved IRP Plans, including details of adjustments made by Enbridge Gas
- Annual and cumulative summaries of actual peak demand reductions/energy savings generated by each IRP Plan to-date, including comparisons to the initial forecast reduction/energy savings and the actual amount of expenditure on each IRP Plan to-date
- The most recent results of Enbridge Gas's IRP Assessment Process for system needs, including reporting on those system needs where a negative binary screening or technical/economic evaluation resulted in no further assessment of IRPAs
- A summary of best available information on demand-side IRPAs, including types of IRPAs, estimates of cost, peak demand savings, status in Ontario, potential role and relevance to Enbridge Gas's system, and learnings from pilot projects and other jurisdictions
- Efforts taken to explore the use of interruptible rates for meeting system needs, including how customers have been provided the opportunity to consider this option
- Any other IRP-related matters established by the OEB.

## 11 IRP COSTS DEFERRAL ACCOUNTS

The OEB determined in the IRP Decision and Order that two IRP Costs deferral accounts will be established for the period from 2021 to 2023, to track incremental IRP-related costs not included in base rates during the current deferred rebasing term. Enbridge Gas will be preparing a Draft Accounting Order for the two IRP Costs deferral accounts, based on the guidance in the Decision and Order. Enbridge Gas will follow the approved Accounting Order for the use of these accounts.

Enbridge Gas may request disposition of account balances, when eligible, as part of its annual Non-Commodity Deferral Account Clearance and Earnings Sharing Mechanism application. Costs in the IRP Operating Costs Deferral Account for general IRP administrative costs may be brought forward for disposition without any prior approval. Costs in this account related to specific projects (e.g. project operating and maintenance costs, enabling payments to competitive service providers) should not be brought forward for disposition until an IRP Plan has been approved. When an IRP Plan has been approved and the project is considered to be “in-service”, Enbridge Gas is also eligible to seek cost recovery of the project’s capital-related revenue requirement through the IRP Capital Costs Deferral Account.

The balances brought forward for disposition in the IRP Costs deferral accounts should be based on actual expenditures. The balance for the IRP Capital Costs Deferral Account will include the revenue requirement impacts associated with project costs eligible for inclusion in rate base. The application to clear any balance in the IRP Capital Costs Deferral Account should describe the reasons for any variance between actual costs and the forecast costs that were included in the IRP Plan approval.

## 12 IRP PILOT PROJECTS

Enbridge Gas is expected to develop and implement two IRP pilot projects. The pilots are expected to be an effective approach to understand and evaluate how IRP can be implemented to avoid, delay or reduce facility projects.

The OEB expects that the IRP pilot projects will be selected and deployed by the end of 2022. The detailed consideration of IRP pilot projects should commence shortly after the issuance of the IRP Framework with input being sought from the IRP Technical Working Group.

The nature of the pilots should be responsive to the opportunities that arise. Enbridge Gas should then apply to the OEB for approval of the IRP pilot projects providing the information and following the approach for IRP Plans, described in chapter 9 (“Future IRP Plan Applications”).

The implementation of pilots should not be a barrier to addressing a system need through a non-pilot IRP Plan, if an exceptional time-limited opportunity arises prior to the completion of the pilots.

Enbridge Gas should share key learnings from the pilots through reporting to the OEB and stakeholders, through the annual IRP report and more frequent updates to the IRP Technical Working Group, as needed. This experience will facilitate the development of other IRP Plans and identify areas for enhancement to the IRP Framework.

The IRP pilot project costs are to be tracked in the IRP Costs deferral accounts, and recovery can be requested annually for prudently incurred costs.

Enbridge Gas is encouraged to use the IRP pilot projects as a testing ground for an enhanced DCF+ test as discussed in section 5.3 (“Two-Stage Evaluation Process”).