# Lagasco Inc. Response to OEB Staff Interrogatories EB-2023-0344

### **OEB STAFF-1**

**Reference:** Application, page 3, 5 and 7

Preamble:

Lagasco stated that Proplant Propagation Services Ltd. (Proplant), together with AB Energy Canada Ltd. (AB Energy Canada), received approval to proceed with the second stage of a bid for a 9.5 MW power supply contract with the Independent System Operator (IESO). Pending a successful bid, Proplant has plans to build an electrical generation facility on their site to supply power into the grid and needs additional gas service for this facility, which they would like Lagasco to provide and which is the subject of this Application (Proplant Generation Facility). Lagasco stated that it operates a pipeline on the North side of Highway 6 on Proplant's property and that this pipeline will be used to provide natural gas service to the Proplant Generation Facility. Lagasco plans to construct a tie-in system, 50 metre service line, meter, regulator, and monitoring station (the Project) to service the Proplant Generation Facility and stated that it will own the Project and operate the tie-in system.

# Question(s):

a) Please explain whether AB Energy Canada will jointly own and/or operate the Project with Proplant.

**Response:** AB Energy Canada and Proplant will be joint owners of the Project through to the completion of the Project due to existing IESO requirements. At completion, AB Energy Canada is required to turn all ownership over to Proplant.

b) Please confirm that Lagasco's planned Project for servicing the proposed generation facility has not changed. If not confirmed, please discuss any proposed changes.

**Response:** No, there have not been any changes since the Application was made.

Reference: Application, page 9

#### Preamble:

Lagasco operates a compressor station and pipeline through which it delivers natural gas to Enbridge Gas Inc. (Enbridge Gas) on the east side of Jarvis Ontario. This is the pipeline that Lagasco proposes to use to supply the incremental gas Proplant Generation Facility requires. The pipeline is on the north side of Hwy 6 on Proplant's property. No main line piping will be required in order to supply the Proplant Generation Facility. The natural gas for the Proplant Generation Facility will be from Ontario produced Lake Erie gas wells having a ~ 50 year reserve life.

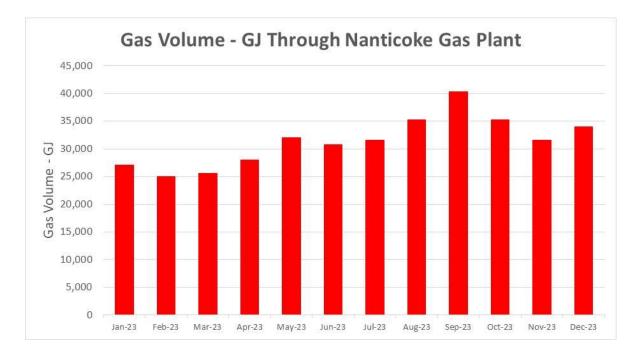
### Question(s):

a) Does Enbridge Gas have its own feed into Jarvis, Ontario or is Lagasco the only provider to Jarvis, Ontario?

**Response:** Lagasco's current gas delivery point to Enbridge Gas Inc. ("Enbridge" throughout) is on Talbot Street East approximately 1.5 kms from Jarvis Ontario at station 12W103. Enbridge is in a better position to describe its feed into Jarvis but Lagasco believes it has a separate distribution service for the town.

- b) Please provide a twelve-month graph, broken into months, indicating the following (similar to the example below):
  - i. Typical load feeding Enbridge Gas's station feeding into Jarvis, Ontario.

**Response:** Actual volumes are in the chart below.



ii. Layering above Enbridge Gas's station load, the estimated load for the Proplant Generation Facility.

**Response:** The Proplant load would be removed from the amounts available to be delivered by Lagasco to Enbridge at the Jarvis station. However, Lagasco is not able to provide the customer load due to the fact that it will be based on IESO contract requirements and has not been supplied to Lagasco by Proplant. It is Lagasco's understanding that the IESO will inform Proplant as to the generation requirements on a day ahead basis, which load will be dependent on the daily forecast electricity grid requirements.

iii. Lagasco's maximum supply capacity.

**Response:** Approximately 1,000 GJs per day as it is currently operating. For additional detail see response to OEB Staff Interrogatory 3(b) below.

- c) What is the basis of "50 year reserve life"?
  - i. Has a study by Lagasco, or another person, been conducted on how much gas is still in the wells that supply this line?

**Response:** Yes, it is based on a confidential Reserve estimation and economic evaluation prepared by Deloitte LLP for Lagasco with an effective date of September 30, 2022.

ii. If so, please provide details of the study, including an explanation as to how long Lagasco will be able to supply Enbridge Gas's station, as well as the Proplant Generation Facility (assuming typical annual usage by Enbridge Gas and estimated usage by the Proplant Generation Facility).

**Response:** The report referred to above estimates the offshore east reserve life to be 50.25 years.

**Reference:** Application, page 7

Application, Appendix 4, page 1 and 2

#### Preamble:

Lagasco provided the summary below detailing Proplant's additional natural gas requirements to supply the Proplant Generation Facility.

Gas Usage Estimate		
Gas per Hour (Per Engine) m3	776	Each engine is 3.332 MW
# of Engines	3	
Total m3 Per Hour	2,328	
GJ / HR	88.46	Gas Available = 1,000 GJ/Day
Est. Days Running per Month	12	
Est. Hours Running per Day	6	
Total Hours Running Per Month	72	
Gas Usage per Month m3	167,616	
Annual Gas Used	2,011,392	

# Question(s):

a) Please confirm that the projected annual gas requirement to service the Proplant Generation Facility has not changed since the application was filed. If the estimated annual requirement has changed, please provide the new estimate.

Response: Confirmed. To the best of Lagasco's knowledge it has not changed.

i. Are you aware of any plans to increase electricity generation capacity of the Proplant Generation Facility at a later date?

**Response:** Lagasco is not aware of any plans to increase the electricity generation capacity. Please see response to EGI-12(b) below.

ii. If Proplant were to increase its generation capacity, would the proposed system be able to take on additional load? What is the maximum supply capacity based on the proposed pipe sizing?

**Response:** The proposed system has been designed to accommodate the load of the currently proposed generation facility with a margin of safety. Lagasco has no ability currently to know what, if any, of Proplant's hypothetical increased generation capacity might be. The maximum supply capacity based on the proposed pipe sizing is 2,210 GJ/day.

b) Please explain how the "Gas Available" (i.e. 1,000 GJ/Day) was determined, including whether it was based on the size of pipe or the production capacity of Lagasco.

**Response:** The "Gas Available" is based on the production capacity of Lagasco's system as it is currently operating, in its current configuration adjustments can be made to deliver additional volumes.

c) Please explain how the "Estimated Days Running per Month" and "Estimated Hours Running per Day" were determined. If determined by the IESO, was it through contract documents or typical bid durations?

**Response:** According to Proplant, these were derived from conversations with AB Energy Canada based on what other generators are currently running.

i. What is the maximum duration that the Proplant Generation Facility is expected to generate electricity?

**Response:** According to Proplant, contractually they have to be able to generate electricity for 8 hours continuously.

ii. Can Lagasco supply this amount? If not, What is the maximum hours the Proplant Generation Facility can expect to generate electricity at full capacity (9.5 MW)?

**Response:** The proposed IESO contract with Proplant requires 8 hours of continuous run time. This equates to 708 GJ and Lagasco is able to supply this amount. It is Lagasco's understanding that Proplant will be installing supplementary backup compressed natural gas (CNG) facilities downstream from the gas custody transfer point to ensure instantaneous flow rates required can be met for the proposed

generation plant. This configuration allows for load balancing and outage protection to ensure security of supply to meet the IESO contract requirements.

d) Please confirm that there is no circumstance in the future under which the annual volumes delivered by Lagasco to the Proplant Generation Facility will be in excess of 3,000,000 m<sup>3</sup>.

# Response: Confirmed.

e) Please explain why the Proplant Generation Facility's generator engines require 4-8 bars (~60-120 psig) of pressure when comparing Enbridge Gas's proposed 20 psig and how Lagasco will be able to meet this requirement.

**Response:** The current design of the Lagasco/Proplant system due to the facility equipment requirements is rated for 60-120 psig as this was the pressure requested of Lagasco by Proplant. Proplant's equipment has the ability to regulate pressure to what the generators require. According to Proplant, the AB Jenbacher engines require the pressures referred to above to operate.

Reference: Application, page 9

#### Preamble:

Lagasco stated that the total capital cost of the Project, to allow suitable quantities of gas to be delivered to the Proplant Generation Facility, is estimated to be \$350,000. The natural gas that will be sold to Proplant is of pipeline quality and meets all the standards set by Enbridge Gas. Any gas not consumed by Proplant will continue along the pipeline and be delivered into Enbridge Gas's system at the sales point at Enbridge Gas station number 12W103.

The tie-in system will require a meter site on Proplant's property, for which Lagasco is seeking the Certificate of Public Convenience and Necessity, which will include the following:

- A NPS 2 service lateral
- Installation of a gas odourizer
- Installation of a gas meter to measure the volume of gas being delivered to the generation
- Facility with remote monitoring
- Piping, valves and regulators at the meter site

#### Question(s):

a) Please provide further details with respect to the significant cost difference between Lagasco's (\$350,000) and Enbridge Gas's (\$11 million) supply options that are designed to serve the same need.

**Response:** Lagasco's Costs are budgeted as follows:

	Cost p	per
Parts and Materials	\$	80,463
Welding Contractor	\$	45,000
Non-destructive testing (x-raay)	\$	5,000
Civil works -on Proplant property	\$	7,500
Odorant Fill -Tansley	\$	6,000
Odorant meter, instrument	\$	1,500
Communication, alarms, automation	\$	18,000
Site work, pads, fencing	\$	12,500
Lagasco pipeline and facility prep including Jarvis stat	\$	23,000
Electrical	\$	4,000
Gas Utility Technician	\$	1,360
System modifications and integrity checks	\$	100,000
Engineering, project management and administration	\$	42,000
Commissioning and troubleshooting	\$	13,500
Total	\$	346,323

Lagasco is not able to provide details of what is underlying Enbridge's \$11 million costs other than what was in the Enbridge letter to Proplant (attached to Lagasco's Application at Appendix 4).

- b) Enbridge Gas believes an NPS8 steel pipe is required to reinforce and supply the Proplant Generation Facility, Lagasco proposed a NPS2 pipe which is tapped from an adjacent NPS6 pipeline.
  - i. Please clarify if this is a steel or plastic pipe.

### Response: It is steel.

ii. Please provide a discussion on why there is such a large difference in sizing of pipes when comparing the proposed NPS2 to Enbridge Gas's proposed NPS8.

**Response:** Lagasco believes that the NPS2 and NPS8 are not comparing "apples to apples". The NPS8 re-enforcements proposed by Enbridge appear to be to Enbridge's main line. Lagasco's main pipeline is NPS6. The NPS2 discussed by Lagasco is for the distribution/service line from Lagasco's pipeline (NPS6) to the proposed generation facility.

In the Enbridge email to Proplant found in the Lagasco Application at Appendix 4, Enbridge does mention the need for a "new service line and metering station", but does not detail the size of the service line they are providing.

Lagasco's engineering team believe that our NPS2 is suitable for the delivery of the gas as required by Proplant over the short distance of 100 metres or less see Lagasco response to OEB Staff Interrogatory 3(b) above.

iii. What is the pressure from Lagasco's NPS6?

**Response:** The pressure of Lagasco's NPS6 line has a maximum allowable operating pressure of 3,500 kpa but varies depending on the Enbridge system requirements at the delivery point (station 12W103).

iv. What pressure is leaving Lagasco's station entering into the Proplant Generation Facility? And does it satisfy the Proplant Generation Facility's 4-8 bars requirement?

**Response:** The pressure leaving Lagasco's station is designed to be in the range of 550 kpa to 830 kpa (5.5-8.3bar).

The design of the Lagasco delivery system as requested by Proplant allows it to meet the requirements of the proposed generation facility and will satisfy the customer's requirement as it was designed per their request. Currently, this provides for a maximum pressure of 12 bars.

c) Is the gas in the NPS6 adjacent to Hwy 6 odorized?

**Response:** No. There is an odourizer in the capital budget for the project under OEB Staff Interrogatory 4(a) above.

d) At the time that the Proplant Generation Facility is operational, please advise which set of customers would be prioritized in the event that there is insufficient natural gas produced by Lagasco (i.e. the Proplant Generation Facility or Enbridge Gas station number 12W103)?

**Response:** Proplant would be prioritized.

i. Please advise whether Enbridge Gas and Lagasco have discussed operational plans if this scenario occurs?

**Response:** We have not.

**Reference:** Application, page 8 and 10

#### Preamble:

Lagasco stated that the timelines that Enbridge Gas provided Proplant for servicing the Proplant Generation Facility were far too long for Proplant's bid to the IESO and to meet the terms of the anticipated IESO contract. Lagasco estimates completion of the tie-in system in 4 weeks, but parts to be ordered will have a longer lead time.

### Question(s):

a) Please elaborate on the project timelines in respect to the IESO bid and terms of the anticipated IESO contract. Please also explain how Lagasco's timelines for completion of the Project support the IESO bid and meet the terms of the anticipated IESO Contract.

**Response:** Upon receiving a contract from the IESO, Proplant expect it will take 20 months to complete the Project planning and construction. According to Proplant, the IESO contract will require a commercial operation date in late 2028, but the IESO has indicated Proplant will be eligible to receive some form of bonus compensation for the power if they are in production prior to that time.

Once Lagasco is asked by Proplant to proceed with the gas delivery, the tie-in and all facilities could be built within 90 days.

b) What is the anticipated construction schedule for the Proplant Generation Facility.

**Response:** Lagasco has been informed by Proplant that after the deposit is paid on the generator engines they expect commissioning of the Proplant Generation Facility to occur approximately 60 weeks later.

c) What is the anticipated construction schedule for the Project.

**Response:** Lagasco has been informed by Proplant that construction is expected to start Summer 2024 and be completed Fall 2025.

Reference: Application, page 4

Application, Appendix 5

#### Preamble:

Lagasco noted that Enbridge Gas is currently servicing Proplant's existing facility located at 2401 Hwy 6, Jarvis, Ontario (Existing Facility). Lagasco stated that the portion of the property planned for the proposed Proplant Generation Facility currently has no gas supply infrastructure on it and that the facility will operate independently from the existing gas fired equipment used for plant propagation and serviced by Enbridge Gas. Lagasco further stated that Proplant wishes to purchase gas from similar quantities from Enbridge Gas in the future.

The map provided in Appendix 5, shows that there are two existing greenhouses at the Project site and one proposed greenhouse.

#### Question(s):

a) Please provide a map that shows Proplant's Existing Facility, Lagasco's existing delivery line and the proposed Proplant Generation Facility. If possible, please also show the approximate location of Enbridge Gas's distribution main and service line that provide gas to the existing gas fired equipment at the Project site.

**Response:** Please see attached map appended to this submission. Lagasco is unable to show the approximate location of Enbridge Gas's distribution main line, however, the service line has been indicated on the attached map and also appears in Appendix 5 to the Lagasco Application. For clarity, the site plan provided as Appendix 5 to the Lagasco Application was provided to Lagasco by Proplant.

b) Please elaborate on what existing gas fired equipment on the project site is being serviced by Enbridge Gas and whether the portion of the property planned for the Proplant Generation Facility has any of Enbridge Gas's infrastructure (i.e distribution infrastructure, etc).

**Response:** According to Proplant, they currently have 2 x 600 HP Boilers and an additional 300 HP Boiler as a backup.

The Proplant Generation facility will be located in a new structure that is completely separate from the existing greenhouse which is currently (and will continue to be)

serviced by Enbridge. The new structure is proposed to be located 200 metres away from the existing greenhouse facility.

c) What is Proplant's emergency response plan in the event of an incident near or at natural gas infrastructure (i.e. site plans marking out natural gas services pertaining to each supplier)?

**Response:** The existing Enbridge gas feed to the property will be separate from the proposed Lagasco gas feed and the infrastructure will be clearly marked. There will be physical separation and clear demarcation. Lagasco will work with Proplant to prepare an emergency response plan related to its proposed facility.

d) Please discuss whether Proplant has a contract in place with Enbridge Gas for providing natural gas service to the existing gas fired equipment at the project site. If so, what is the length of the contract.

**Response:** Proplant are currently on a M2 contract with Enbridge. The contract is renewed annually.

e) Which natural gas supplier will be serving the "Proposed Greenhouse (Phase 4)" shown in Appendix 5.

**Response:** According to Proplant, Enbridge will be supplying this gas. However, the new greenhouse will not require any additional boilers or load to what they are currently using as they have peak shaving measures in place.

Reference: Application, page 15

#### Preamble:

Lagasco has applied for a limited Certificate to enable it to construct works to supply gas to the Proplant Generation Facility. The *Ontario Energy Board Act, 1998* permits the OEB, when making an order, to "impose such conditions as it considers proper."

OEB staff has prepared draft conditions of approval, set out below, that it plans to submit to the OEB should consider by the OEB when determining whether to deny or approve Lagasco's application.

### Question(s):

a) If Lagasco does not agree to any of the draft conditions of approval noted below, please identify the specific conditions that Lagasco disagrees with and explain why. For conditions in respect of which Lagasco would like to recommend changes, please provide the proposed changes and an explanation of the changes.

**Response:** Lagasco is in agreement with all of the draft conditions of approval noted below.

#### Lagasco Inc.

# **Application for a Limited Certificate of Public Convenience and Necessity**

- 1. Lagasco shall give the OEB notice in writing of the:
  - a. Commencement of construction, at least ten days prior to the date construction commences;
  - b. Planned in-service date, at least ten days prior to the date the facilities go into service:
  - c. Date on which construction was completed, no later than 10 days following the completion of construction; and
  - d. In-service date, no later than 10 days after the facilities go into service.
- 2. Lagasco shall advise the OEB of any change to the proposed facilities as described in its application and evidence, prior to implementing the change.
- 3. Lagasco shall designate one of its employees as project manager who will be responsible for the fulfillment of these conditions. Lagasco shall provide the employee's name and contact information to the OEB, Proplant Propagation

Services Ltd., and clearly post the information at the tie-in station site. The project manager will be responsible for the fulfilment of the conditions of approval on the site.

4. The OEB's designated representative for the purpose of these Conditions of Approval shall be the OEB's Manager of Natural Gas.

