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April 3, 2020

Ontario Energy Board
2300 Yonge St., 27th Floor
Toronto, ON
M4P 1E4

Attn: Christine E. Long, Registrar and Board Secretary

By electronic filing and e-mail

Dear Ms Long:

Re: EB-2019-0159 Enbridge Gas Inc. 2021 Dawn Parkway Expansion
GEC additional interrogatories

Attached please find GEC's additional interrogatories in this matter filed pursuant to the Board's letter of March 26th.

Sincerely,

David Poch

Cc: Z. Crnojacki, M. Millar, all parties

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Issue 1 – Need

31. Please provide Enbridge's anticipated annual short-fall in supply capacity in each year for the design peak day and for any other constraints that the proposed facilities are intended to address.

    a. For each such peak day or other constraint, please provide the forecast demand and supply from each other resource category (e.g., existing Dawn to Parkway, TCPL Mainline, in-franchise storage) for each year.

32. Reference: Exhibit A, Tab 7:

    a. The federal government has committed to "help homeowners and landlords pay for retrofits by giving them an interest-free loan of up to $40,000." Please provide the latest available information at the time of interrogatory responses on whether heat pumps will qualify for this program.

    b. If heat pumps will qualify for the federal governments $40,000 interest free loans, does Enbridge expect this will impact its demand forecast (e.g. due to customers choosing to convert to heat pumps instead of natural gas due to the lack of up-front cost for the former)? If not, why not. If yes, by how much?

    c. Please provide a table showing, for each year from now to 2030: (i) the forecast number of new customers; (ii) the annual increase in volumes (m3) from new customers, and (iii) the cumulative increase in volumes (m3) from new customers. Please provide figures that are consistent with the demand forecast underlying the application.

    d. Please reproduce the table requested in (c) only for the areas served by the proposed Hamilton Pipeline. An approximate area is sufficient (e.g. all rate zones except Union South).

33. Reference Exhibit A, Tab 7. In EB-2020-0066, Exhibit B, Tab 2, Schedule 2, Page 2, Enbridge states: "At least initially, RNG procurement will offset traditional supply purchases at Dawn in the Gas Supply Plan. Enbridge Gas will include forecast RNG volumes procured in its Annual Updates to the Gas Supply Plan filing. As the Program develops and grows over time, Enbridge Gas will adjust its procurement plan and may include longer term contracts based on market conditions."

a. Please provide a table indicating for each year from now to 2040, the RNG volumes it plans to procure under its proposed RNG program (GJ/yr and GJ/d) and an estimate of the volumes that would need to flow through the Hamilton Pipeline (e.g. those that would be connected downstream of the pipeline). A best efforts approximate estimate with caveats is sufficient.

b. Please provide a table indicating for each year from now to 2040, the RNG potential for Ontario (GJ/yr, GJ/d, and % of total throughput). Please indicate the source of the information and compare it to the potential found by the OEB's Marginal Abatement Cost Curve report.

c. Please provide a table indicating for each year from now to 2030 the total volume (GJ/d) contracted for by downstream ex-franchise customers per customer on the Dawn-Parkway system.

d. Based on publicly available information and Enbridge's best information, please provide the RNG targets for Enbridge's downstream ex-franchise customers.

e. Please provide a table indicating for each year from now to 2030 the (i) total volume (GJ/d) contracted for by downstream ex-franchise customers per customer on the Dawn-Parkway system and (ii) the estimated volumes of incremental RNG based on the applicable RNG targets.

f. Please confirm that most RNG consumed by downstream ex-franchise customers on the Dawn-Parkway system will not flow through the Dawn-Parkway system.

34. Please provide all analyses completed by Enbridge on the impact of RNG on demand for the Dawn-Parkway system for the economic life of the project.

35. Please explain whether the proposed facilities are required solely for design day loads, or also for normal winter or other supply requirements. If so, please provide the workpapers showing such shortfalls.

36. Does Enbridge foresee any binding supply constraints at a less than daily level, such as hourly, without the proposed facilities?

a. If so, please describe and quantify those issues.

b. Please describe Enbridge's options for relieving supply constraints at a less than daily level, where daily supply is adequate.

37. Please describe Enbridge's understanding of state and provincial commitments to reducing greenhouse gas emissions, and how those commitments would affect continued growth in gas shipments on the proposed facilities. Please include at least:

    a. the CO2e reductions mandated in the Ontario Government's Environment Plan,

    b. efforts to achieve Canada's CO2e reduction targets,

    c. the commitments and objectives of downstream jurisdictions, including:

        i. Quebec

        ii. New Brunswick

        iii. Maine

        iv. New Hampshire

        v. New York

        vi. Vermont

        vii. Massachusetts

        viii. Connecticut

        ix. Rhode Island

38. Please describe Enbridge's understanding of state and provincial commitments and goals regarding electrification of buildings, and how those commitments would affect continued growth in gas shipments on the proposed facilities, for each of the jurisdictions listed above.

39. Please describe Enbridge's understanding of commitments and goals of state and provincial governments and LDCs regarding renewable gas supply, and how those commitments would affect continued growth in gas shipments on the proposed facilities, for each of the jurisdictions listed above.

40. Please describe Enbridge's understanding of the plans of California with regard to decarbonization, electrification and development of renewable natural gas.

    a. Considering the role that California had in the early promotion of energy-efficiency, renewables and electric vehicles, does Enbridge expect that California's efforts to reduce natural gas use will provide a model for New York, New England and eastern Canada? If not, why?

41. Please provide Enbridge's projection of Ontario gas-fired generation by year 2021–2035, and the average and marginal heat rate for operating gas generation, for:

    a. Installed generation capacity,

    b. Annual MWh generation

    c. Normal winter MWh generation

    d. Normal January MWh generation

    e. Design winter MWh generation

    f. Design January MWh generation

    g. Design day MWh generation

42. Please provide the schedule for Ontario nuclear refurbishments, as Enbridge understands that schedule, and the resulting annual additional gas requirement for electric generation.

    a. Please explain how the gas need would be affected by the availability of power purchases from Quebec, PJM, MISO and New York during refurbishment.

    b. Please explain how the gas need would be affected by expansion of renewable energy generation in Ontario.

43. Please provide any analysis available to Enbridge comparing the economic and environmental implications of replacing nuclear generation during refurbishment with additional gas generation, versus wind and solar.

44. Please provide any information available to Enbridge regarding anticipated expansion of renewable energy generation and is effect on demand for gas for electric generation, in:

    a. Ontario

    b. Quebec

    c. New Brunswick

    d. Maine

    e. Vermont

    f. New Hampshire

    g. Massachusetts

h. Connecticut

i. Rhode Island

45. Please provide a list of the gas storage facilities in Ontario and Quebec (including underground and LNG) and for each:

a. the current and anticipated future capacity

b. the current and anticipated future utilization,

c. The ability to increase supply capacity for design peak

46. Please explain why Enbridge has not required potential ex-franchise purchasers of capacity on the proposed facilities to enter into contracts for capacity for the depreciation life of the facilities, to protect franchise customers from the risk of lost export load.

47. Please estimate the cost of deferring the proposed pipeline for five years using existing pipelines.

48. Please list Enbridge's current commitments from ex-franchise purchasers of capacity on its faculties, and for each the amount of the commitment and the length of the commitment, reflecting early termination options.

49. Please provide an analysis of the need and cost-effectiveness of the proposed facilities if ex-franchise purchasers enter into no further contracts and do not renew existing commitments beyond current contract terms.

50. At Exhibit A Tab 6, Page 19 of 20 there is mention of significant turn back of contracted capacity effective March 31, 2021 ("Recently, Enbridge Gas was notified of intent to turnback approximately 89 TJ/d of Dawn to Parkway capacity effective March 31, 2021"). Is that turnback accounted for in the capacity shortfall calculations provided by EGI earlier in that tab? Please explain EGI's understanding of the reason for the turnbacks and why Enbridge "believes there are future Dawn Parkway System growth opportunities and limited risk of capacity turnback"?

51. Please provide any projections available to Enbridge concerning the effect of the COVID-19 pandemic and resulting economic recession on:

a. Economic activity in the US, especially New England

b. Economic activity in Canada, especially:

i. Ontario

    ii. Quebec

    iii. New Brunswick

c. Gas demand in the US, especially New England

d. Gas demand in Canada, especially:

    i. Ontario

    ii. Quebec

    iii. New Brunswick

e. Electric demand in the US, especially New England

f. Electric demand in Canada, especially:

    i. Ontario

    ii. Quebec

    iii. New Brunswick

52. Please provide any available analysis of the potential effect of the COVID-19 pandemic and resulting economic recession on the need date for the proposed facilities.

53. Please explain whether any commitments from other parties to take gas over the proposed facilities (or over other facilities serving Ontario load that would alleviate demand for the proposed facilities) may be delayed or cancelled due to the the COVID-19 pandemic and resulting economic recession.

Issue 3 – Alternatives

54. Please provide cost impact estimates for the alternative supply alternatives mentioned in Staff IR #4.

55. Reference: Exhibit A, Tab 7, Page 18 to 28. In EB-2019-0188, Exhibit I.ED.4, Page 2, Enbridge stated: "A provision for future abandonment costs is included in OEB approved gas distribution rates and is collected in the asset depreciation rate. Future abandonment costs charged to earnings through the depreciation expense are recorded as a liability on the Enbridge Gas financial statements and are collected from all ratepayers."

    a. Please provide the total for all of Ontario for the above-referenced "future abandonment costs charged to earnings through the depreciation expense …

recorded as a liability on the Enbridge Gas financial statements and … collected from all ratepayers."

b. How much will Enbridge's liability or reserve for abandonment costs increase to account for the Hamilton Pipeline?

c. How much will Enbridge reserve ($) for abandonment costs associated with the Hamilton Pipeline? Please provide an estimate per year and in total over the economic life of the project.

d. How much would it cost to safely cease operations of the proposed pipeline if in the future the pipeline was no longer used and a decision was made to cease operations and abandon the pipe? Please make and state assumptions as necessary.

e. Does Enbridge reserve funds for abandonment costs in a way that ensure ratepayers are protected in the event of Enbridge going bankrupt?

f. Please provide a full accounting of Enbridge's abandonment costs.

g. Please confirm that Enbridge did not account for the cost of abandonment in its comparison between build and no-build alternatives.

h. Please explain whether Enbridge could meet its in-franchise forecast gas demand using existing pipelines, including the TransCanada Mainline, without building the Hamilton Pipeline for each year, from the winter of 2021/22 through the end of Enbridge's forecast.

56. Please provide Enbridge's estimate of the costs (in $/MJ or similar units) avoided by energy efficiency in its Ontario service territories, with all supporting workpapers.

57. Please provide Enbridge's forecasts of gas prices by month, for whatever period Enbridge has forecasts, for:

a. Empress

b. Appalachian hubs relevant to Enbridge gas procurement and planning

c. Basis to Dawn and other relevant hubs from Appalachian hubs

58. Please provide a list of load-related T&D projects planned by Enbridge in its service areas that would be served from proposed pipeline, and for each such project:

a. the location of the project,

b. the cost of the project,

c. the design-day shortfall anticipated in each year without the project.

59. Please provide Enbridge's projection of the daily capacity on the TCPL Mainline to Enbridge's service territory, for the winters of 2020/21 through 2035/36.

    a. Please explain any changes in that capacity.

60. Please provide Enbridge's forecasts through 2036, with supporting documentation, for

    a. the cost of gas at Empress

    b. the charges on the TCPL Mainline

    c. the effect of changes in TCPL Mainline sales and revenue on Enbridge's charges for recovery of TCPL sunk costs.

61. Please provide Enbridge's analysis of the annual and present-value costs of serving future load over:

    a. The TCPL Mainline, net of effects on Enbridge stranded-cost charges.

    b. The proposed facilities, including capital costs.

62. Please provide Enbridge's estimated methane emission rates, including leakage, intentional and incidental releases from measurement and other operations, and venting required by periodic maintenance from:

    a. Existing Enbridge pipelines,

    b. The Enbridge distribution system

    c. Anticipated from Hamilton pipeline