

ENBRIDGE GAS INC.

Answer to Undertaking from
Energy Probe Research Foundation (EP)

Undertaking

Tr: 86

To confirm whether a franchise terminates if a provider does not in fact distribute gas to a municipality.

Response:

Please see response at Exhibit J1.2 regarding a gas utility's obligation to serve.

Pursuant to the Model Franchise Agreement, the terms and conditions associated with a franchise agreement apply for a term of 20 years and at any time within two years prior to scheduled expiration of the franchise agreement, either party may give notice to the other that it desires to enter into negotiations for a renewed franchise agreement. Until such renewal has been settled, the terms and conditions of the existing franchise agreement shall continue, notwithstanding the expiration of the existing franchise agreement.

There are no provisions within the franchise agreement that address an obligation to continue providing service within a municipality.

At Tr. Vol. 1 page 107 , Enbridge Gas's witness agreed with Energy Probe that section 4 of the Model Franchise Agreement indicates that if a municipality no longer wanted gas distribution service from Enbridge Gas, it would have to give notice to Enbridge within two years. Enbridge Gas wishes to correct that statement. What section 4 addresses is that at any time within two years prior to the expiration of a franchise agreement, either party may give notice to the other that it desires to enter into negotiations for a renewed franchise. There are no provisions within the Model Franchise Agreement regarding cancelling distribution service within a municipality. However, pursuant to section 10 of the Municipal Franchises Act, either the municipality or the gas company may apply to the OEB for an order for a renewal or extension of the term of a franchise and the OEB may, in consideration of public convenience and necessity, grant or refuse a renewal or extension.

ENBRIDGE GAS INC.

Answer to Undertaking from
Energy Probe Research Foundation (EP)

Undertaking

Tr: 97

To confirm whether Enbridge is obliged to keep serving those customers as long as customers need natural gas.

Response:

Gas distributors in Ontario are obligated to provide service pursuant to the *Ontario Energy Board Act, 1998*, section 42:

Duties of gas transmitters and distributors

Discontinuance of transmission or distribution

42.(1) Subject to the *Technical Standards and Safety Act, 2000* and the regulations made under that Act, and in the absence of an agreement to the contrary between the parties affected, no gas transmitter shall voluntarily discontinue transmitting gas to a gas distributor without leave of the Board. 1998, c. 15, Sched. B, s. 42 (1); 2002, c. 17, Sched. F, Table; 2003, c. 3, s. 32.

Duty of gas distributor

(2) Subject to the *Public Utilities Act, the Technical Standards and Safety Act, 2000* and the regulations made under the latter Act, sections 80, 81, 82 and 83 of the *Municipal Act, 2001* and sections 64, 65, 66 and 67 of the *City of Toronto Act, 2006*, a gas distributor shall provide gas distribution services to any building along the line of any of the gas distributor's distribution pipe lines upon the request in writing of the owner, occupant or other person in charge of the building. 2006, c. 32, Sched. C, s. 42.

The *Ontario Energy Board Act, 1998* (OEB Act), section 42(3) also gives the OEB the authority to order that service be provided:

Order

(3) Upon application, the Board may order a gas transmitter, gas distributor or storage company to provide any gas sale, transmission, distribution or storage service or cease to provide any gas sale service. 1998, c. 15, Sched. B, s. 42 (3).

In addition to being subject to the laws referenced in section 42(2) of the OEB Act, a gas distributor's obligation to serve is subject to the gas distributor's terms and conditions of service approved by the OEB from time to time, such as feasibility and connection policies.

Pursuant to the *Municipal Franchises Act*, a gas distributor requires a municipal franchise agreement in order to provide gas distribution services to the inhabitants in a municipality. Franchise agreements are typically in the form of the OEB's Model Franchise Agreement and are in place for an initial term of 20 years and subject to renewal thereafter in accordance with sections 9 or 10 of the *Municipal Franchises Act*. Enbridge Gas has franchise agreements in place with 312 lower/single-tier municipalities and 27 upper-tier municipalities in Ontario.

Section 4 of the Model Franchise Agreement states:

c. At any time within two years prior to the expiration of this Agreement, either party may give notice to the other that it desires to enter into negotiations for a renewed franchise upon such terms and conditions as may be agreed upon. Until such renewal has been settled, the terms and conditions of this Agreement shall continue, notwithstanding the expiration of this Agreement. This shall not preclude either party from applying to the Ontario Energy Board for a renewal of the Agreement pursuant to section 10 of the Municipal Franchises Act.

At Tr. Vol. 1 page 106, the Company witness indicated the municipality should have a choice of which energy their constituents could receive. To provide further context, as long as Enbridge Gas has customers in a municipality, it may seek approval from the OEB to renew the franchise agreement with the municipality, typically with the municipality's consent. However, if the municipality has concerns about the terms and conditions of renewal of a franchise agreement, Enbridge Gas may apply to the OEB pursuant to section 10 of the *Municipal Franchises Act* for a renewal.

ENBRIDGE GAS INC.

Answer to Undertaking from
Federation of Rental-housing Providers of Ontario (FRPO)

Undertaking

Tr: 114

To provide the overall business scorecard and senior management incentives tied to performance of the scorecard for 2021 and 2022.

Response:

The 2021 scorecard results are provided at Exhibit I.1.2-SEC-79 Attachment 1, page 3 and the 2022 Scorecard results at Exhibit JT1.8 Attachment 1.

ENBRIDGE GAS INC.

Answer to Undertaking from
Green Energy Coalition (GEC)

Undertaking

Tr: 74

To file the Guidehouse demand model forecast for the annual consumption of electricity on an annual basis, in an excel sheet, with sources.

Response:

The following response was provided by Guidehouse Canada Ltd.:

Intervenors asked Guidehouse to provide calculations and documentation to support its claim that the use of end-use-specific load shapes would not overstate estimates of peak electricity demand to the extent suggested in the evidence provided by GEC's expert witness.

Guidehouse observes that GEC's expert witness used calculations based on *daily* load shapes published by the Electric Power Research Institute. Guidehouse believes it is more appropriate to use *annual* load shapes when estimating peak demand based on forecasts of annual consumption. In Attachment 1, Guidehouse compares estimates of building sector peak demand that were calculated using (1) end-use specific load shapes, which were retrieved and interpreted as described below, and (2) a load shape derived from air-source heat pump (ASHP) performance data, as Guidehouse did in the *Pathways to Net Zero* (P2NZ) analysis.

Guidehouse also observes that GEC's expert witness did not account for the projection that the hour of electric peak demand will be different in the Electrification scenario and the Diversified scenario. Attachment 1 references the appropriate hour of peak electric demand for each scenario, as identified at page 3 of I.1.10-GEC-18.

As a data source for load shapes specific to individual end uses, Guidehouse referenced the U.S. National Renewable Energy Laboratory (NREL) ResStock and ComStock databases. NREL uses building energy models and high-performance computing to produce these datasets as a representation of expected energy use depending on geography, climate, building configurations, and equipment selections. These databases are only available for U.S. geographies, and Guidehouse retrieved

load shapes for New York state, since New York has a similar geography and climate to Ontario's main population centers.

For the analysis described here, which was not included in the *P2NZ* analysis or report, Guidehouse extracted data using the following input criteria:

ResStock: National Load Profiles by State TMY, New York, Timeseries Data
https://resstock.nrel.gov/dataviewer/in-depth-load-chart/?datasetName=vizstock_resstock_tmy3_release_1_by_state&locationId=NY

Location: New York, Fuel type: electricity, Upgrade: Baseline, Aggregation type: Average, Timeseries Range: year, Month Constraints: Jan – Dec, Heating fuel: Electricity, HVAC Heating Type: Ducted heat pump.

ComStock: National Load Profiles by State TMY, New York, Timeseries Data
https://comstock.nrel.gov/dataviewer/in-depth-load-chart/?datasetName=vizstock_comstock_tmy3_release_1_by_state_vu&locationId=NY

Location: New York, Fuel type: electricity, Upgrade: Baseline, Aggregation type: Average, Timeseries Range: year, Month Constraints: Jan – Dec, Heating fuel: Electricity, Service water heating fuel: Electricity

Data extractions from the ResStock and ComStock databases contain electricity and fuel consumption data on 15-minute intervals for a wide variety of end uses. These 15-minute interval data are included as raw data in the “NREL 15-min Res NY” and “NREL 15-min Com NY” tabs of Attachment 1.

Guidehouse summarized these raw data extracts by (1) summing the 15-minute interval data to 1-hour intervals, and (2) grouping the electrical end uses into four end use categories to align with how the *P2NZ* analysis projected consumption over the study period (the categories of space heating, space cooling, water heating, and other/miscellaneous). To understand the fraction of annual energy consumption that would occur during each hour of the year, Guidehouse calculated a normalized load shape where the fractions in the 8,760 hours of the year sum to 1.0. In Attachment 1, the tabs, “Summary_Res” and “Summary_Com” contain (1) the annual electrical load shapes for four categories on 1-hour intervals; and (2) the normalized annual loadshapes, in which each hour of the load shape represents the hour's portion of annual consumption for the end use.

In JT1.28 Attachment 3, Guidehouse provided forecasts of annual electricity consumption in petajoules (PJ) for the residential and commercial sectors by scenario, by decade, and by end use category. These annual consumption forecasts are copied into Attachment 1, on the tabs “Impact to Res Peak GW” and “Impact to Com Peak GW.” On those same tabs, Guidehouse used the peak load factors from the normalized end use load shapes (described above) to calculate the GW that each end use contributes to peak electric load.

The “Total Summary” tab of Attachment 1 compares the peak electrical system loads in the year 2050 (from Figure ES-2 of the P2NZ report) with the figures calculated in this analysis to conclude that, compared to end-use-specific load shapes, the use of ASHP-derived load shapes may have overestimated peak system demand by 2.4% in the Diversified scenario and by 10.2% in the Electrification scenario.

Guidehouse notes that although the use of ASHP-derived load shapes may have overestimated peak demand by 2.4% in the Diversified scenario and by 10.2% in the Electrification scenario, the impact on each scenario’s total cost cannot be determined without re-running the model, and it cannot be assumed that the scenario costs would change in an equivalent manner.

ENBRIDGE GAS INC.

Answer to Undertaking from
School Energy Coalition (SEC)

Undertaking

Tr: 77

To make best efforts to advise within 2022 how much of that hypothetical executive's incentive pay came from the EBITDA generated by growth capital line.

Response:

The incentive pay generated from EBITDA Generated by Growth Capital would have been \$14,000 using a hypothetical executive salary of \$350,000 for 2022.