Filed: 2023-08-23
EB-2022-0156
EB-2022-0248
EB-2022-0249

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Schedule B; and in particular sections 90(1) and 97 thereof;

AND IN THE MATTER OF an application by Enbridge Gas Inc. for an order granting leave to construct natural gas distribution pipelines and ancillary facilities that make up a Community Expansion Project to serve the Township of Selwyn in the County of Peterborough.

AND IN THE MATTER OF an application by Enbridge Gas Inc. for an order granting leave to construct natural gas distribution pipelines and ancillary facilities that make up a Community Expansion Project to serve the community of Mohawks of the Bay of Quinte First Nation and part of Tyendinaga Township.

AND IN THE MATTER OF an application by Enbridge Gas Inc. for an order granting leave to construct natural gas distribution pipelines and ancillary facilities that make up a Community Expansion Project to serve the Hidden Valley community in the Town of Huntsville and District of Muskoka.

ENBRIDGE GAS INC.

REPLY SUBMISSION

Contents

A. Introduction

1. These are the reply submissions of Enbridge Gas Inc. ("Enbridge Gas" or the "Company") in respect of three separate applications to the Ontario Energy Board ("OEB") under section 90 of the *Ontario Energy Board Act, 1998* ("OEB Act") for orders granting leave to construct for the following projects (collectively referred to as the "Applications" or "Projects"):

   (a) Selwyn Community Expansion Project, EB-2022-0156 ("Selwyn Project");

   (b) Mohawks of the Bay of Quinte ("MBQ") Community Expansion Project, EB-2022-0248 ("MBQ Project");

   (c) Hidden Valley Community Expansion Project, EB-2022-0249 ("Hidden Valley Project").

2. Enbridge Gas is filing these reply submissions in respect of each Application noted since there are many common intervenor submissions applicable across the Applications. Enbridge Gas highlights below where specific submissions relate to a particular Application.

3. The Projects are in the public interest and each requested leave to construct should be granted. The Projects are required to support the Government of Ontario's Natural Gas Expansion Program ("NGEP") and are designed to expand access to safe, reliable, and affordable natural gas to areas of Ontario that do not currently have access to natural gas. The need for the Projects is directly supported by each community's municipal and Indigenous government (as the case may be) through their request for natural gas for their constituents. Core to the need for the Projects is the clearly expressed preference and interest in natural gas service from future customers within each community in question. In this regard, OEB staff support the granting of leave to construct each of the Projects.

4. Environmental Defence ("ED") and Pollution Probe ("PP") submissions challenging the Company's attachment forecast for each Project, together with their request that the OEB deny the Applications or impose conditions of financial responsibility and survey information requirements, should be rejected by the OEB. The OEB should reject the submissions of ED and PP since the premise on which they rely is ill-conceived and, if accepted, requires the OEB to adopt an abstract over-simplification of energy conversion that is neither representative of the actual energy choices or energy preferences customers made or expressed in response to Enbridge Gas's attachment surveys nor reflective of the actual energy conversion costs dependent on physical parameters and limitations of their specific homes or businesses in the Project areas. The Federation of Rental-housing Providers of Ontario ("FRPO") made submissions regarding the proposed pipeline facilities primarily in respect of the MBQ Project. FRPO proposes an inefficient pipeline alternative that is not technically feasible and should be rejected by the OEB.

B. The Public Interest under section 96(1)

5. With respect to the consideration of the public interest under section 96(1) of the OEB Act, ED states that eligibility for the natural gas expansion subsidy under the Government of Ontario's NGEP does not require that the OEB apply a more lax standard. Notwithstanding ED's submission, it is important to note that the OEB cannot and should not ignore the *Access to Natural Gas Act, 2018* and its regulations when assessing the public interest under section 96(1) of the OEB Act.

6. The legislation and regulations that enable the NGEP were established to further the public interest consistent with the OEB's objectives to facilitate the rational expansion of natural gas distribution systems. The decision of the Ministry of Energy to approve the Projects for funding on June 9, 2021 under the NGEP further supports that the Projects are in the public interest. As noted by the OEB in its April 17, 2023 Decision, "[t]he OEB in administrative and adjudicative decisions has accepted that the *Access to Natural Gas Act, 2018* and its proposed program implementation represents an important consideration in the determination of the public interest in providing the availability of

natural gas service in unserved communities."[1] In this regard, while the factors that the OEB considers in the ordinary course in determining the public interest under section 96(1) of the OEB Act remain intact, they should not be considered in isolation from the Minister's expression of the public interest.

C. Pollution Probe's Inappropriate Use of Evidence

7. Throughout its submissions, Pollution Probe ("PP") references various exhibits and transcripts that form part of Enbridge Gas's rebasing application in EB-2022-0200. Doing so is inappropriate and any submissions made relying on such references should be given no weight. The information referenced forms the evidentiary basis for an entirely different application with a different context. Notwithstanding that the information relates to another Enbridge Gas matter, the Company does not adopt that evidence for the purposes of the OEB's consideration of the Applications. Pursuant to section 15.1(1) of the *Statutory Powers Procedure Act*, "the tribunal may treat previously admitted evidence as if it had been admitted in a proceeding before the tribunal, if the parties to the proceeding consent." Enbridge Gas does not consent to the evidence in EB-2022-0200 being admitted in the Applications. In the absence of Enbridge Gas's consent, PP is tendering new evidence which is inappropriate to do at this stage of the proceeding and contrary to previously issued Procedural Orders. As such, the submissions of PP made on the basis of the information in question should be given no weight.

D. Project Costs and Economics

8. The submissions of ED and PP focus primarily on project cost and economics. Both ED and PP argue that the Company's attachment forecast for each Project is unreliable because, in their view, there will be future uptake of electric heat pumps by Project area customers.

9. Their position is premised on one singular and incorrect notion that electric heat pumps are more cost effective than natural gas service in every and all customer circumstances

[1] Decision on Intervenor Evidence and Confidentiality (EB-2022-0156/0248/0249), p. 3.

both technically and financially and that any assertion to the contrary is merely an expression of bias and not fact. The OEB should reject the submissions of ED and PP since the premise on which they rely is ill-conceived and, if accepted, requires the OEB to adopt an abstract over-simplification of energy conversion that is neither representative of the actual energy choices or energy preferences customers made or expressed in response to Enbridge Gas's attachment surveys nor reflective of the actual energy conversion costs dependent on physical parameters and limitations of their specific homes or businesses in the Project areas.

10. In any event, while ED, in particular, would prefer that the focus of the Applications be the adjudication of the economics of electric heat pumps relative to natural gas, Enbridge Gas submits that the OEB is not required in exercising its discretion in the public interest to make a decision on the relative merits of electric heat pumps to natural gas. This is because in each Application Enbridge Gas has provided an attachment forecast based upon extensive consultation with each of the communities and their representative governments and survey results that represent the energy interests expressed by actual residents and business-owners within the Project area, which intrinsically incorporates all factors including financial and non-financial considerations. As concluded by OEB staff, Enbridge Gas's market survey results are the best information available on the record and the survey results suggest that there is sufficient interest in natural gas conversion, in the relevant communities, to allow Enbridge Gas to achieve its customer attachment forecasts.[2]

11. For the same reasons as ED, PP asserts that the evidence is insufficient to support the customer attachment forecasts. In this regard, Enbridge Gas directs the OEB's attention to paragraphs 1-16 of the Argument-in-Chief which provides a detailed summary of Enbridge Gas's community consultation, survey and survey results that are the foundation of the attachment forecasts. Neither PP or ED provided a counter-argument to those facts or submissions.

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[2] EB-2022-0249, OEB staff Submission, August 9, 2023, p. 10. EB-2022-0248, OEB staff Submission, August 9, 2023, pp. 11-12. EB-2022-0156, OEB staff Submission, August 9, 2023, p. 11.

12. This is because the sole basis for ED's and PP's assertions regarding the Company's attachment forecasts is that the customer surveys do not adequately inform potential customers of the advantages of electric heat pumps, generally or, more particularly, select results from the analysis and model created by Guidehouse Inc. ("Guidehouse") and the further analysis provided by Enbridge Gas.[3]

13. In making its assertions, ED takes two approaches. First, ED selectively chooses a specific aspect of the analyses to justify its position regarding the cost effectiveness of electric heat pumps. Second, ED asserts that the Guidehouse model and analysis and Enbridge Gas's further analysis are biased. However, ED has misconstrued the scope and nature of the Guidehouse and Enbridge Gas analyses. In fact, the analyses clearly point out the over-simplification of ED's electric heat pump premise.

14. To understand the over-simplification that ED and PP has undertaken, it is important to consider the scope, nature and intent of the Guidehouse and Enbridge Gas analyses.

15. Unrelated to the Applications, Enbridge Gas in Q1 2023 engaged Guidehouse to provide an assessment of the annual operating costs of high-efficiency electric cold climate air source heat pumps within four Ontario climates (Windsor, Toronto, Ottawa, and Thunder Bay) at three peak winter design loads (2.5 tons, 4 tons, and 5 tons). In interrogatories, ED requested Enbridge Gas's estimate of the difference in average annual operational costs. To be responsive, Enbridge Gas filed the Guidehouse model and an accompanying report. As noted below, it was not possible for the Company to prepare an estimate for an average customer within the Project areas in question.[4]

16. Interrogatory Exhibit I.ED.16, part e) also sought lifetime cost-effectiveness analysis. It is important to note that the scope of the Guidehouse model consisted of an assessment of operating costs only and did not include an assessment of upfront capital costs which are required to conduct a customer lifetime cost-effectiveness analysis of converting a home

[3] ED Submission, August 9, 2023, p. 6.

[4] EB-2022-0249, May 31, 2023, Exhibit I.ED.16, part e).

to a high-efficiency electric cold climate air source heat pump configuration.[5] To be responsive to the interrogatory however, in May 2023 following receipt of ED's interrogatory, Enbridge Gas requested low-end and high-end upfront cost estimates from HVAC contractors for conversions to both high-efficiency electric cold climate air source heat pump configurations and natural gas furnace configurations.[6]

17. To provide ranges for the customer lifetime cost-effectiveness of converting a home to a high-efficiency electric cold climate air source heat pump configuration compared to a natural gas furnace configuration, Enbridge Gas combined the upfront cost information gathered from HVAC contractors with the operational cost information from the Guidehouse study. Twelve scenarios were assessed.[7] The scenarios included three different electric heat pump configurations for Toronto and Ottawa[8] and for the low-end and high-end upfront costs respectively. The results of the Enbridge Gas analysis were reproduced in Table 3 of Exhibit I.ED.16, part e). Attachment 7 to that interrogatory response provided the detailed basis of the data appearing in Table 3.

18. Assessing the upfront costs required to convert a home to a high-efficiency electric cold climate air source heat pump configuration requires consideration of several factors, which results in a more complex analysis than assessing the upfront costs required to convert a home to a natural gas furnace configuration. For example, in addition to the cost of the electric heat pump itself, a home could also require electrical panel upgrades, exterior service upgrades from the electric utility, internal wiring upgrades, and/or duct work improvements. There is a wide range of potential upfront costs depending on the existing configuration of the home itself. For this reason, the Company was not able to provide an average upfront cost, which would be required to develop an average customer lifetime cost-effectiveness analysis for conversions to electric heat pump

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[5] Ibid, p. 3.

[6] Ibid, pp. 3-4.

[7] Ibid, pp. 4-5.

[8] In the Guidehouse model whole building energy modeling with EnergyPlus was used to model single family residential prototype models and generate hourly heating profiles for four locations across Ontario: Ottawa, Toronto, Windsor, and Thunder Bay. The system performance criteria in conjunction with the heating profiles from the energy model were used to calculate hourly consumption of natural gas and electricity for each of the system configurations. (Exhibit I.ED.16, part e), Attachment 2, p. 1)

configurations. Any attempt to do so would result in an oversimplification of the conversion costs and would not necessarily be representative of the actual conversion costs for specific homes or businesses in the Project areas.[9] Enbridge Gas was clear in its response that the results arising from its analysis were illustrative and that more refined research would be required to establish robust estimates/assumptions.[10]

19. Enbridge Gas disagrees with PP's characterization of the Guidehouse and Enbridge Gas analyses. PP asserts that the analyses were an attempt to "bridge a gap" in the Applications which did not adequately consider consumer choice in the Project area.[11] However, the Guidehouse model and report were, firstly, an independent exploration of the complex comparison between electric heat pumps and natural gas (separate and apart from the Applications) and secondly, Enbridge Gas's analysis was an effort to respond to an interrogatory. As noted above, the analyses are not needed to justify the attachment forecast or the reflection of customer choice. These stand on their own through the Enbridge Gas attachment forecasts that directly reflects the preferences of consumers based on a broad and thorough community engagement.

20. In asserting its unqualified conclusion that electric heat pumps are more cost effective than natural gas in every and all customer circumstances, ED ignored the fact that the results of Enbridge Gas's cost-effectiveness analysis in Table 3 are end points of ranges and thereby ignored the fact that there are a number of results within those end points since every home and circumstance is different. Instead, ED narrowly focused on the lowest possible results in Table 3 and ignored key qualifications that must be considered when interpreting the results.[12]

21. Recognizing the complexity in assessing the conversion costs and the variables that must be considered, in reference to the results in Table 3, Enbridge Gas indicated that "conversion to a high-efficiency electric cold climate air source heat pump configuration

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[9] EB-2022-0249, May 31, 2023, Exhibit I.ED.16, part e), p. 3.

[10] Ibid, p. 3.

[11] EB-2022-0249, PP Submission, August 8, 2023, p. 12. EB-2022-0248, PP Submission, August 8, 2023, p. 11. EB-2022-156, PP Submission, August 8, 2023, p. 11.

[12] ED Submission, August 9, 2023, p. 6.

could be more cost-effective for space heating for some homeowners when compared to a conversion to a natural gas furnace configuration, whereas for other homeowners the natural gas solution would be more cost-effective."[13] It is important to also note that with respect to energy costs, the analysis made no assumptions regarding forward price curves and utility rates for either natural gas or electricity. The energy costs used in the analysis are a snapshot in time and thus may not be reflective of consumer expectations for long-term energy prices.[14] It also does not include electricity price changes arising from energy transition, including those related to widespread electrification.

22. In effect, the analyses completed by Guidehouse and supplemented by Enbridge Gas is a scenario analysis that is a theoretical construct based on a particular set of data at a point in time. The analyses are not a substitute for the interests expressed by actual consumers within the Project areas. Those expressed interests reflect consumers' preferences and energy decisions encompassing all relevant factors, including financial and non-financial considerations relevant to their geographic location, heating need, housing and electrical standard.

23. Because the results of the Guidehouse model and the Company's additional analysis do not unequivocally support the notion espoused by ED that electric heat pumps are superior in all circumstance, ED asserts that the Guidehouse model and Enbridge Gas analysis are biased. However, the Guidehouse report summarizing the methodology underpinning the Guidehouse model has very clearly set out the assumptions made and the limitations related to the results. Furthermore, in both Exhibit I.ED.16 and the Company's Argument-in-Chief, the basis for the Enbridge Gas analysis was set out in detail. Importantly, many of the aspects that ED has asserted as lacking had in fact been included in the analysis[15]. For the purposes of the OEB's consideration of the Applications, the examples ED lists to assert bias in fact show and reinforce that the determination of the cost-effectiveness of electric heat pumps relative to natural gas is complex and it cannot be made to fit within a singular all-encompassing conclusion as

[13] EB-2022-0249, May 31, 2023, Exhibit I.ED.16, part e), p. 6.
[14] EB-2022-0249, May 31, 2023, Exhibit I.ED.16, part e), p. 5.
[15] Enbridge Gas Argument in Chief, July 25, 2023, p. 12, para 26.

proposed by ED. Attempting to do so will impose on the desire of actual consumers and result in an over-simplification that will disregard what is truly driving the choices expressed.

24. ED questions Enbridge Gas's attachment forecasts because ED believes that the surveys used for each Project to establish customer interest in converting to natural gas were biased for not setting out in detail various government incentives to install electric heat pumps.[16] Enbridge Gas submits that the surveys are appropriate and the survey results are a sound basis on which to establish the attachment forecasts. In the surveys Enbridge Gas explicitly informed the respondent of the existence of electric heat pumps and indicated that government incentives were available.[17]

25. ED also believes that the attachment surveys were biased because they did not set out the merits of electric heat pumps as ED perceives them to be. However, as noted above the relative cost comparison between electric heat pumps and natural gas furnaces is complex and highly variable and it would be inappropriate to present in the survey the over-simplification that is proposed by ED. ED also takes the view that because Enbridge Gas provided customers with natural gas savings relative to oil, propane and electric resistance heating solutions, Enbridge Gas should also provide savings related to electric heat pump solutions.[18] PP makes a similar submission.[19] These submissions are not appropriate as consumer conversions from electric heat pumps to natural gas is not a scenario which Enbridge Gas's attachment forecast relies on. Based on Enbridge Gas's market research conducted within the Project areas, the current uptake of electric heat pumps is minimal (0% to 4%).[20]

26. Furthermore, consumers that are the subjects of a natural gas attachment survey receive their energy supply from a non-natural gas source and the purpose of the survey was to

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[16] ED Submission, August 9, 2023, p. 9.

[17] EB-2022-0249, May 31, 2023, Exhibit I.ED.16, p. 2.

[18] ED Submission, August 9, 2023, p. 10.

[19] EB-2022-0249, PP Submission, August 8, 2023, p. 14. EB-2022-0248, PP Submission, August 8, 2023, p. 13. EB-2022-0156, PP Submission, August 8, 2023, p. 13.

[20] EB-2022-0249, May 2, 2023, Exhibit I.ED.1, pp. 2-3.

solicit the consumer's interest in converting from their existing energy source to natural gas – not to electric heat pumps. The Applications are for leave to construct the Projects to deliver natural gas and not an application for electrification. Enbridge Gas has no ability to cause consumers to convert to electric heat pump solutions via the Applications. In addition, providing consumers with information related to conversions to non-natural gas energy solutions without consideration of those energy solutions' supply-side requirements and implications would not be appropriate or valuable.[21]

27. A key deficiency in ED's argument is its failure to recognize that the provision of electric solutions are provided by electric utilities and HVAC contractors. ED appears to believe that consumers are ignorant of the facts and that electric utilities and HVAC contractors have no interest in providing electric solutions. This is contrary to PP's perspective. PP, without any supporting evidence whatsoever asserted that "Ontario heat pumps have recently outpaced traditional furnace installations", and then provided an advertisement from an HVAC contractor promoting a green energy rebate.[22] If this activity is occurring it is clear that the role in presenting consumers with comprehensive electric heat pump solutions is best left to those that can supply those solutions. At the same time, ED not only ignores the energy solution preferences expressed by consumers in the Project areas but also the express desire of the municipalities and communities that have advocated for the natural gas Projects, not to mention the Ministry of Energy under the NGEP, to make natural gas available to the communities in question. Notwithstanding that these leaders are attempting to provide a natural gas energy option for their constituents, ED appears to mistakenly believe that these leaders are ignorant of non-natural gas solutions.

28. The issue set out by ED is a true red herring. The issue before the OEB is whether there is sufficient interest in the conversion to natural gas from existing non-natural gas sources of energy to justify the attachment forecasts. In this regard, the attachment forecasts are based on the energy interests expressed by actual residents and business-owners within the Project area, which intrinsically incorporates all factors including financial and non-

[21] EB-2022-0249, May 2, 2023, Exhibit I.ED.28, part a).
[22] PP Submissions, August 8, 2023, Appendix A.

financial considerations.[23] The Company has no reason to believe that the attachment forecasts are inaccurate and submits that the project need and economics support the granting of leave to construct for each Project. OEB staff agrees that Enbridge Gas's market survey results are the best information available on the record and that the survey results demonstrate sufficient interest in natural gas conversion, in the relevant communities, to allow Enbridge Gas to achieve its customer attachment forecasts.[24]

29. ED and PP also believe that the Enbridge Gas attachment forecasts are unreliable because they do not consider the potential for converting customers to leave the natural gas system in the future. This again is for the singular reason that ED and PP believe in the absolute cost-effectiveness of electric heat pumps now and into the future. However, this is a very narrow view that disregards the many variables and uncertainties that are at play as energy transition evolves. Policy changes, growing electricity costs to modernize and renew the grid and build out supply, technological change, and economic cycles could change the economic relationship between electric heat pumps and natural gas in the future. As such, the OEB should give no weight to the assertion made by either ED or PP in this regard.

30. Because ED wrongly believes that the attachment forecasts are unreliable, ED has asserted that "it is essential that the OEB state today, up front, that Enbridge will bear any revenue shortfalls" and that a "standard prudence review at the time of rebasing following the end of the rate stability period is far from sufficient"[25] to prevent existing customers from bearing the cost risk. PP takes the same view.[26] The position of ED and PP should be rejected. In this regard, Enbridge Gas agrees with OEB staff. As stated by OEB staff, the OEB will have the opportunity to review the actual project costs and revenues and determine the appropriate amounts to use for ratemaking purposes, which is in accordance with the OEB's findings in Enbridge Gas's application for leave to

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[23] EB-2022-0249, May 2, 2023, Exhibit I.ED.17, p. 2.

[24] EB-2022-0249, OEB staff Submission, August 9, 2023, p. 10. EB-2022-0248, OEB staff Submission, August 9, 2023, pp. 11-12. EB-2022-0156, OEB staff Submission, August 9, 2023, p. 10.

[25] ED Submissions, August 9, 2023, p. 13.

[26] PP Submissions, August 8, 2023, p. 5.

construct approval of the Haldimand Shores project.[27] The future OEB panel is best placed to consider the actual attachments relative to forecasts within an evolving energy sector.

31. Furthermore, Enbridge Gas submits that the OEB should also reject ED's and PP's submission that Enbridge Gas be directed to provide information on the annual operating cost of electric heat pumps relative to the operating cost of natural gas. In the ordinary course, Enbridge Gas does not provide information to consumers regarding conversion to non-natural gas energy solutions (e.g., electricity, oil, propane). Providing consumers with information related to conversions to any non-natural gas energy solution, in particular electric heat pumps, without consideration of those energy solutions' supply-side requirements would not be appropriate or valuable.[28] That is a role best left to the providers of those non-natural gas energy solutions.

E. Application Specific Submissions

OEB Staff's Submissions Regarding Indigenous Consultation

32. With respect to the Selwyn and Hidden Valley Projects, OEB staff submits that the OEB should wait to receive the letter of opinion from the Ministry of Energy before providing its final approval to grant leave to construct for the Projects, and that if the letter of opinion is not filed prior to record close, the OEB can place the proceeding in abeyance until such time that the letter is filed.[29]

33. On August 8, 2023, the Ministry of Energy provided Enbridge Gas with letters of opinion for both the Selwyn and Hidden Valley Projects. The letters state that "[b]ased on this review of materials and our outreach to Indigenous communities, ENERGY [Ministry of Energy] is of the opinion that the procedural aspects of consultation undertaken by Enbridge to-date for the

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[27] OEB staff Submissions, August 9, 2023, p. 5.

[28] EB-2022-0249, May 2, 2023, Exhibit I.ED.28, p. 2.

[29] EB-2022-0156, OEB Staff Submissions, August 9, 2023, p. 20. EB-2022-0249, OEB Staff Submissions, August 9, 2023, p. 19.

purposes of the OEB's Leave to Construct for the Project are satisfactory".[30] As such, Enbridge Gas submits that there should be no delay in the OEB's leave to construct decision with respect to both the Selwyn and Hidden Valley Projects.

PP's Submissions Regarding the Environmental Report

34. With respect to the Selwyn Project, PP commented that the Environmental Report ("ER") identified exposed bedrock in the Project area with a high likelihood of encountering bedrock. PP stated that because most residents were on well water and blasting may be required, a well monitoring program would need to occur and this could, according to PP, affect timelines and cost.

35. The ER includes a desktop analysis of ground conditions within the Project's Study Area. The ER indicated that the average overburden in the area is 9.7 m and that some rock may be encountered at the surface. Enbridge Gas has conducted a geotechnical assessment to further assess the ground conditions along the pipeline route and confirm the desktop conclusions. The field work concluded that no bedrock is expected along the pipeline alignment at the pipeline installation depths. This geotechnical assessment was used to refine the Project cost estimate with the constructor and to establish a preliminary construction methodology plan to manage the ground conditions. In the event that bedrock is encountered in the field, the contractor will attempt using a hoe ramming or expanding grout in appropriate locations. As an additional precaution, a voluntary well water monitoring program was conducted for this Project which aims to assess the water quality and quantity of private wells within a 50 m distance from the route before construction. 85 residents were notified of the opportunity to participate, and based on responses received to date, one well has been sampled, resulting in minimal impacts to Project costs.

36. PP raised the same issue with respect to the Hidden Valley Project. In this regard, Enbridge Gas conducted test digs to further assess the ground conditions along the

[30] EB-2022-0156, August 23, 2023, Exhibit H, Tab 1, Schedule 1, Attachment 3. EB-2022-0249, August 23, 2023, Exhibit H, Tab 1, Schedule 1, Attachment 3.

pipeline route. The results of the digs concluded that some bedrock will be encountered along the pipeline route at the proposed installation depths. The data was used to refine the Project cost estimate with the constructor and to establish a preliminary construction methodology plan to manage the ground conditions. In the areas where bedrock is expected, the contractor will attempt using a hoe ramming or expanding grout in appropriate locations.[31]

37. In spring 2023, letters were handed out to residents in the Project area to offer participation in a pre-construction well monitoring program. Responses to the letters confirmed that residents in the Project area are on municipal water supply. As such, the domestic supply wells identified in the ER are not the primary source of water supply for the community. To date, no monitoring requests have been received. Interruptions to the municipal water supply service are not anticipated as a result of construction.

38. PP also raised this issue for the MBQ Project. The Environmental Report includes a desktop analysis of ground conditions within the Project's Study Area. Within 100 m of the Project's pipeline route, there are a total of 154 Water Well Records ("WWR"). Of these 154, 105 are considered residential/agricultural. Based on the WWRs within 100 m of the pipeline route, depth of bedrock ranged between 0 m below ground surface ("mbgs") to 18 mbgs, with an average depth to bedrock being 3.7 mbgs. The varying overburden thickness ranges from 1 m to 20 m with the pipeline will be buried between approximately 0.9 m to 1.2 m deep (and at least 2.0-2.5 m for watercourse crossings).

39. Enbridge Gas conducted test digs to further assess the ground conditions along the pipeline route. The results of the digs concluded that bedrock will be encountered along the pipeline route at the proposed installation depths. The data was used to refine the project cost estimate with the constructor[32] and to establish a preliminary construction methodology plan to manage the ground conditions. In the areas where bedrock is

[31] EB-2022-0249, May 2, 2023, Exhibits I.PP.18, I.PP.21, I.PP.22 and I.PP.23.
[32] EB-2022-0248, May 2, 2023, Exhibit I.STAFF.3.

expected, the contractor will attempt using hoe ramming or expanding grout in appropriate locations.

40. As an additional precaution, a voluntary well water monitoring program was conducted for this project which aims to assess the water quality and quantity of private wells within 100 m of the pipeline route before construction. 327 letters were mailed out to addresses and based on responses received to date, three wells have been sampled, resulting in minimal impacts to project costs.

FRPO Submissions

41. FRPO made submissions regarding the technical pipeline parameters for both the MBQ Project and the Selwyn Project. However, before providing those specific submissions, FRPO commented on the nature and the scope of the facilities information filed in support of the Applications. FRPO asserted that the pre-filed facilities information did not meet the requirements of the OEB's Natural Gas Facilities Handbook (the "Handbook"). FRPO provided no justification for its assertion and its submission should be rejected. The filing requirements for a proposed project are set out at Exhibit D of the Handbook. There is no indication from FRPO as to how the Projects do not comply with those sections. Enbridge Gas submits that the facilities evidence filed in support of the Applications is appropriate and consistent with the Handbook. This is reflected in the determination of completeness by the OEB following the filing of the Applications.

42. With respect to the MBQ Project specifically, FRPO submits that Enbridge Gas should be approved for NPS 2 for the entire Project instead of the proposed NPS 4. However, in making this submission FRPO disregards key technical evidence provided by Enbridge Gas. Enbridge Gas indicated that with the entire Project installed as NPS 2, the low pressure in year 10 approaches minimum allowable pressures based on the forecasted attachments. The model demonstrates it is not feasible to install the entire Project as NPS 2, as system pressures fall below minimum allowable pressures with 100% attachment rate of the Project.[33] Enbridge Gas believes it to be more prudent to install a design with

[33] EB-2022-0248, May 2, 2023, Exhibit I.FRPO.4.

capacity for the ultimate potential in the area. Based on the Natural Gas Questionnaire and Expressions of Interest ("EOI") results, the 65% attachment rate assumed for the 10-year forecast is conservative. The Questionnaire indicated 90% interest in natural gas conversion.[34] Supplementary to the Questionnaire the EOI included 103 responses confirming interest,[35] findings consistent with MBQ's experience with its members and constituents.[36] FRPO, however, takes the position that if the existing system cannot provide the needed demand, increasing the pipe size by looping an NPS 2 with NPS 4 should be considered. This is entirely inefficient and should be rejected by the OEB. A future looping will be an unnecessary duplication of costs (e.g., contractor mobilization, yard construction, environmental assessments, road repairs, etc.). There is also additional inconvenience for the community with further ground disturbance.

F. Conclusion

43. Based on the foregoing, Enbridge Gas respectfully requests that the OEB reject the submissions of ED, PP and FRPO and issue an order granting leave to construct for the Selwyn Project, the MBQ Project and the Hidden Valley Project pursuant to section 90 of the OEB Act without the conditions proposed by those intervenors.

[34] EB-2022-0248, Exhibit B, Tab 1, Schedule 1, p. 3, para 10.
[35] EB-2022-0248, May 2, 2023, Exhibit I.STAFF.1, part d).
[36] MBQ Submission, August 9, 2023 p. 3, para. 13.