Enbridge Gas Inc.
50 Keil Drive North
Chatham, Ontario, Canada
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June 28, 2023

Ms. Nancy Marconi
Registrar
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Marconi:

Re: System Access Proceeding
Ontario Energy Board File Number: EB-2022-0094

Pursuant to Procedural Order No. 6 issued March 13, 2023, attached are Enbridge Gas' responses to the information requests submitted by OEB Staff, the Ontario Petroleum Institute and the Canadian Biogas Association.

Procedural Order No. 6 indicates that intervenors and OEB Staff who wish to file replies to Ontario Petroleum Institute's final argument submissions must file them with the OEB by July 28, 2023.

Given the scheduling of the oral hearing and argument for Enbridge Gas' 2024 rates application (EB-2022-0200), Enbridge Gas would like to request an extension to the July 28, 2023 date for final submissions in this System Access proceeding by 4 weeks. Many of the staff working on Enridge Gas' submissions in this proceeding are also heavily involved with the review of the 2024 rates application.

Should you have any questions on this submission, please do not hesitate to contact me.

Yours truly,

Patrick McMahon

Digitally signed by Patrick McMahon
Date: 2023.06.28 17:04:14 -04'00'

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Ritchie Murray, OEB
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ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Energy Board Staff

Reference: EGI Evidence, Page 2, Paragraphs 7-9

Preamble:
Enbridge Gas summarizes its understanding of OPI's concerns with Enbridge Gas's process for connecting Ontario gas producers to the distribution system. OPI's impression is that the process is not a robust, prescriptive one, but rather an ad hoc process with no firm timelines or standardized information exchange procedures. OPI believes that greater transparency about available market/capacity in the Enbridge Gas distribution system is needed. OPI submits that Ontario producers are frequently "shut-in" (i.e., curtailed) for extended periods of time with insufficient notice and little or no effort to maintain flows.

Question:
How could Enbridge Gas improve its customer service and communications with local producers to address the issues raised in OPI's evidence? In the response, please address:

a) How could Enbridge Gas improve transparency regarding intake pressure requirements and shut-in dates at connecting stations?
b) Whether Enbridge Gas would be amendable to information sharing on a collaborative basis with producers in a mutually acceptable format? For example, would Enbridge Gas share a daily snapshot with producers to assist them in making timely decisions? If not, why not?

Response:

a) As noted in the OPI's response Enbridge-11 dated April 14, 2023, connection requests from OPI members have been limited to approximately 5 requests since 2014. The infrequency of these requests requires Enbridge Gas to refamiliarize itself with the facilities and contracts related to local production as they are so infrequent, unique, and complicated. In the example of an extended connection request process put forward by OPI related to Station 5D-501[1], Enbridge Gas granted a unique exception to Lagasco's predecessor by allowing the producer station to be shut in and remain in place without any maintenance being performed so that the producer (and later Lagasco) could avoid paying the required station fees. This unique situation naturally required more time to evaluate the condition of existing injection station equipment which contributed to delays in estimating connection costs for Lagasco.

[1] OPI Evidence, pages 2 – 4.

As Enbridge Gas previously stated, Lagasco also contributed to the delays in the time it took to "consider its options".

Enbridge Gas is continuously working to improve how it communicates with its customers. Enbridge Gas's rebasing application proposes to harmonize its injection services, which will be an opportunity for the utility to also align its account management practices with local producers. This alignment may improve customer service with respect to both the connection process (which includes communication of intake pressure requirements) but also in timeliness of communications related producer shut-ins or other events that may impact producers connected to Enbridge Gas' system.

Prior to harmonizing the injection services, Enbridge Gas can work to standardize and enhance its communications with local producers including more timely responses and updates on the progress of each request. In addition to providing minimum market demand in response to connection requests as it does today, Enbridge Gas could include more detailed market demand and injection pressure requirements for each season.

As outlined at Exhibit EGI-OPI-1 a), Enbridge Gas strives to communicate potential shut-ins with more than the 24-hours notice as required in the contracts with local producers.

b) Enbridge Gas is not aware of any request by producers for this type of information to be shared on a daily or ongoing basis. Enbridge Gas would not be open to sharing daily information with regard to its system operation and local distribution market availability as this type of real-time information is generally not available for external parties and would be extremely resource intensive to distribute to producers.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Energy Board Staff

Reference: EGI Evidence, Pages 3-4, Paragraphs 11-13
EGI Evidence, Page 7, Paragraph 26

Preamble:
Enbridge Gas Inc. (Enbridge Gas) states that:

1) "The detailed process for determining design hour demand (the highest expected firm demand in an hour for natural gas within a day) is contained within evidence submitted as part of Enbridge Gas' 2024 rebasing application.[1] The assessment of local injection into the distribution system is done using the same process, however, consideration must be given to both the highest design hour demand experienced in winter along with the lowest hour demand. The lowest hour demand typically occurs during the summer months on weekends and is where demand for natural gas on the system is the lowest due to lack of space and water heating, and limited process demands. For the acceptance of local injection, the summer condition (i.e., not requiring additional gas in the system) often becomes the primary design constraint due to insufficient demands on the system."
2) Distribution station set points can be adjusted to help prioritize injection from connecting stations, but this is highly dependent on specific system configurations and locations of demands. Overall system safety and reliability must be considered and will supersede any such adjustments.
3) "The local producer's ability to access local markets is dependent on their ability to meet specific system pressure needs such that their supply feeds the Enbridge Gas system and not supplies from other sources (other producers or transmission stations)."

Questions:
a) Please explain the relationship between the "lowest hour demand" and the "summer condition".
b) Does the phrase "not requiring additional gas in the system" mean that there is no flow into the system during the summer condition and that demand is entirely met by line pack? If not, please explain.
c) Please comment on whether a local producer could always supply its natural gas into Enbridge Gas's system provided that the local natural gas is compressed to a pressure higher than the pressure in Enbridge Gas's system at that time (including the pressure drop across the connecting station) provided that the connecting station is set to allow the local natural gas to

[1] EB-2022-0200 at Exhibit 4, Tab 2, Schedule 3

flow into Enbridge Gas' system. Otherwise, please explain. In the response, please comment on how the summer condition and lowest hour demand may be determining factors.

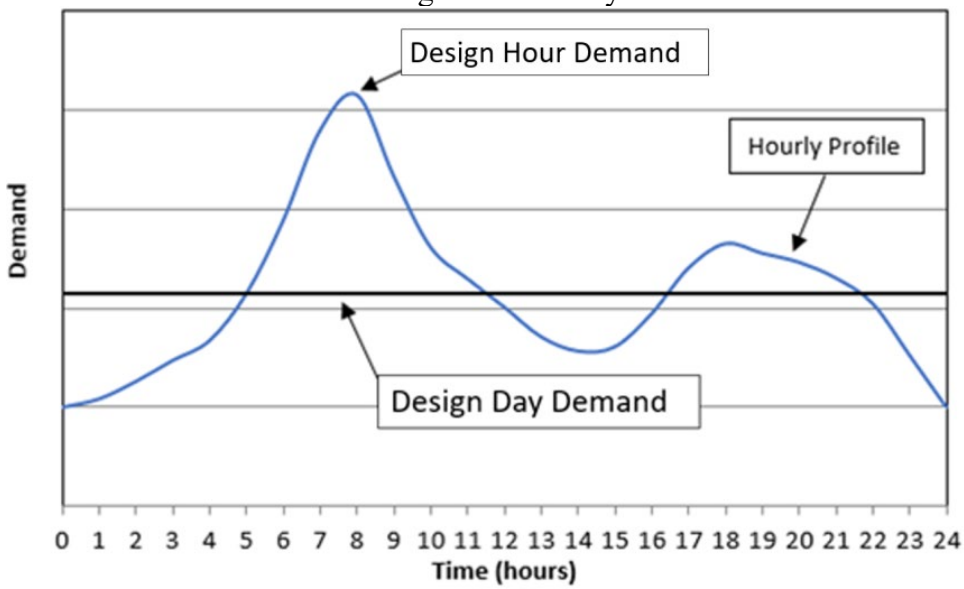
d) Is the maximum amount of Ontario produced natural gas that Enbridge Gas could accept into its system if all the gas was sold on the open market and subject to Rate M13 (i.e., none of the gas was sold to Enbridge Gas under Gas Supply Agreements) equivalent to the maximum amount of Ontario produced natural gas Enbridge Gas could accept into its system if all the gas was subject to Gas Supply Agreements (i.e., all of the gas was sold to Enbridge Gas and none of the gas was sold on the open market)? If not, then please explain.
e) In table form, please list and describe the main system safety and reliability threats posed to Enbridge Gas's system from, at all times, allowing local producers to supply their natural gas into Enbridge Gas's system. For each threat, please provide:
    i. An estimate of the probability of an occurrence
    ii. The consequence(s) of an occurrence
    iii. Any possible mitigants
    iv. Whether the mitigants currently exist or would need to be implemented
    v. An indication of the capital and OM&A costs to implement the mitigants
    vi. Any additional information that may be useful to understanding these threats and their possible consequences
f) Please confirm that Enbridge Gas does not offer to any local producers the compression services required to flow local natural gas into Enbridge Gas's system (i.e., all local producers are responsible for their own compression). Otherwise, please explain.
g) Please explain the current process, method of communication, and timing by which Enbridge Gas notifies local producers as to what pressure their local natural gas must be compressed for it to flow into Enbridge Gas's system.

Response:

a) "Summer condition" refers to the weather conditions applied in the summer assuming 0 HDDs when heating load is off. The lowest hour demand is the hour within a single day at the summer conditions with the lowest flow. The hourly demand on any system varies over a 24 hour period, with the higher demand typically in the morning when residential water heating starts and commercial businesses open, and is lowest in the late evening through to early morning.

   The Maximum Daily Volume is also affected by the hourly profile as illustrated in Figure 1 below. The profile varies by region, customer group, and time of year, but generally demand is highest in the morning with a smaller peak in the afternoon. As the demand on the distribution system increases, so does the capacity for a local producer to inject gas into the system. As demand on the distribution system decreases, so does the capacity for a local producer to inject. Once the system reaches its Maximum Operating Pressure (MOP), a producer will no longer be able to inject.

Figure 1 – Hourly Profile



b) That is correct, but it should be noted that on most distribution systems there is very minimal to no line pack.

c) A local producer's injection station is set to deliver a pressure no higher than the MOP of the system accepting the injection. So long as the system accepting the injection has a pressure lower than the MOP, the station will allow a local producer to inject. When there is very little to no demand on the system, the pressure will quickly rise to the MOP causing the injection station to stop flowing. This condition is most likely to occur during summer conditions at the lowest hour of demand.

d) Yes. The methodology for establishing the Maximum Daily Quantity is the same for all producers, regardless of the contract type that is signed (i.e., GPA, M13). The Maximum Daily Quantity is established as the lesser of:
   a) the producer's maximum daily production capability; or
   b) the capability of the system the producer is injecting gas into to accept the gas, as determined by Enbridge Gas (see response to part a) above).

e) The primary system safety threat identified by Enbridge Gas related to local production injections into Enbridge Gas' system is the gas quality. As such, Enbridge Gas performs regular gas quality sampling at the Ontario producer station sites. The sampling measures Hydrogen Sulfide (H2S), moisture content, and other gas quality parameters to ensure the protection and integrity of Enbridge Gas transmission and distribution networks. Enbridge Gas has a response action plan in place for producer stations when operating conditions or gas quality tests are out of specification. Depending on the gas condition or pressure, actions may include shut in of the producer. The combination of procedures and station design controls (such as filtration and over pressure protection) work to identify gas quality issues and mitigate the potential health and

safety consequences associated with H2S exposure and operational consequences such as regulator freeze-off, frost heave and delivery of off-spec gas to customers.

Gas purchased and delivered from Ontario producers is not done so on a firm basis. Producers have no obligation to deliver their contracted quantities to the system and Enbridge Gas does not rely on receipt of these quantities for system design purposes, therefore, a risk assessment as it pertains to system reliability has not been determined to be necessary.

f) Confirmed.

g) Pressure requirements are communicated as part of the connection process, which is outlined in the Enbridge Gas' evidence on pages 5 and 6 and outlined at Exhibit EGI-OPI-1. The local producers are informed via email when this information is available.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Energy Board Staff

Reference: EGI Evidence, Pages 3-4, Paragraph 13

Preamble:
Enbridge Gas states that if its natural gas system does not have capacity to meet the injection volume requested by a local producer, then other options are considered including the adjustment of distribution station set points and the construction of additional pipeline facilities.

Question:
Please identify and explain any additional options or factors (e.g., seasonal demand) that could affect available capacity and comment on the magnitude and timing of them.

Response:

A system's ability to accept local producer injection is directly related to the amount of customer demand on that system, which varies by customer type and time of year. As further outlined at Exhibit EGI-Staff-2, the capacity of the system is assessed at summer conditions and lowest hour demand. Most systems are heat sensitive such that the highest demand occurs at the coldest temperatures, and during summer conditions the demand is low. Any change in customer demand, addition or loss of customers, and other local producers are all factors affecting the available capacity on a system.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Energy Board Staff

Reference: EGI Evidence, Page 5, Paragraph 20

Preamble:
Enbridge Gas states that it treats an Ontario producer connection request similar to other requests that it receives from customers. The first step in the process involves the producer requesting to connect to the Enbridge Gas system and providing the location and estimated volumes of production. The request is assigned to an Account Manager and forwarded to engineering to assess the request and determine the facilities required to connect to Enbridge Gas's system.

Question:
Please explain the role of Enbridge Gas's Account Manager, including:

a) Frequency of contact with Ontario natural gas producers
b) Typical channels of communication with Ontario natural gas producers
c) Ontario natural gas producers' preferred channel for receiving important information
d) Availability of the Account Manager and their response time to queries from Ontario natural gas producers

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Response:

The role of the Account Manager is to be the primary point of communication between Ontario producers and Enbridge Gas and to work with various internal departments at Enbridge Gas as required to respond to queries and requests of the Ontario producer.

a) The frequency of communication varies significantly by producer and whether they have a specific issue or request for Enbridge Gas. The average producer contacts Enbridge Gas approximately once per year or less as requests from this customer group are infrequent in most cases. Communication frequency may be as high as multiple times per day if a specific issue or request is being worked on.

b) The typical channels of communication with Ontario producers include email and phone.

c) Ontario producers have not communicated their preferred channel of communication for receiving general information to Enbridge Gas, although most communication occurs through email. Ontario producers have identified emergency contact information so that Enbridge Gas can contact them by phone in the event of emergency operational situations that require immediate contact.

d) The account manager is available by email or phone during typical business hours. Producers have contact information for Enbridge Gas personnel that are available 24x7 for emergencies. Enbridge Gas does not track response times to queries from Ontario producers.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Energy Board Staff

Reference: EGI Evidence, Pages 7-8, Paragraph 27

Preamble:
EGI states that, "OPI's assertion that locally produced gas is displacing gas that is purchased upstream of Dawn in areas such as Western Canada is not valid. Should Ontario production be removed from Enbridge Gas' portfolio, that production would be replaced with purchases at Dawn. While Enbridge Gas acknowledges that since Dawn is not a production basin the supply located at Dawn is imported from various production basins across North America, it is not reasonable to suggest that all or even a majority of Ontario production results in avoidance of transportation fuel at rates applicable to long-haul transportation from across the continent."

Questions:
a) Please confirm that for every unit of natural gas not procured by Enbridge Gas from an Ontario producer under a Gas Purchase Agreement, an equivalent unit of natural gas must be procured by Enbridge Gas at Dawn. If not, please explain.
b) Please confirm that the natural gas supplies available at Dawn are transported there through transmission pipelines that most often use natural gas fueled compressors and that originate from various production basins across North America. If confirmed, then please explain why it is not reasonable to suggest that all or even a majority of Ontario natural gas production results in avoidance of transportation fuel at rates applicable to long-haul transportation. If not confirmed, then please explain why not.
c) Please elaborate on the basis for Enbridge Gas's assertion that locally produced gas does not displace natural gas purchased upstream of Dawn in areas such as Western Canada.

Response:

a) Confirmed.

b) Confirmed. Natural gas supplies available at Dawn originate from various production basins across North America. These basins include, but are not limited to, Western Canada (WCSB), Appalachia, Michigan, and the U.S. Midcontinent. "Long-haul" transportation refers to transportation service on the TransCanada Mainline from Empress, Alberta (accessing WCSB production) to locations in eastern Canada. The WCSB is the furthest of these major supply basins that have direct connectivity to Dawn, and the fuel required to transport this gas is significantly higher than that required to move gas from Michigan or Appalachia basins to Dawn. While it can be assumed that displacement of gas purchased at Dawn by gas produced

within Ontario results in fuel savings, it cannot be assumed that all or a majority of the supplies at Dawn incur transportation fuel rates applicable to those of long-haul transportation.

It is important to note that Enbridge Gas is not charged a fuel rate for gas purchased at Dawn. Any cost to move gas supplies to Dawn is embedded into the price charged by suppliers and only to the extent those suppliers are able to give the liquid and competitive market conditions that exist at Dawn.

c) Gas purchased and delivered to Enbridge Gas from Ontario producers under GPAs is not firm and varies in volume day to day. As a result, Enbridge Gas must balance the variation in daily deliveries with other gas purchases. Similar to other balancing activities such as those driven by demand variances, this balancing is done by adjusting purchases at Dawn.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Energy Board Staff

Reference: EGI Evidence, Pages 8-9, Paragraphs 30-31

Preamble:
Enbridge Gas states that:

1) "OPI explained that the principles set out in section 3.2.15A of the Distribution System Code ("Work that requires physical contact with the distributor's existing distribution system is not eligible for alternative bid unless the distributor decides in any given case to allow such work to be eligible for alternative bid") would only apply to the final tie-in to Enbridge Gas's pipeline."
2) "OPI members construct their facilitates with a final above ground flange to which Enbridge Gas installs an isolation valve and then the station which connects to Enbridge Gas' underground pipeline [connecting station]."
3) "Enbridge Gas' [connecting] station includes several components including measurement, pressure control, gas quality, and odorization."
4) It considers "the final connection much broader than just the final tie-in connection to an underground pipeline."

Questions:

a) Please confirm Enbridge Gas's view that the entire connecting station constitutes the final tie-in to Enbridge Gas's pipeline system. Otherwise, please explain.
b) Does Enbridge Gas consider its view in part a) of this question to be consistent with the Distribution System Code? Please explain, using specific references to the relevant sections of the Distribution System Code.
c) If Enbridge Gas does not consider its view in part a) of this question to be consistent with the Distribution System Code, then please provide an explanation for why Enbridge Gas believes it is appropriate for there to be an inconsistency between the contestability rules for electricity and natural gas.
d) Please explain what Enbridge Gas would require for the connecting station work to be contestable.

Response:

a) Confirmed.

b) The Distribution System Code, section 1.4 states "This Code applies to all electricity distributors licensed by the Ontario Energy Board under Part V of the *Ontario Energy Board Act*." Enbridge Gas is not an electricity distributor.

The Distribution System Code (DSC) states the following:

> *3.2.14 Where the distributor requires a capital contribution from the customer, the distributor shall allow the customer to obtain and use alternative bids for the work that is eligible for alternative bid. The distributor shall require the customer to use a qualified contractor for the work that is eligible for alternative bid provided that the customer agrees to transfer the expansion facilities that are constructed under the alternative bid option to the distributor upon completion.*
>
> *3.2.15 The following activities are not eligible for alternative bid: (a) distribution system planning; and (b) the development of specifications for any of the following: i) the design of an expansion; ii) the engineering of an expansion; and iii) the layout of an expansion.*
>
> *3.2.15A Work that requires physical contact with the distributor's existing distribution system is not eligible for alternative bid unless the distributor decides in any given case to allow such work to be eligible for alternative bid.*
>
> *3.2.15B Despite any other provision of this Code, decisions related to the temporary de-energization of any portion of the distributor's existing distribution system are the sole responsibility of the distributor. Where the temporary de-energization is required in relation to work that is being done under alternative bid, the distributor shall apply the same protocols and procedures to the de-energization as it would if the customer had not selected the alternative bid option.*

As stated in response to a) above, Enbridge Gas considers the entire station that connects the local gas producer to the distribution system to be the tie-in to the Enbridge Gas system. If Enbridge Gas was an electricity distributor, it would consider that section 3.2.15A of the DSC would apply such that the work on the station would not be eligible for an alternative bid.

c) The types of equipment and facilities as well as governing regulatory codes for electrical distribution and natural gas distribution are substantially different. It is to be expected that there would be a resulting inconsistency between the rules, or at least the application of such rules, for electricity and natural gas.

d) Please refer to Exhibit EGI-Staff-7.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Energy Board Staff

Reference: EGI Evidence, Page 9, Paragraph 31

Preamble:
Enbridge Gas states that its connecting stations include several components including measurement, pressure control, gas quality, and odorization. As part of its procedures, Enbridge Gas must ensure that each of the components have material traceability and that its approved installation contractors have welders approved to Enbridge Gas's standards, traceability of fabrication, and quality control records.

Questions:
a) Do Enbridge Gas employees construct the connecting stations, or is the work performed by contractors? If the work is performed by contractors, please explain how Enbridge Gas ensures that applicable standards are met and that fabrication and quality control records are traceable.
b) If the construction of connecting stations is contracted out by Enbridge Gas, could local natural gas producers hire the same contractors to construct the connecting stations? If not, please explain why not.
c) Does Enbridge Gas contract out other types of pipeline and station construction work? If so, how does Enbridge Gas ensure that applicable standards are met and that fabrication and quality control records are traceable for this work?
d) Is it Enbridge Gas's view that local producers are not capable of ensuring material and fabrication traceability, employing welders capable of producing work to Enbridge Gas's standards, or producing and maintaining quality control records? If so, please explain why not.

Response:

a) Enbridge Gas' employees and contractors are trained, qualified, and certified to construct and install pressure reducing stations between the producer's facilities and Enbridge Gas' underground pipelines. All company and contractor welders are tested and certified annually to demonstrate competency and to ensure welds are completed to Enbridge Gas' standards.

   Enbridge Gas contractors weld pressure reducing stations to Enbridge Gas approved drawings. Any deviations to these drawings require prior Enbridge Gas approval. When the station has been fabricated, the contractor produces a marked-up drawing with any changes made and these form part of Enbridge Gas's final records. All welds are identified on the "mark-up" drawing by a specific welder identification number that each individual welder has – this ensures traceability of Enbridge Gas's assets.

Pressure reducing stations need to be pressure tested and non-destructively examined (i.e., radiographic x-ray) according to Enbridge Gas' standards – when contractors fabricate pressure reducing stations, they complete the pressure test to Enbridge Gas standards. These pressure test records are provided to Enbridge Gas for review and approval and are maintained for the life of the asset.

Periodic quality control (QC) checks are provided by both contractors and Enbridge Gas. Contractor QC is subject to Enbridge Gas audit – the contractors QC checks are based upon Enbridge Gas standards. Enbridge Gas also completes on-going random audits of contractors following Enbridge Gas' quality management program.

Consistent with industry practice, Enbridge Gas uses trained and licensed gas pipeline inspectors to provide contractor oversight during field installation activities to ensure construction practices conform to Enbridge standards and specifications.

b) As noted above, Enbridge Gas certifies contractors to weld stations and connect to Enbridge Gas' pipelines. Enbridge Gas requires its contractors to test their employees' competency (Operator Qualifications - OQ) annually, or more frequently as required, to perform tasks, and to conform to Enbridge construction specifications. Enbridge Gas completes periodic audits of their contractor's OQ programs and field activities.

   Enbridge Gas issued for construction (IFC) drawings include bills-of-materials (BOM) that list all the materials for construction to ensure material traceability and to ensure material meets or exceeds Enbridge Gas' purchases specifications. Enbridge Gas purchases materials through its supply chain for contractors and ensures these materials conform to applicable standards and purchase specifications that suppliers must adhere to. All pipe that is ordered requires a Mill Test Report (MTR) that is reviewed and approved by Enbridge Gas' Engineering team. Any deviations from the IFC, BOM, or purchase specifications needs to be approved by Enbridge Gas' Engineering Department.

   The fabrication and installation of pressure reduction stations is broader than just welding. Enbridge Gas employs management programs across all aspects of an asset's life to ensure the safe and reliable operation of their facilities, and this includes the design, fabrication, installation, and maintenance of the asset. It is for these reasons, and those identified above, that natural gas producers cannot hire the same contractors that Enbridge uses and provide an equivalent product.

c) Enbridge Gas contracts out other types of pipeline and station work - the same measures identified in parts (a) and (b) above are utilized.

d) Enbridge Gas is accountable for the safe operations of its assets and must ensure the competency of work performed by its employees and contractors and that records are maintained for the life of the asset. As identified in OPI's response to Enbridge-6 (b) and

Enbridge-7 in this proceeding, OPI has not demonstrated that its members have practices and procedures in place that meet Enbridge Gas' requirements.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Petroleum Institute

Reference: EGI Evidence, Paragraphs 9 and 10

Questions:
Does EGI have mandatory timelines or timeline targets for any communications related to: (a) producer connection requests; and (b) producer GPA shut-ins? Please note that this can include any step in the process of getting connected or shutting-in a producer (e.g., response to connection request, notice of shut-in, time to provide initial connection cost estimate, etc.).

If yes, please provide:

- The internal EGI document that establishes those timelines or targets for communication on these matters.
- Examples where EGI has met those timelines or targets.

If not, please provide the basis for EGI's disagreement noted in paragraph 10 of the EGI evidence.

Response:

Enbridge Gas follows the same process for Ontario producer connection requests as it does for other connection requests it receives from customers. This process is summarized on pages 5 and 6 of the evidence submitted to this proceeding by Enbridge Gas on May 31, 2023. Enbridge Gas attempts to provide a completed feasibility cost estimate and indication of available demand in the proposed injection location within an average of 6 to 8 weeks of the request. Timelines are heavily impacted by the complexity and uniqueness of the specific connection request as well as the ability to gather timely information from the requestor. For this reason, Enbridge Gas cannot propose mandatory timelines or targets associated with producer connection requests.

There are several reasons a producer may be shut-in or curtailed, including:

a) Emergency situations which could include third party damage to the distribution system near an injection station, such that the distribution system needs to be isolated
b) Operational issues on Enbridge Gas's distribution system (e.g., pipeline isolation or re-routing gas to perform maintenance activities).
c) Producer's gas quality does not meet Enbridge Gas specifications per the requirements outlined in the GPA and M13 contract
d) Pipeline system integrity activities
e) Construction related activities

Under Section XIV of the GPA contract, Enbridge Gas' obligations with regard to communication of curtailments and shut-ins are as follows:

> "*Verbal Notice: Excepting instances of emergency, Seller and Enbridge agree to give at least twenty-four (24) hours notice before a planned curtailment of receipt or delivery, shut-down or startup."*

Enbridge Gas communicates curtailments and shut-ins prior to the 24-hour notice period whenever possible.

Enbridge Gas does not have searchable or consolidated records of producer injection station shut-ins or curtailments.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Petroleum Institute

Reference: EGI Evidence, Paragraphs 9 and 10

Questions:
Does EGI have a mandatory timeline or timeline target for responding to producers on available capacity when a producer requests to connect? If yes, please provide:

- The internal EGI document that establishes the timeline or target.
- Examples where EGI has met the timeline or target.

If not, please provide the basis for EGI's disagreement noted in paragraph 10 of the EGI evidence.

Response:

Please refer to the response at Exhibit EGI-OPI-1.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Petroleum Institute

Reference: EGI Evidence, Paragraphs 9 and 10

Questions:
Does EGI have a mandatory timeline or timeline target for providing producers who request a detailed cost estimate for meter stations with the detailed cost estimate? If yes, please provide:

- The internal EGI document that establishes the timeline or target.
- Examples where EGI has met the timeline or target.

If not, please provide the basis for EGI's disagreement noted in paragraph 10 of the EGI evidence.

Response:

Please refer to the response at Exhibit EGI-OPI-1.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Petroleum Institute

Reference: EGI Evidence, Paragraph 12

Question:
Please provide a detailed description of the analysis performed to determine winter and summer available capacity for local producers using highest design hour demand and lowest hour demand.

Response:

The Design Hour Demand Process is described in evidence submitted as part of Enbridge Gas' 2024 rates application.[1] This process is used to generate inputs to models for which hydraulic analysis can be done in a range of temperatures from 0 HDD to design conditions.

The highest design hour demand corresponds to:
- Design Condition (HDD which is regionally determined)
- Firm General Service Load at Peak Hour Value
- Contract Load at Maximum Firm Hourly with Interruptible Hourly Off

The lowest hour demand corresponds to:
- Summer Conditions (0 HDD)
- Firm General Service Load at Minimum Hour Value
- Contract Load at Minimum Actual Hourly Value

Please refer to Exhibit EGI-Staff-2 for further details on summer conditions and lowest hour demand.

[1] EB-2022-0200 - Exhibit 4, Tab 2, Schedule 3, page 28, paragraph 58

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Petroleum Institute

Reference: EGI Evidence, Paragraph 12

Question:
Please provide the output of this analysis for the Paton Pool/Shackleton Station estimate (discussed in OPI's evidence in this proceeding), specifying any assumptions that contribute to the available winter and summer capacity.

Response:

August 13, 2021

Takeaway Capacity:
- Summer Minimum Flow: 0 m^3/hr. The summer market on the Dutton 860 MOP line is very minimal and there are two other producers injecting into the system.

Customer Station:
- Connected to the 860 kPa system and must have an outlet of 825 kPa or higher.

Service:
- Any service or main extension required to get to this pipe from the customer station will need to be 6in ST 860 kPa MOP.

Distribution System:
- No modifications required.

Please refer to Exhibit EGI-Staff-2 for further details on the process for assessing injection capacity.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Petroleum Institute

Reference: EGI Evidence, Paragraph 12

Questions:
With respect to the Paton Pool/Shackleton Station connection request, the producer was advised by EGI that there was zero available market capacity in summer. In paragraph 12 of the EGI evidence, Enbridge states that summer capacity is calculated using lowest hour demand.

(a) Can EGI confirm that in the Paton Pool/Shackleton Station area, the lowest hour demand leaves zero available local capacity?
(b) If there is insufficient, non-zero demand to meet producer's requested injection, what is EGI's guiding assumption about how those demands are met (i.e., producer gas versus gas from the upstream distribution system).
(c) Please provide the analysis outputs and communications regarding insufficient market availability associated with the Clearbeach Mabees Corners Station (which was discussed in OPI's evidence).
(d) Please provide actual monthly flows from the Clearbeach Mabees Corners Station from January 1, 2018 through to December 31, 2020.

Response:

(a) Confirmed.

(b) The producer's injection request is assessed at summer conditions in the lowest peak hour demand (refer to Exhibit EGI-Staff-2). When there is insufficient demand on the system to meet the requested hourly injection volume, Enbridge Gas is unable to support the producer's injection request. The analysis conducted to assess injection capacity is done using the specific system configuration, customer demands, and hydraulics on the local distribution system. Upstream supplies into a distribution system do not impact the analysis of available market demand.

(c) Enbridge Gas believes the inquiry noted by OPI related to the Clearbeach Mabees Corners Station was submitted to Union Gas in 2014. Enbridge Gas is unable to locate the records requested in this interrogatory.

(d) Please see Table 1 below.

Table 1: Clearbeach Mabees Corners Station Production by Month (10^3m^3)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2018	-	-	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	219.6	240.7	370.2	830.5
2020	361.4	343.2	378.2	315.8	87.2	176.1	245.1	43.9	350.0	365.7	299.6	260.8	3,227.0

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Petroleum Institute

Reference: EGI Evidence, Paragraph 13 (Distribution Station Set Points)

Questions:
Please explain how EGI sets the primary distribution station regulator pressure in relation to producer station regulator pressure to:

(a) sequence first flow;
(b) ensure needed pressure for reliability if upstream volumes are not available to the regulator;
(c) ensure safety by capping the maximum pressure for safety including an automatic shutting off both distribution and producer regulators if limited demands are met.

Response:

(a) The primary control for a station's ability to inject or impact a system is the outlet pressure setting. A station can be set to a maximum based on the local systems maximum operating pressure (MOP). To adjust flows between multiple stations, either local producer or system stations, the outlet pressure setting is adjusted, such that the regulator with the highest setpoint will flow into the system first. There are limitations to the impact that these adjustments can have on a given station and include system configuration, pipe size, and location of the highest customer demands. Station regulator setpoints are established to ensure system resiliency and safety.

(b) Stations are designed and engineered to strict internal standards which consider the maximum flow rate, minimum system inlet pressure, maximum outlet pressure, and minimum pressure differential requirements. Equipment, including the regulators are selected based upon these requirements.

(c) Both distribution and producer stations have independent overpressure protection devices installed to ensure the pipeline system that they are supplying does not exceed the allowable limits as specified by CSA Z662-19.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Petroleum Institute

Reference: EGI Evidence, Paragraph 13 (Distribution Station Set Points)

Questions:
Has EGI considered adjusting set points in the Paton Pool/Shackleton Station example referenced in OPI's intervenor evidence? If so,

(a) please supply the results of this investigation; and
(b) please explain whether EGI considers adjusting station outlet pressures in order to allow local producer stations to flow preferentially.

If not, why not?

Response:

(a) Station adjustments were not considered as the producer's injection request exceeds demand on the system. Additionally, there are currently two existing producers injecting into the system capturing the market available.

(b) Please refer to Exhibit EGI-Staff-2 for details on station adjustments.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Petroleum Institute

Reference: EGI Evidence, Paragraph 13 (Reinforcement)

Question:
Please provide examples of where Enbridge considered alternate locations (where there is more available capacity) in proximity to a producer request to access EGI's distribution system.

Response:

The most recent example of such a case can be found in the details of the Ridge Landfill RNG Project (EB-2022-0203) for which the capacity of local systems was not sufficient to meet the injection request and a pipeline to another system was required.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Petroleum Institute

Reference: EGI Evidence, Paragraph 13 (Reinforcement)

Question:
In the Paton Pool/Shackleton Station example cited in OPI's evidence, can Enbridge confirm that it has no alternate pipelines with a higher demand capacity within 10 km of connection request location?

Response:

Confirmed.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Petroleum Institute

Reference: EGI Evidence, Paragraph 23

Question:
Please confirm that: (a) "on a timely basis" does not refer to any mandatory timelines or timeline targets, and (b) EGI is not voluntarily proposing any such timelines or targets in this proceeding?

Response:

Please refer to Exhibit EGI-OPI-1.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Petroleum Institute

Reference: EGI Evidence, Paragraphs 24 to 27

Questions:
Please confirm that for all gas at Dawn, even for gas stored at Dawn, that gas would:

(a) Physically come from outside Ontario (if you cannot confirm, please explain);
(b) Such gas needs compressor fuel to reach Dawn at some point between its origin and Dawn;
(c) at some times during the year, such gas needs compressor fuel to go from Dawn to the EGI distribution system (to which the producer is connected).

Response:

a) Excluding gas that has been produced in Ontario, all gas located at Dawn has come from locations outside of Ontario.

b) Confirmed.

c) Confirmed.

ENBRIDGE GAS INC.

Response to Interrogatory from
Ontario Petroleum Institute

Reference: EGI Evidence, Paragraphs 24 to 27

Question:
Please confirm that local producer gas (including M13 and Lake Erie gate station deliveries) delivered to the local distribution system avoids EGI transmission system and storage system fuel gas, carbon tax on fuel gas and UFG?

Response:

Ontario producers provide a very small volume of natural gas compared to Enbridge Gas' total distribution system throughput (less than 0.1%). There are over 60 active injection locations across Enbridge Gas' system, making it impossible to isolate the impact of Ontario producer deliveries to compressor fuel and unaccounted for gas (UFG).

Theoretically, deliveries of Ontario producer gas directly to Enbridge Gas' distribution system may achieve a small level of compressor fuel savings. Carbon charge savings from Ontario producer gas deliveries would be limited to avoided charges on the avoided compressor fuel.

Due to the low number of producer stations and the minimal amount of natural gas injected into the distribution system by local producers, Enbridge Gas is unable to conclude whether Ontario producer deliveries to the distribution system have a positive or negative impact on UFG.

ENBRIDGE GAS INC.

Response to Interrogatory from
Canadian Biogas Association

Reference: Enbridge Gas Evidence, page 3, paragraph 1

Preamble:
The detailed process for determining design hour demand (the highest expected firm demand in an hour for natural gas within a day) is contained within evidence submitted as part of Enbridge Gas' 2024 rebasing application. The assessment of local injection into the distribution system is done using the same process, however, consideration must be given to both the highest design hour demand experienced in winter along with the lowest hour demand. The lowest hour demand typically occurs during the summer months on weekends and is where demand for natural gas on the system is the lowest due to lack of space and water heating, and limited process demands. For the acceptance of local injection, the summer condition (i.e., not requiring additional gas in the system) often becomes the primary design constraint due to insufficient demands on the system.

Questions:
a) Please provide the number of "local" producers currently injecting natural gas in the EGI distribution, broken down into the following categories:

   i) producers of conventional natural gas that sell their gas to Enbridge Gas Inc.,
   ii) producers of conventional natural gas that do not sell their gas to Enbridge Gas Inc.,
   iii) producers of renewable natural gas that sell their gas to Enbridge Gas Inc.,
   iv) producers of renewable natural gas that do not sell their gas to Enbridge Gas Inc.

b) Please provide the number of times producers in each category provided in the answer to question a) were "shut in" or "curtailed" by EGI over the last 5 years. Please provide detail as to the number of producers affected by each "shut in" or "curtailment", the date (or dates if lasting beyond one day) of each "shut in" or "curtailment", the circumstances requiring the "shut in" or "curtailment", and, in the event a "shut in" or "curtailment" did not affect all of the producers accessing the EGI system to inject natural gas, an explanation as to why some but not all producers were affected by the "shut in" or "curtailment".

c) Under what conditions, if any, would a "shut in" or "curtailment" be required of any producer during the winter months?

Response:

a) Please see Table 1 below. All local producers currently injecting natural gas into Enbridge Gas' system are doing so either under a Gas Purchase Agreement (GPA) where the producer sells their production to Enbridge Gas, or an M13 contract where the producer injects into Enbridge Gas' system for the gas to be notionally transported to Dawn and the producer can market and sell it to 3rd parties. All RNG procured by Enbridge Gas via the Voluntary Renewable Natural Gas Program has been transacted at Dawn and not through a local production GPA contract.

Table 1: RNG and Conventional Gas Producers by Contract Type

# of Producers	Conventional Natural Gas	Renewable Natural Gas (RNG)
GPA Contract	26	0
M13 Contract	1	4

b) As indicated at Exhibit EGI-OPI-1, Enbridge Gas does not track when a producer is either "shut in" or "curtailed". Enbridge Gas operates an extensive series of transmission and distribution networks across Ontario, and not all of these networks are connected to one another. Each interruption to a producer's ability to inject into the distribution system is based on the local conditions of the system they are connected to and the specific reason driving the curtailment. Since these interruptions are locally driven, Enbridge Gas has never shut-in or curtailed every Ontario producer at once. Typically, these interruptions only impact a single or small number of producers at a time.

c) Conditions for a "shut in" or "curtailment" during winter months would be primarily related to 1) the producer's gas quality not meeting Enbridge Gas specifications per the requirements outlined in the GPA and M13 contract; and 2) emergencies or disruptions to the pipeline, station, or system facilitating the injection.

ENBRIDGE GAS INC.

Response to Interrogatory from
Canadian Biogas Association

Reference: Enbridge Gas Evidence, page 3, paragraph 13

Preamble:
If the local gas system does not have capacity to meet the injection volume requested, other options are considered:

- Distribution Station Set Points: Adjusting station outlet pressure set points on one or more distribution system stations to allow for injection through the customer injection station into the local system. These adjustments can help prioritize injection from customer station but is highly dependent of specific system configurations and locations of demands. Overall system safety and reliability must be considered and will supersede adjustments.

- Reinforcement: New facilities to allow for injection to reach another network and or pressure system to expand the demand. Access to more system demand can sometimes be achieved through new facilities to interconnect systems and or gain access to more significant pipelines not in the immediate area of the customer facility. Reinforcements are subject to a project profitability index (PI) calculation and may result in a required contribution in aid of construction (CIAC).

Questions:
a) Please confirm that the "other options" are only required during periods of low demand i.e., the summer months. If not confirmed please describe the conditions that would require the consideration of "other options".
b) Please explain whether EGI's willingness to adjust the station outlet pressure set points on one or more distribution system stations to allow for injection through the customer injection station into the local system is impacted by whether the producer is selling its natural gas to EGI or shipping its gas outside the EGI franchise area.

Response:

a) Not confirmed. The local system may not have the capacity to accept the producer injection at any time of the year due to limited demand and or system size requiring other systems or options to be considered.

b) Enbridge Gas' ability to accept producer injections is not dependent upon whether that producer sells its gas to Enbridge Gas, sells it to a third party at Dawn, or transports its gas outside of its franchise area. The analysis for the acceptance of a producer's injection is solely based on the

system specific demands and hydraulic analysis combined with considerations for operational safety and reliability. Enbridge Gas establishes station setpoints that maintain a reliable supply of natural gas at the pressures required to meet customer demands on the pipeline system regardless of how the producer is selling its supply.

ENBRIDGE GAS INC.

Response to Interrogatory from
Canadian Biogas Association

Reference: Enbridge Gas Evidence, page 4, paragraphs 15 and 16

Preamble:
To clarify, when Enbridge Gas establishes a maximum daily volume in a Gas Purchase Agreement, this volume is determined by the capabilities of the injection station to accept gas and often exceeds what the producer is able to provide or what the local market is able to accept.

The Gas Purchase Agreement allows for full variability up to the maximum daily volume whereas the M13 contract has a Maximum Daily Quantity (MDQ) and a firm daily variability amount. The MDQ is based on the producer's estimated production amount and is set for the duration of the contract and there is no winter/summer difference. A Firm Daily Variability (FDVD) amount is calculated based on the producer's actual production volumes (if they are established) or estimated production (if they are new). The calculation compares the average daily production for the year less the average daily production for the lowest month during the year. The producer can opt for a higher FDVD if they choose to and want to pay for it.

Questions:
a) Please confirm that producers with a Gas Purchase Agreement with EGI are able to inject gas up to their maximum daily volume regardless of system conditions. If not confirmed, under what conditions would a producer with a Gas Purchase Agreement with EGI be "shut in" or "curtailed" despite their maximum daily volume.
b) Please confirm that producers with a Gas Purchase Agreement with EGI are able to negotiate a maximum daily volume based on their capacity to produce natural gas; if not confirmed, please explain under what conditions EGI would limit the maximum daily volume in a Gas Purchase Agreement below the producer's production capacity.
c) Please confirm that renewable natural gas producers who sell their gas to EGI are/will be treated the same as conventional natural gas producers with a Gas Purchase Agreement with EGI with respect to access to EGI's system throughout the year. If not confirmed, please explain how renewable natural gas producers who sell their gas to EGI are/will be treated differently than conventional natural gas producers with respect to access to EGI's system throughout the year.
d) Please confirm that producers that do not sell their gas to EGI can establish a Maximum Daily Quantity equal to their maximum daily production if they so choose; if not please describe the circumstances where a producer's Maximum Daily Quantity would be limited by EGI.
e) Please provide details as to how the FDVD impacts a producer's ability to inject gas up to their Maximum Daily Quantity throughout the year.
f) Please explain under what conditions a producer would elect to pay for a higher FDVD than the FDVD calculated based on their actual daily production. Please explain how the incremental price for a higher FDVD is determined using an example.

Response:

a) Not confirmed. The maximum daily volume is based on the available system capacity over the period of the day. In normal operation the injection would not be actively shut in or curtailed, however if demands on the system are low then the injection would be limited due to the system reaching the maximum outlet pressure of the injection station. This could be caused by a reduced period of injection by the producer due to their own operational issues or changes in demand on the distribution system during that day.

b) Not confirmed. See answer a above.

c) Confirmed.

d) The methodology for establishing the Maximum Daily Quantity is the same for all producers, regardless of the contract type that is signed (i.e., GPA, M13). The Maximum Daily Quantity is established as the lesser of:

(a) the producer's maximum daily production capability; or
(b) the capability of the system the producer is injecting gas into to accept the gas, as determined by Enbridge Gas (see response to part a) above).

e) The FDVD is a contractual balancing parameter and therefore has no impact on a producer's ability to inject gas up to their Maximum Daily Quantity.

f) Enbridge Gas cannot speculate as to why a producer would request an FDVD higher than the FDVD calculated based on their actual daily production. The charges for FDVD are outlined on the M13 contract, Schedule 2, section 2 c):

"The charge payable for the Firm Daily Variability Demand shall be equal to the rate specified in Enbridge's T1 Rate Schedule for Annual Firm Injection/Withdrawal Right, Enbridge provides deliverability Inventory, under Storage Services."

ENBRIDGE GAS INC.

Response to Interrogatory from
Canadian Biogas Association

Reference: Enbridge Gas Evidence, page 6, paragraph 20 subsection 6

Preamble:
The Account Manager works with the Producer to sign the applicable contract and agree to the costs. As identified in the M13 contract's general terms and conditions, once the producer has agreed to the CIAC payment, the first prepayment is required at the time of execution of the agreement. The second prepayment is required prior to installation of the meter station. These prepayments are based on the estimate and there is a true-up process that happens after commissioning of the station.

Question:
a) Please confirm that a producer has the option of paying their CIAC over time as part of their contract with EGI. If not confirmed, please explain the circumstances, if any, under which the CIAC for a producer station can be paid for over time by a producer.

Response:

a) Confirmed, subject to the producer meeting credit requirements as determined by Enbridge Gas.

ENBRIDGE GAS INC.

Response to Interrogatory from
Canadian Biogas Association

Reference: Enbridge Gas Evidence, page 7 paragraph 26

Preamble:
Enbridge Gas does not design the operation of its system around non-firm supply sources. The local producer's ability to access local markets is dependent on their ability to meet specific system pressure needs such that their supply feeds the Enbridge Gas system and not supplies from other sources (other producers or transmission stations).

Natural gas purchased from Ontario producers amounts to approximately 0.8 PJs annually, or an average of 2100 GJ/day. This amounts to less than 1% of Enbridge Gas' system gas portfolio.

Questions:
a) Please confirm that EGI has the capability to adjust its system pressure to accommodate the injection of local production by adjusting the flow of gas into the relevant system if necessary. If not confirmed, please explain why EGI does not have that capability, particularly given the relatively small amount of local production relative to EGI's total natural gas portfolio, and please explain what measures would be required to create that flexibility.
b) If and when locally injected gas production is stable but local demand for gas fluctuates, how can EGI respond without impacting local injection, i.e., if local demand is significantly below forecast? To the extent there are options that EGI can employ does it do so?

Response:

a) Enbridge Gas does have some capability to adjust system pressures to accommodate injection of local production, however there are limitations. Enbridge Gas's system is typically designed to flow from upstream transportation and storage sources at very high pressure cascading down to lower pressures for final delivery to customers. Station adjustments can help modify flow in a single system. When the producer injection occurs on one of the downstream lower pressure systems, the capacity is limited by the specific configuration and demands of that system. While it may help offset demands on the upstream system feeding into the lower pressure system, there is no direct access for the flow to those demands. It is important to note that system reliability must be maintained, so while system stations may be adjusted, Enbridge Gas must ensure the system is able to serve customer demand should a local producer stop injecting into the system.

b) Enbridge Gas' ability to respond to changes in demand without impacting local injection is dependent on where in the system the injection is occurring. The larger and higher

operating pressure the system the local producer is connected to, the larger the market and the more flexibility there is to respond.