

**ENBRIDGE GAS INC.**

**CUSTOMER CONNECTION POLICIES**  
**May 1, 2024**

## ENBRIDGE GAS CUSTOMER CONNECTION POLICIES

1. Enbridge Gas' customer connection policies have been designed to facilitate the rational expansion of the natural gas system.<sup>1</sup> Adherence to these policies will ensure that system expansion projects meet all financial compliance requirements and will not result in undue cross subsidization.
  
2. The policies include the method of feasibility assessment, minimum profitability standard and portfolio approach, feasibility assessment inputs, and the CIAC collection, allocation, and refund policy. The document also summarizes the System Expansion Surcharge (SES), Temporary Connection Surcharge (TCS) and Hourly Allocation Factor (HAF) mechanisms.

### 1. Terms and Definitions

3. Table 1 is a list of terms found in this document and their definitions.

Table 1  
Terms and Definitions

Term	Definition
After Tax Weighted Average Cost of Capital (AtWACC)	The AtWACC is a forecast cost of capital that uses the incremental after-tax cost of capital based on the capital structure, debt and preference share costs, and the latest OEB- approved equity return levels.
Area of Benefit	The Area of Benefit is determined by hydraulically modelling the pipeline network in the region around the proposed Development Project to determine the geographic extent of the area that will benefit from the incremental capacity of the project.
Commercial Customer	A customer operating a commercial business and uses natural gas to meet its energy needs (e.g., shops, restaurants, offices, and apartment buildings).
Contribution in Aid of Construction (CIAC)	The Company's calculation in accordance with its feasibility policy of the amount of customer financial contributions required to reduce the capital cost of a project to serve one or more customers so that the project becomes economically feasible.

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<sup>1</sup> These policies have been developed in accordance with the principles and guidelines prescribed in The Guidelines for Assessing and Reporting on Natural Gas System Expansion in Ontario, E.B.O. 188 (January 30, 1998) and the OEB Decision in the Enbridge Application for approval of a System Expansion Surcharge, a Temporary Connection Surcharge, and an Hourly Allocation Factor, EB-2020-0094 (November 5, 2020)

Development Project (DP)	A project that is designed to provide incremental firm capacity to serve multiple large and small volume customers forecasted within an identified Area of Benefit.
Extra Length Charge (ELC)	Enbridge Gas provides 20 metres service at no cost to a residential customer (infill). Customers pay an ELC for each additional metre beyond 20 metres.
Hourly Allocation Factor (HAF)	A method of allocating capital cost of a DP designed to provide incremental firm capacity to serve multiple large volume customers (LVC) forecasted in an Area of Benefit. The allocation is done based on peak hourly demand of LVCs who receive the incremental capacity.
Investment Portfolio	The costs and revenues associated with all new distribution customers who are forecast to attach in a particular test year (including new customers attaching to existing mains). The Investment Portfolio includes a forecast of Normalized System Reinforcement Costs (NSRC).
Large Volume Customer (LVC)	Defined as a customer with an estimated gas consumption equal to or greater than 50,000 m <sup>3</sup> per year.
Normalized System Reinforcement Costs (NSRC)	This represents a method of socializing reinforcement cost to new customers included in the Utility's portfolio. The historical average for special and normal reinforcement costs are used as the normalized amount to be included in the portfolio analysis as a percentage of the total capital expenditure in the year.
Profitability Index (PI)	A ratio of the net present value (NPV) of the net cash inflows to the NPV of the net cash outflows for a system expansion project undertaken by the Company.
Residential Customer	A customer who uses natural gas to satisfy the energy needs of a residential dwelling.
Revenue Horizon	The length of time Enbridge Gas considers a customer type will provide revenue for the purposes of the feasibility calculation.
Rolling Project Portfolio (RPP)	An accumulation of the new business capital requisitions that are issued and approved within a 12-month period. This includes all future customer attachments, revenues, and costs based on the life cycle of each project. It also includes a forecast of NSRC and excludes service laterals from existing mains (infill customers).

Small Volume Customer (SVC)	Defined as a customer with an estimated gas consumption of less than 50,000 m <sup>3</sup> per year.
System Expansion Surcharge (SES)	Applicable to projects with >=50 customers. An economic contribution to financial feasibility of a customer attachment project through a temporary volumetric rate as set out in applicable rate schedules. The SES is used as an alternative to CIAC to achieve a PI of 1.0.
Temporary Connection Surcharge (TCS)	Applicable to projects with <50 customers. An economic contribution to financial feasibility of a customer attachment project through a temporary volumetric rate as set out in applicable rate schedules. The TCS is used as an alternative to CIAC to achieve a PI of 1.0.

**2. Method of Project Feasibility Assessment**

- 4. Economic feasibility of system expansion projects is conducted under the OEB's guidelines prescribed in E.B.O. 188. The following evidence describes the method and the common elements used for evaluating all new connection projects except for residential infills.
  
- 5. A feasibility analysis determines whether a system expansion project meets financial requirements and ensures there is no undue cross subsidization caused by attaching new customers. This is accomplished by evaluating forecast project revenues and costs using a Discounted Cash Flow (DCF) analysis, as described in E.B.O. 188. Enbridge Gas uses an After Tax Weighted Average Cost of Capital (AtWACC) for discounting revenues and costs for DCF analysis.
  
- 6. The output of the DCF analysis is the Profitability Index (PI), which measures the value of a project's revenues against the project's costs. A PI of 1.0 or greater indicates a project's revenues over its life cycle will be equal to or greater than the costs, on a present value basis and validates that a project is economically feasible.
  
- 7. When a project PI is greater than or equal to 1.0, Enbridge Gas will build the project at no additional cost to the customer(s). If the PI is less than 1.0, a customer is required to cover the shortfall by one of the current OEB-approved methods, set out below:
  - a) Pay an upfront CIAC to lower the capital cost of the project necessary to make the project feasible. The CIAC amount is calculated to be sufficient to bring the project PI up to the required threshold (i.e., PI equal to 1.0).

- b) Pay a volumetric surcharge at a rate of \$0.23 / m<sup>3</sup> for a pre-defined term.  
Currently there are two surcharge mechanisms available to Enbridge Gas, the SES and TCS, as approved by the OEB.<sup>2</sup> The surcharge term, either SES or TCS, is determined based on the number of years required to achieve a PI of 1.0, up to a maximum of 40 years.
- c) Pay a premium to posted rates sufficient to bring the project PI up to the required threshold, may be negotiated with a customer.

### 3. A Minimum PI Threshold & Portfolio Approach

- 8. Enbridge Gas uses a portfolio approach to manage its system expansion activities to ensure the required profitability standards are achieved at both the individual project level and the portfolio level. The Investment Portfolio and Rolling Project Portfolio (RPP) are two OEB-prescribed portfolio approaches Enbridge Gas uses.
- 9. Investment Portfolio: The Company evaluates the costs and revenues associated with all new customers forecast to attach in a particular test year including new customers attaching to existing mains (infills). The Investment Portfolio includes an allowance for NSRC and is planned to achieve a PI of 1.0 or greater.
- 10. Rolling Project Portfolio: the RPP provides an ongoing method of determining the financial feasibility of system expansion projects over a rolling 12-month basis. The RPP includes all future customer attachments, revenues, and costs based on the life cycle of each project, however it excludes the costs and revenues associated with new customers attaching to existing mains built prior to the last 12-month period. The Company maintains a PI of greater than or equal to 1.0 for its RPP.
- 11. The minimum PI threshold for projects to be included in the RPP is 1.0 absent exceptional circumstances. The responsible Director may authorize exceptions, subject to a PI no lower than 0.8, as stipulated in E.B.O. 188.

### 4. Feasibility Assessment Inputs

- 12. The following are the key inputs for feasibility assessment of new distribution projects except for residential infills.

#### 4.1. Project Revenue

- 13. The key inputs for estimating project revenues include a forecast of new customers, and their estimated annual gas consumption and/or demands over the project revenue horizon. Using these

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<sup>2</sup> EB-2020-0094, OEB Decision and Order, November 5, 2020, page 5.

forecasts and OEB-approved natural gas distribution rates, Enbridge Gas estimates project revenues for use in the feasibility assessment of the project.

#### **4.2. Consumption Estimates**

14. Customer consumption estimates depend on various factors such as the type of customer, construction type, square footage, and number and type of appliances. For most residential customers, gas usage is estimated based on historical averages by customer type (e.g., single, semi-detached, townhouse, bungalow). Load estimation for non-residential customers is made using historical knowledge, and/or estimates provided by customers or HVAC contractors. For large volume commercial or industrial customers detailed equipment lists with connected load and hours of operation are used to estimate maximum hourly demand, contract demand and annual consumption.

#### **4.3. Capital Cost Estimates**

15. The project capital cost reflects all direct and indirect costs for attaching forecast customers. Direct cost includes costs of distribution mains, services, customer stations, new distribution stations, land and land rights. Indirect costs include an allowance for incremental overheads and NSRC.

16. When a main is upsized in anticipation of future growth potential, the cost of the minimum project design required to meet the customer's load requirements is used for feasibility assessment.

17. Enbridge Gas uses various approaches for estimating capital costs for different types of projects. The objective is to derive estimates, which are closely aligned to costs reflective of the unique parameters of each project. Estimation techniques are dependent on project type and complexity and may include field visits and use of cost estimating systems that incorporate the cost estimating mechanisms of contract unit rates, bundled service pricing, contractor cost estimates and target pricing.

#### **4.4. Normalized System Reinforcement Cost Estimates**

18. Enbridge Gas includes an allowance for NSRC in the feasibility assessment of individual projects and the system expansion portfolio.

19. NSRC is determined using the procedure described in E.B.O. 188 Section 2.3.7 and is applied to individual project feasibilities, the Investment Portfolio and the RPP.

#### 4.5. Common Elements for Feasibility Testing

20. The maximum customer attachment forecast horizon for a project is 10 years per E.B.O. 188.
21. The maximum customer revenue horizon is 40 years from the in-service date of the initial mains for residential and small commercial customers. For large volume customers (LVC) including contract customers the maximum revenue horizon is 20 years from the customer's initial service. A project specific revenue horizon is used when the project life cycle is determined to be shorter than the prescribed time horizons.
22. Incremental O&M expenses associated with new customer additions are included in the feasibility assessment.
23. The feasibility assessment uses a discount rate equal to the incremental after-tax cost of capital based on the prospective capital mix, debt, and preference share cost rates, and the latest OEB-approved rate of return on common equity.
24. Discounting reflects the time value of money and translates the future costs and benefits to a value at the beginning of the project. Up-front capital expenditures will be discounted at the beginning of the project year and capital expended throughout the year will be mid-year discounted, as will revenue, gas related costs, and operating and maintenance expenditures.

#### 5.1. Timing

25. The timing and method of CIAC collection for different market sectors is as follows:
  - a) For general service residential and commercial projects, CIAC is collected from the customer prior to the start of construction.
  - b) The ELC for residential infill customers on main is calculated based on the actual service length after the service is installed and will be collected through the customer's first gas bill.
  - c) CIAC for large volume contract customers are collected prior to the start of construction except for rare situations where installment payments may be authorized. Customer requests for payment of CIAC in installments may be authorized by the responsible Director and are subject to a credit review. All installments must be paid between the start of construction and the in-service date of the project.

#### 5.2. Allocation

26. The following guidelines will be used in allocating CIAC between customers served by a new project.

- a) When a CIAC is required for a project that serves more than one general service residential and small commercial customers, the CIAC is allocated between the customers based on the annual consumption forecast.
- b) When the project serves more than one LVC, the CIAC will be allocated between the customers based on their forecast peak hourly demand.
- c) If the project serves a mix of general service and one or more LVCs, the CIAC will be allocated between customers based on forecast peak hourly demand.

### ***Refund Policy***

- 27. Refunds of CIAC may be requested by customers when the actual customer count on a system expansion project exceeds the original forecast.
- 28. General service customers: For general service customers, refund requests are evaluated upon customer request and will be accepted at any time within 10 years of the in-service date of the project. The system expansion project is then re-evaluated with the actual customer count and the timing of service connections to determine a revised contribution that is required to bring the PI to the original targeted level. If the revised CIAC amount is lower than the actual CIAC paid by customers, the difference will be refunded to those customers who paid it. Refunds are made based on the proportionate contribution of customers who paid the CIAC. This policy applies to main extension projects involving conversion customers.
- 29. Large volume customers: Refunds for LVCs will be determined based on re-evaluation of the system expansion project, considering the timing and load associated with customers not forecasted in the original project. Refund requests are applicable only to the original project scope, the specific piece of main constructed to serve the initial customer(s) and does not consider subsequent main extensions coming off the original project main. Refund requests are evaluated upon customer request and will be accepted at any time up to 10 years from the in-service date of the project.
- 30. No interest is payable on refunds, and only those customers who made the original contribution are eligible for a refund.
- 31. In order to be eligible for a refund, the customer must be consuming natural gas at the address for which refund is being claimed.

32. The Refund Policy does not apply to:
- a) New construction builder developments
  - b) Customers on a system expansion projects where either the SES or TCS rate riders have been applied in lieu of a CIAC.
  - c) Customers in a Development Project where an Hourly Allocation Factor (HAF) has been used for allocating project costs amongst the prospective customers.

### ***Residential Infill Service Connections***

33. Enbridge Gas uses the extra length rule for new residential customers (infills) connecting to existing mains. The rule allows Enbridge Gas to attach residential infill customers at no cost to a maximum of 20 meters. Beyond 20 metres, customer pays an Extra Length Charge (ELC) per metre at a rate prescribed in Rider G of the Enbridge Rate Handbook.
34. The length of the service for applying this rule will be measured from the customer's property line to the location where the gas meter is installed.

### ***SES, TCS and HAF Mechanisms***

35. Enbridge Gas uses a SES, a TCS and a HAF which were OEB-approved in EB-2020-0094.<sup>3</sup>
36. Use of the SES and TCS surcharge provides a predictable rate and a consistent approach for customers to provide contribution to expansion projects to make them feasible. Use of the HAF results in allocation of the capital costs of a project to customers in a fair and equitable manner as costs are allocated over time to eligible customers seeking access to the incremental capacity generated by the project.
37. The following are key elements of the SES, TCS and HAF mechanisms.

### ***SES and TCS***

38. The SES and the TCS is a volumetric surcharge at the rate of \$0.23/m<sup>3</sup> that applies to customers on a system expansion project with a PI of less than 1.0. The SES and TCS apply to both existing homes and businesses converting to natural gas as well as customers attaching to a new construction project.

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<sup>3</sup> EB-2020-0094, Application for approval of a System Expansion Surcharge, a Temporary Connection Surcharge, and an Hourly Allocation Factor, Decision and Order, November 5, 2020.

39. The SES and TCS terms are determined in accordance with Enbridge Gas' feasibility policies, which follow the OEB's E.B.O. 188 Guidelines. The term will be based on the number of years it takes for the project to achieve a PI of 1.0 to a maximum of 40 years.
40. Projects that do not achieve a PI of 1.0 after factoring in the maximum term of 40 years of the SES or TCS, can not use CIAC in conjunction with the SES or TCS to bridge any economic shortfall.
41. Small volume customers (SVC) on a project that is denoted as SES or TCS, do not have the option of paying a CIAC in lieu of the SES or the TCS.
42. LVCs have the option of paying an upfront CIAC in lieu of the SES or the TCS or a combination of both. In addition to the SES or TCS, LVC's may enter a multi-year large volume distribution contract (if eligible) as a means of supporting the economics of the projects.
43. The SES and TCS is applied to the property such that if a new owner takes possession, they will assume payment of the SES or TCS for the balance of the applicable term.

## **HAF**

44. The HAF is a method of allocating the upfront capital cost of a Development Project designed to provide incremental firm capacity to serve multiple LVC's forecasted over a certain Area of Benefit. The capital cost of the Development Project is allocated based on the peak hourly demand of the LVCs who receive the incremental capacity.
45. The HAF is applied as a capital cost in addition to the direct capital cost of customer specific facilities (e.g., dedicated distribution main, service line, customer station, meter, etc.) to the individual economic analysis of customers receiving incremental capacity as they commit or contract for a firm gas service.
46. Once the total incremental capacity is fully allocated, the HAF will cease to be applied to the economic feasibility of new customers requesting a service in the Area of Benefit.
47. The threshold for applicability of the HAF is 50 m<sup>3</sup>/hour or greater. This threshold will be set at the beginning of a project, and will remain fixed, until the project is fully allocated.
48. The HAF may be used for projects that are primarily distribution and also have a minor component of transmission.
49. SVCs on a project do not receive a capital cost allocation through the HAF process for their collective or individual feasibility analysis.