

REDACTED VERSION**ONTARIO ENERGY BOARD**

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, SO 1998, c. 15 (Sched B), as amended (the **Act**) and the *Municipal Franchises Act* (the **MFA**), RSO 1990, c. M.55, as amended;

AND IN THE MATTER OF an application by the Corporation of the Town of Marathon under section 8 of the MFA for an order or orders granting Certificates of Public Convenience and Necessity to the Corporation for the construction of works in the Town of Marathon, Township of Manitouwadge, Township of Schreiber, Township of Terrace Bay, and Municipality of Wawa;

AND IN THE MATTER OF an application by the Corporation of the Town of Marathon under section 90 of the Act for an order or order granting leave to construct natural gas distribution pipelines and ancillary facilities to serve the Town of Marathon, Township of Manitouwadge, Township of Schreiber, Township of Terrace Bay, and Municipality of Wawa;

AND IN THE MATTER OF an application by the Corporation of the Town of Marathon under section 97 of the Act for an order or orders approving the form of easement agreements;

AND IN THE MATTER OF an application by the Corporation of the Town of Marathon for an order or orders for a gas supply plan to serve the Town of Marathon, Township of Manitouwadge, Township of Schreiber, Township of Terrace Bay, and Municipality of Wawa;

AND IN THE MATTER OF an application by the Corporation of the Town of Marathon for an order or orders pre-approving the cost consequences associated with a long-term upstream liquefied natural gas contract to serve the Town of Marathon, Township of Manitouwadge, Township of Schreiber, Township of Terrace Bay, and Municipality of Wawa.

CONTAINS CONFIDENTIAL INFORMATION**Corporation of the Town of Marathon (“Marathon”)****Response to Interrogatories
of
Certarus Ltd.****November 26, 2019**

Foreword

Implicit in most of the Certarus' questions and in its intervention, more generally, is the suggestion that the Corporation and/or the Applicants have imprudently, improperly, or both, excluded Certarus-supplied compressed natural gas ("**CNG**") from consideration as a competitive and available gas supply option. **This implication is incorrect and unfair for the reasons set out below.** The fact of the matter is that since the early days in 2015 when the Municipalities first conceived of a natural gas distribution system, to the present time, no cost effective CNG option has been identified.

The gas and distribution Project that underpins the Application was conceived and has been developed as an LNG-supplied project. In October 2015, the Applicants partnered with Northeast Midstream LP ("**Northeast**"), to submit an application to the Northern Ontario Heritage Fund Corporation ("**NOHFC**") for funding to assess the engineering, environmental and economic feasibility of developing a regional natural gas delivery system. Funding was subsequently received from NOHFC, allowing the completion of the feasibility work. The resulting preliminary feasibility study, entitled "North Shore Natural Gas Distribution Plan", is included in the Application as Tab 9, Schedule 4, Attachment 1. Based on the positive results of this study, the Applicants applied for a grant under the NOHFC Strategic Economic Infrastructure Program, which helps regions and communities advance economic development opportunities and supports investment through strategic infrastructure. The Applicants applied for this grant in order to fund detailed engineering and design, regulatory approvals and project management and administration for the North Shore LNG Project. In March 2018, the NOHFC approved a grant of \$3.45 million. This funding is supporting the ongoing development of the project, including applications for the regulatory approvals required to move the Project to the next stage of development and financing.

Non-LNG gas supply options were ruled out early in the process for reasons having to do with availability and cost. A pipeline option, connecting the five communities with the TransCanada Mainline, was ruled out in the beginning because it was too costly, relative to the LNG supply option. As for alternative supplies of LNG, in March 2017 and after the preliminary feasibility work had been completed (see discussion above), the Corporation met with representatives of Union Gas to discuss the feasibility of purchasing LNG produced at Union Gas' Liquefied Natural Gas Facility located in Hagar, Ontario, a 9.5 hour drive from Marathon. Ultimately, and after a preliminary economic analysis was completed by Union, both parties agreed that a Union LNG supply option was not viable for reasons related to reliability of supply and cost. Finally, at the time, there were no operating CNG facilities in northern Ontario, proximate to the five Municipalities, and so, CNG was simply not an option.

On November 21, 2017 and in response to an introductory e-mail from Certarus, representatives of the Corporation met with Mr. Nathan Ough, a Vice President of Certarus. By this point in time, development work on the Project was proceeding based on the assumption that the Project would rely on LNG. Nevertheless, the Corporation considered it prudent to meet with Mr. Ough in order to determine whether a viable and cost competitive alternative to the LNG option had become available since the time that the preliminary feasibility assessment had been completed. At the meeting, Mr. Ough advised that Certarus was in the final stages of permitting a large scale bulk CNG terminal on Highway 11, outside of Timmins and was investigating a second terminal in either Hearst or Thunder Bay. Importantly, however, Mr. Ough advised the Corporation that the Certarus business model did not contemplate supplying CNG for residential loads served by pipeline and was, instead, targeting commercial and industrial loads that could accept trucked delivery of CNG. This meant that CNG supply, purchased from Certarus, would not meet

a critical project prerequisite, namely, the development of a regional natural gas pipeline system to serve the residential sector.

After the November 21, 2017 meeting, there was no further communication with Certarus until May 5, 2018, when Mr. Ough requested a "catch up". Marathon agreed but never received a response from Certarus to set up the meeting. On September 17, 2018, Certarus (Stephane Gallant) contacted Marathon requesting a meeting the next day, on September 18th. Marathon's representative responded that he was unavailable at this time. Mr. Gallant, in turn responded that he would be in touch the following week. However, Marathon did not hear from Certarus again, until September 2019 after the Application had been finalized and filed with the Board.

The Applicants do not know whether Certarus is now prepared to offer a CNG supply option for residential loads served by a gas distribution pipeline and, if it is, whether this service could be provided at a competitive cost. Even if it were willing to consider a different business model, it is not incumbent upon the Applicants to put their distribution project, conceived to benefit residents of the Municipalities, "on hold" for Certarus. It is notable that Certarus has never provided the Applicants with any concrete information or hard data to support a CNG supply option. Indeed, Certarus waited until November 2017 to contact the Corporation for the first time, notwithstanding the fact that plans to develop a regional natural gas delivery system were well known and in the public realm, as early as 2015.

In the result, and for all of the reasons discussed above, the distribution systems for which leave to construct is sought in this proceeding have not been designed in contemplation of connection of non-LNG sourced natural gas. (Please see the response to OEB Staff-11(c) in this regard).

Certarus-1

Ref: Exhibit A, Tab 1, Schedule 2, pages 7-8

Preamble

In the above reference to the Application, the Corporation of the Town of Marathon (the "**Corporation**"), on its own behalf and as representative of the Township of Manitouwadge, the Township of Schreiber, the Township of Terrace Bay and the Municipality of Wawa (the "**Municipalities**") states that "...and the Utility is not exposed to any capital cost overruns incurred by Nipigon LNG during the term."

Questions

- a) The Application states that the Utility¹ is not exposed to any capital overruns associated with the proposed Nipigon LNG infrastructure. What mitigation measures have the Municipalities planned in the event Nipigon LNG LP ("**Nipigon LNG**") incurs cost overruns and is unable to obtain additional financing to complete to construction?
- b) In the event that after the municipal gas distribution systems commence operations, Nipigon LNG ceases operations for any reason, what mitigation measures have the Municipalities, on behalf of the Utility, planned to maintain gas supply service to its customers.

Responses

- a) We would expect Nipigon LNG to rely upon commonly employed project management and contractual mechanisms to minimize and manage the risk of construction cost overruns. However, in the event that the Nipigon LNG Facilities are not completed and there is no reasonable likelihood that they will be completed, the Utility would, as any prudent greenfield utility would, seek to contract for an available and economically feasible alternative supply of natural gas.
- b) See the responses to OEB Staff-31, 42(c) and 45.

¹ The Application defines the "Utility" as the local gas distributor that the Municipalities have resolved to incorporate, finance, and resource for the distribution of natural gas within the Municipalities. Certarus Ltd. adopts this definition of "Utility" for the purpose of these Interrogatories.

Certarus-2

Ref: Exhibit A, Tab 13, Schedule 1, pages 10-14

Exhibit A, Tab 2, Schedule 1, pages 2 to page 3

Preamble

"Several gas supply alternatives were reviewed according to their cost effectiveness, reliability (which includes security of supply) and support for public policy. They included a lateral pipeline from the TransCanada Mainline, LNG and compressed natural gas ("CNG"). The preferred supply option is LNG from a new plant near Nipigon." (Exhibit A, Tab 2, page 2, line 8 to page 3, line 2)

Question

- a) Please provide all studies, copies of other source documents, worksheets and any other materials relied upon with respect to the basis for assumptions and the analysis of CNG as a supply alternative.

Response

- a) Please see Exhibit A, Tab 13, Schedule 1, pp 10-15 and the response to OEB Staff-11(a).

Certarus-3

Ref: Exhibit A, Tab 13, Schedule 1, pages 10 and 11

Preamble

"The average landed gas supply cost of the proposed Contract is less than or competitive with costs for alternate natural gas supply. Nipigon LNG and the Corporation have considered other options of providing the requisite natural gas services to meet the demands of the North Shore Municipalities. These options include LNG service, compressed natural gas service and a lateral pipeline. A landed cost analysis demonstrates that the LNG Services contemplated in the proposed Contract is the most beneficial and cost-effective option." (page 10, line 18 to page 11, line 2)

Question

- a) The Application states Nipigon LNG and the Corporation have considered alternative options to LNG for providing natural gas service. Please confirm that the Corporation did not conduct its own analysis, independent of Nipigon LNG. If the Corporation conducted its own analysis, please provide that analysis.

Responses

- a) The Corporation explored several alternatives during the initial discovery and exploratory phase of the potential for a natural gas project. Meetings and discussions were held with alternative natural gas service suppliers involving several municipal representatives and gas supply representatives. These meetings and discussion were held independently by the Municipalities and without involvement or inclusion of Nipigon LNG. For a more detailed explanation, please see the Foreword to these responses.

Certarus-4

**Ref: Exhibit A, Tab 8, Schedule 1, Attachment 1
[Initial Gas Supply Plan - North Shore Municipalities, Elenchus Research Associates Inc.
(July 2019)]**

Questions

- a) Please confirm that the report prepared by Elenchus Research Associates Inc. ("**Elenchus**") dated July 2019 does not include any analysis or even mention CNG.
- b) Please explain whether the fact the report did not assess CNG as part of its Supply Option Analysis (section 2.7), and exclusively focused on LNG supply even in terms of back up facilities (i.e. section 2.7.2, section 2.8.4.2, Appendix 2 Risk Analysis part 3a "Extend Plant failure" and part 4 "Weather-related road closure"), was a deliberate decision on the part of the authors or was the scope of the Elenchus study dictated by the Corporation. If Elenchus decided not to assess CNG options, please provide its rationale for failing to do so.
- c) Please provide the retainer agreement for the study conducted by Elenchus (with commercial details such as rates and prices redacted) so that any limitations on the scope of its work can be clearly identified.
- d) Was Elenchus retained and instructed by the Corporation, Nipigon LNG or both?

Responses

- a)&b) Elenchus was retained by the Corporation in 2019 to develop a Gas Supply Plan in accordance with the OEB's requirements in this regard. Elenchus was instructed by the Corporation that the plan should be premised on a project supplied by LNG.
- c) See **Attachment A**.
- d) See the response to Certarus-4 a) & b).

Certarus-5

Ref: Exhibit A, Tab 4, Schedule 1, Page 18

Preamble

"Natural gas demand from Residential and General Service customers are seasonal in nature, with significant "peaks" in the winter. Natural gas distribution companies must plan to meet customers' needs during the peak demand periods, and as a result may only utilize system capacity 30% to 35% of the time.

It is intended that the upstream gas resources (i.e., LNG capacity and upstream pipeline capacity) would be procured to meet the peak day requirements for the residential and General Service customers. The majority of capacity not utilized by the residential and General Service customers would be sold and delivered to the industrial market in order to minimize the total rate for all customer classes. This approach requires the industrial market to be connected to the distribution system and to utilize other fuel types when the supply of natural gas is less than total demand." (line 1 to line 11)

Questions

- a) The Application states that the supply of natural gas may be less than total demand at times, and in the event that occurs industrial markets would not have access to natural gas. Please explain whether the source of natural gas the applicant considered when making this statement was limited to Nipigon LNG and why supplemental sources such as CNG were not also considered.
- b) Please explain if the Municipalities or the Utility, have planned for "open access" to its system to facilitate alternate natural gas supply so as to avoid the curtailment of industrial markets. If so, please provide diagrams indicating the potential locations and approximate costs for the construction of interconnections with each gas distribution system separate and apart from the LNG Depot proposed in each location. If not, please explain why not.
- c) Please explain what arrangements the Corporation considered to ensure reliable gas supplies to its utility customers in the event of prolonged outages of re-gasified LNG to each municipal distribution system in summer and in winter conditions.
- d) Please advise what standby fuel capability residential, small commercial and institutional (including but not limited to schools, hospitals etc.) customers are expected to have available in the event of a prolonged failure of gas supply from Nipigon LNG.
- e) Please provide the curtailment priority for each customer or service offered by each of the municipal gas distribution systems in the event the gas supplies from Nipigon LNG are not available.

Responses

- a) The industrial customer has chosen interruptible gas service over firm service for economic reasons.
- b) See the response to Certarus-5(a).
- c) The Utility has committed to ensuring that the facilities are sufficient to maintain backup supply in each community that is sufficient to meet five (5) days of demand under peak demand conditions. Unlike a single transmission pipeline, trucking options have significant flexibility to respond to *force majeure* conditions. See also response to OEB Staff-31.
- d) Individual customers will be neither required to maintain independent standby fuel capability nor will they be precluded from doing so. Individual standby fuel capability is a matter of customer choice for all customers of all natural gas distribution utilities.
- e) Curtailment priorities have not been established at this time. While the need for curtailment is highly unlikely, the Utility's response in a *force majeure* situation will be addressed once the Utility is approaching its in-service date. It would not be appropriate to establish such priorities without close consultation with the Municipalities and all potentially affected customers.

Certarus-6

**Ref: Exhibit A, Tab 4, Schedule 1, Attachment 1 at page 4
[Residential Telephone Survey - North Shore Community NG Forecasting, Innovative
Research Group Inc. (June 2016)]**

Preamble

"4. Cost is a significant factor:

- It is a primary reason for not converting and the main deciding factor for those who aren't sure."

Questions

- a) Please confirm that the referenced research report notes cost is a primary reason, and for some the main factor, in deciding to convert.
- b) Please provide an assessment of conversion rates assuming overall rate reductions (separating out distribution charge and commodity cost of gas) of 10%, 15%, 20% and 25% relative to the Nipigon LNG price assumed.

Responses

- a) Confirmed.
- b) The survey did not conduct a homeowner's sensitivity analysis on the likelihood of conversion under alternative rate scenarios as referenced in the question. However, in order to be helpful for the Board, several observations can be made:
 - The most likely customers to convert to natural gas are those customers that are currently on propane or are able to replace their existing electric forced air furnace or forced air oil furnace to natural gas. As noted in Exhibit A Tab 4 Schedule 3 Table 3, the payback period for these conversions range from 0.6 years for a propane conversion to about 4 years for a new furnace installation to replace oil or electric. Union Gas in the past has noted that four (4) years is a reasonable upper payback limit for conversions². Since the payback periods are already within this range, it is unlikely that lower reductions to the Nipigon LNG price would materially affect the conversion rates.
 - What potentially could improve the conversion rates would be if the delivered cost of natural gas were low enough to attract a significant percentage of the electric baseboard conversion market by lowering the payback period for this conversion to four (4) years. The Nipigon LNG price is \$8.31/GJ³ (\$7.03/GJ for fixed costs + \$0.44/GJ for variable costs + \$0.84/GJ for trucking). Even assuming the maximum suggested reduction of 25%, as requested in the question, this fee

² EB-2016-0004 Transcript Volume 5 pages 127-128

³ Exhibit A Tab 13 Schedule 1 Table 3

reduction would be \$2.08/GJ. The average customer consuming 84.85 GJ/year⁴ would save approximately \$176 annually ($\2.08×84.85) thereby increasing the total annual savings for this type of customer from \$1498⁵ to \$1,674 which would reduce the payback to 7.5 years ($\$12,500^6/\$1,674$). This is still almost double the targeted 4 year payback range and therefore a reduction of up to 25% in the Nipigon LNG Price is not likely to have a material impact on conversion rates for this market segment.

⁴ Exhibit A Tab 8 Schedule 1 Attachment 1 page 48

⁵ Exhibit A Tab 4 Schedule 3 Table 1

⁶ Exhibit A Tab 4 Schedule 3 Table 3

Certarus-7

Ref: Exhibit A, Tab 13, Schedule 1, page 3

Preamble

"The distribution pipeline will also be connected to a local LNG depot providing the natural gas."

Ref: Exhibit A, Tab 5, Schedule 1, page 1

Preamble

"The gas is then sent through a conventional underground distribution system at the desired distribution temperature and pressure to homes and businesses in the service area. A draft LNG Depot layout is included. (see Tab 13, Schedule 1, Attachment 3).

The LNG Depots will be located on land leased or owned by the Utility identified in Tab 6, either pursuant to a lease or agreement of purchase and sale, with road access and utility services provided by the Utility."

Questions

- a) Please confirm if the Corporation intended that each municipal distribution system should be "open access", with the distribution pipeline able to connect to another source of natural gas supply in addition to the source of gas provided by Nipigon LNG. If not, why not?
- b) Please confirm that the LNG Depot itself will be owned by the gas supplier Nipigon LNG and would be a propriety asset rather than part of the "open access" municipal gas distribution system.
- c) If the Corporation is unable to confirm its initial intention to operate the municipal gas distribution systems on an "open access" basis, is it now prepared to make its system open access so as to avoid a gas supply monopoly and to enhance reliability of gas service to its customers by providing an additional connection to each municipal gas distribution system for alternative suppliers on terms similar to what it has provided to Nipigon LNG?

Responses

- a) See the Foreword to these responses as well as response to OEB Staff-31.
- b) LNG Depots will be located in each Municipality and will be owned by Nipigon LNG.
- c) See the Foreword to these responses as well as response to OEB Staff-31.

Certarus-8

Ref: Exhibit A, Tab 7, Schedule 3, Page 1

Preamble

"The Project is proposed to be in service for the 2020-2021 heating season." (line 9)

Ref: Exhibit A, Tab 13, Schedule 1, Page 5

Preamble

"The anticipated commercial operation date for provision of the LNG Services to the Utility is October 1, 2020 (the "Commercial Operation Date")." (lines 18 and 19)

Questions

- a) Has Nipigon LNG provided the Corporation an updated anticipated commercial operation date for the LNG Services since the Corporation's Application was filed in August 2018? If yes, please provide the updated in-service date.
- b) In light of current Application timing please provide an up-to-date critical path analysis separately for each municipal gas distribution system, for all required LNG facilities and for any TC Energy required facilities detailing the key approval, construction, commissioning and in-service dates assumed by the Corporation for each component of the overall project. Please include a discussion of the critical path associated with all electric power facilities required to operate each one of the LNG facilities.
- c) Please describe the Utility's mitigation plan if Nipigon LNG is unable to deliver natural gas, due to construction delays or otherwise, to complete commissioning or meet the Utility's needs for the 2020-2021 heating season?
- d) In the event Nipigon LNG is delayed or unable to proceed, please advise whether the Corporation would be prepared to proceed to construct each municipal gas distribution system to commence service October 1, 2020 provided adequate long term CNG supplies can be contracted to be available at interconnection points to be added to each gas distribution system upon commercial terms no more onerous to the Corporation than those agreed to with Nipigon LNG. Please assume no new facilities are required by the CNG supplier or TC Energy to supply the required volumes; that no backstopping of incremental CNG costs is required; and that any firm gas supply arrangement would be for the same 10 year term as the Nipigon LNG contract, or for some longer or shorter term as desired by the Utility.
- e) Why should the utility customers of each municipal gas utility be required to bear the costs of stand-by LNG Depot capacity for 5-6 day outage protection if alternative gas supplies are available from existing facilities at competitive prices?

- f) Are the utility customers expected to pay the cost of the electric power required for Nipigon LNG's liquefaction and vapourization activities?
- g) Did the Corporation undertake an assessment of LNG supply reliability risk associated with the construction and operation of greenfield LNG facilities apart from the transportation risk of LNG trucks travelling between the liquefaction terminal and the individual LNG depots? If so, please provide that analysis. If not, why not?
- h) Did the Corporation assess the methane emissions from venting LNG during summer and winter months at the LNG Depot re-gasification facilities? If so, please indicate whether they comply with federal or provincial standards to limit fugitive methane emissions. If no, why not and how might they affect the Nipigon LNG critical path and the planned gas distribution in-service date of October 1, 2020?
- i) Do any provisions of any agreements with Nipigon LNG or any potential financing term sheets or financing agreements contain restrictions on gas supply competition for the requirements of each individual gas distribution system or their customers? If so, please explain the status of any related application to the federal competition authorities and how any potential competition review or approvals might affect the critical paths of Nipigon LNG and of each municipal gas distribution system?
- j) What was the assumed TC Energy service (STFT, IT, FT etc.) and toll for delivery of the natural gas to Nipigon LNG?

Responses

- a) Nipigon LNG provides public updates regarding the Nipigon LNG plant on its website at <http://northeastmidstream.com/regulatory.php>.
- b) The critical path for the Project regarding the gas supply by Nipigon LNG is discussed in Article 3.1 of the LNG Services Agreement. The parties will establish a final schedule after the receipt of conditional approval of this application by the OEB. The electricity requirements for the LNG Depots are minimal and were addressed in the planning phase of the Project. See also response to OEB Staff-29.
- c) Please see Article 3.1 of the proposed LNG Services Agreement. If Nipigon LNG fails to meet any condition precedent within a timeframe to be specified, then the Utility may terminate the LNG Services Agreement and seek alternative gas supply options.
- d) If the hypothetical scenario posed in this question were to materialize, the Utility would assess its position at the time, having regard to all available and feasible options.
- e) The proposed LNG Depots are integral parts of the proposed supply chain. They will provide a reasonable level of supply capability and security in two circumstances. First, during planned and unplanned outages of the Nipigon LNG Facilities. Second and critically, when highway trucking is delayed or cancelled due to northern Ontario winter

weather conditions. This is a usual occurrence in northern Ontario and it would be imprudent for any utility not to plan for it.

- f) See the response to OEB Staff-41.
- g) The Nipigon LNG plant will use proven, low-complexity technologies for gas pre-treatment and liquefaction. Pre-treatment will be accomplished using a mole-sieve Temperature Swing Absorption (TSA) system. Liquefaction will be done by a double nitrogen expansion process. Both of these systems represent the most commonly used processes for LNG production in the small scale. An important factor in the selection of these systems was design and operational simplicity, and both systems are the least complex options available. The providers of these systems that are being considered by Nipigon LNG are the leaders in the marketplace, and have abundant experience. Nipigon LNG considered the technology risk associated with the LNG production process and determined that based on the large number of similar plants operating reliably throughout North America that the risk was insignificant.

The risk associated with construction and operation were considered by the Corporation. The risks of construction are limited to factors that would cause delays in the commencement of service from the Nipigon LNG plant. These risks are real and are mitigated though they entire project development process being conducted by Nipigon LNG Ultimately, delays in the commencement of service can be mitigated by procuring gas supplies from an alternate source. Practical options for replacement LNG supply exist in Canada and the northern US.

Reliability risks associated with operation of the LNG plant were also considered by the Corporation. These risks are well understood and are most commonly related to equipment breakdown, although there are other, less likely risks. Equipment-related risks are mitigated in the same way that equipment risks are mitigated at other industrial plants throughout Ontario (including the plants responsible for the provision of oil, electricity and propane to the North Shore communities). Reliability planning begins in the design phase with site-appropriate equipment and piping specifications, sparing philosophy, and robust controls. Suppliers of equipment are screened to allow only experienced suppliers of similar equipment. Construction quality assurance will be implemented per the CSA standards for this type of plant. Operations will be supervised by qualified Operation Engineers per TSSA regulations. When breakdowns do occur, the time required to repair is minimized by maintaining critical spare parts on site, maintaining contractual service relationships with local service providers, and leveraging design features that enable ease of maintenance and repair.

- h) The information requested does not pertain to the undertaking that is the subject of this Application; rather, it pertains to the undertaking of Nipigon LNG. Nevertheless, we can advise that the LNG Depots are designed to prevent fugitive methane emissions from venting to the atmosphere and comply with all federal and provincial rules and regulations.

- i) The LNG Services Agreement that will be entered into by Nipigon LNG and the Utility does not include non-competition provisions pertaining to who may or may not supply natural gas. The Utility is not privy to the terms of any Nipigon LNG financing arrangements.

- j) The landed cost of gas analysis assumes a TC Energy toll of \$0.99 per GJ, which is based on a firm contract from Empress to Nipigon WDA, an existing delivery point nearby Nipigon LNG, and includes the abandonment surcharge.

Certarus-9

Ref: Exhibit A, Tab 8, Schedule 1, Attachment 1, page 31

Preamble

Certarus Ltd. would like to better understand the Corporation and the Utility's plans for transportation of gas upstream of the Nipigon LNG facility

Questions

- a) Please confirm that the Utility will have responsibility for acquisition of the gas supply and transportation for the gas ultimately to be consumed and paid for by its customers.
- b) Please advise the status of negotiations with TC Energy regarding firm transportation service including but not limited to tolls, type of service, diversion rights, term and likelihood of timely availability of service commencement October 1, 2020.
- c) Please confirm that short term firm services and IT on the TC Energy Mainline are at biddable prices and whether the Utility intends to rely upon these services to provide the gas supply required by its customers.
- d) Please confirm that long term firm service requests on TC Energy's Mainline that trigger the construction of new facilities require a minimum term of 15 years.
- e) Please advise whether the Corporation or the Utility are aware of any upcoming TC Energy Open Seasons that may affect the availability of capacity to its intended interconnection point or which might trigger a term-up requirement for any firm service contract it may elect to enter into.
- f) Please advise whether the request for TC Energy Mainline service is being made in the name of the Corporation, the Utility or Nipigon LNG.
- g) What cost of TC Energy metering and interconnection were assumed by the Corporation or the Utility; what is the status of negotiations with TC Energy regarding payment of those costs; and how will those costs be recovered from customers (e.g., embedded in utility distribution charges; in the commodity cost of gas; in the Nipigon LNG charge; etc.)?
- h) Please provide drawings of the interconnection with the TC Energy Mainline and the Nipigon LNG facilities indicating whether the meter and interconnection facilities will be located on land owned by TC Energy, Nipigon LNG, the Municipalities, or the Utility, and whether third parties might have access to those interconnection facilities.
- i) Please explain how the Utility will secure and control access to the TC Energy interconnect in the event, for any reason, Nipigon LNG is no longer able to provide service, the Nipigon LNG contract expires, or Nipigon LNG ceases to exist.

- j) Please indicate whether the Utility will have the right at any time during the Nipigon LNG contract term or after its expiry to divert gas to other TC Energy Mainline delivery points in the WDA or NDA for ultimate delivery to the new municipal gas systems by means of CNG, LNG or otherwise.
- k) Please indicate whether there are any restrictions set forth in any Nipigon LNG agreements or financing agreements on the Utility's ability to take delivery of gas from TC Energy at other delivery points than the new interconnection referenced above.
- l) Assuming the transportation, interconnection and meter costs are the responsibility of the Utility, which costs will be recovered in rates from its customers, how will the Utility ensure "open access" for third party gas suppliers to access that TC Energy interconnection and to receive gas delivered by means of the Utility's TC transportation agreement?
- m) Will the Utility commit to the management of its rights on the TC Energy Mainline to deliver gas to alternate delivery points provided the costs of further delivery to its customers can be demonstrated to be the best cost alternative available or where they could be otherwise justified in the public interest?

Responses

- a) Confirmed.
- b) The Municipalities continue to evaluate the merits of contracting for upstream gas supply services with TC Energy directly or through an agent.
- c) The Utility intends to engage in upstream gas supply agreements that best meet the objectives of the Gas Supply Plan.
- d) Not confirmed.
- e) It would be inappropriate for the Municipalities to speculate regarding TC Energy's proposed services and future plans.
- f) In the event that the Utility decides to contract with TC Energy directly for Mainline service, the request will be made in the name of the Utility.
- g) Please see the response to OEB Staff-29.
- h) Please see the response to OEB Staff-29 and the OEB's decision and order in the matter of EB-2018-0248.
- i) The Ledger Facilities serving Nipigon LNG will be the property of TC Energy and are expected to remain the property of TC Energy.

- j) Diversion rights for customers/shippers are common under agreements with TC Energy as well as arrangements with agents.
- k) The LNG Services Agreement does not preclude the Utility from taking gas delivery from TC Energy at a delivery point, as long as the Utility meets its nomination obligations to Nipigon LNG.
- l) Please see the response to OEB Staff-29. The interconnection and meter costs for the Ledger Facilities are not the responsibility of the Utility.
- m) The question is unclear.

Certarus-10

**Ref: Exhibit A, Tab 8, Schedule 1, Attachment 1, pages 8-9
[Initial Gas Supply Plan - North Shore Municipalities, Elenchus Research Associates Inc.
(July 2019)]**

Preamble

"Since this is a new distribution area, it is recognized that the demand for gas could occur in a different pattern than what has been assumed from the surveys. The Plan therefore needs to be sufficiently flexible to manage variations in demand while still meeting the needs of the customers in a cost-effective and reliable manner.

To the extent required, additional upstream options will be assessed, and new arrangements will be put in place that maintain the cost- effectiveness–reliability–public policy balance."

Questions

- a) Please confirm if the Utility agrees with the assertion made by Elenchus that demand for gas could occur in a different pattern than assumed, and that additional upstream options may need to be put in place.
- b) Did Elenchus or Innovative Research consider a slower natural gas adoption cycle and the potential impact on prices borne by customers, on the owners of the gas distribution systems or on the financing arrangements required?
- c) Was Elenchus or Innovative Research asked to consider, or did they otherwise consider, the reliability risk of a greenfield LNG supply option or discuss with potential customers the cost of back up supply arrangements for their space heating requirements in the event an LNG Depot is unable to provide gas supplies for a prolonged period particularly in the winter months? If so, please provide that analysis or a report of any such discussions. If not, why not?
- d) Were back-up supply costs included in the analysis of the expected conversion rate?

Responses

- a) The Applicants agree that demand for gas could occur in other than the assumed pattern. The OEB's Framework for the Assessment of Distributor Gas Supply Plans (EB-2017-0129) requires distributors to submit a comprehensive gas supply plan every five (5) years, for detailed review, and an annual gas supply update that focuses on changes to the supply and demand conditions. The five (5) year plan must also include a retrospective view of the annual gas supply update. The Utility will assess the need for additional or new gas supply options in the context of the annual and five-year Gas Supply Plan reviews.
- b) The majority of costs embedded within rates, for both the distribution rate and the LNG service rate, are to recover the costs of fixed assets or are otherwise independent of the

number of customers or volume consumed. A slower natural gas adoption cycle would leave these fixed assets and expenses underutilized which would have adverse consequences to the rates paid by all customers.

- c) The assessment of supply risks is addressed in the Gas Supply Plan found at Exhibit A Tab 8 Schedule 1 Attachment 1. The use of LNG is a common technology, used in North America and throughout the world, to meet the ongoing and peak day needs of customers. Elenchus did assess the potential for LNG plant outages related to component failures, and Nipigon LNG assured Elenchus that normal equipment spare parts would be retained on site to ensure that repairs could be quickly addressed without the need for incremental mitigation measures. Elenchus did identify the Gas Supply Plan that there was a potential risk of extended plant outage and the potential mitigation measures. The Gas Supply Plan also addressed the risks associated with other potential LNG outages. These mitigation measures include both LNG Plant Storage and Depot Storage, as well as gaining access to alternative supplies. The Innovative survey did not specifically include the unlikely event of an extended plant outage or the cost implications of an alternative supply during such an event, but it did include the costs associated with providing a natural gas system that had a reasonable balance between cost effectiveness and reliability. The costs of any back up supply would be dependent on the time of year and quantity of supply needed.

- d) The delivered cost of natural gas to customers does include the costs associating with mitigating the risks associated with the LNG supply. This includes both the 18,000 GJ of LNG Plant storage as well as 5-7 days of LNG Depot storage.

Certarus-11

Ref: Exhibit A, Tab 13, Schedule 1, Page 1

Preamble

"Nipigon LNG is a transformative and regionally significant initiative for the economic development of northern Ontario. Project infrastructure will help sustain existing industrial operations, accelerate new development and provide a platform to extend natural gas service..." (lines 13 – 15)

Question

- a) Does the Corporation agree that Certarus Ltd.'s two built and de-risked CNG terminals in Northern Ontario (Timmins and Red Rock), of which the Timmins terminal is already reliably supplying multiple industrial customers, is a "transformative and regionally significant initiative for the economic development of northern Ontario" and "provide[s] a platform to extend natural gas service" in the region?

Response

- a) We are unable to comment on the transformative nature, or otherwise, of Certarus' undertakings.

Certarus-12

Ref: Exhibit A, Tab 13, Schedule 1, Page 2

Preamble

"Without pre-approval of the cost consequences of the proposed Contract, the Utility's investors would not commit the capital to finance the Utility, and, in turn, Nipigon LNG could not commit to build and operate the LNG Depots to supply the Utility with natural gas. As a result, the residents and businesses of the Municipalities would be exposed to the sustained impacts of higher-cost energy." (lines 21 – 25)

Question

- a) What is the Utility's mitigation plan should Nipigon LNG be unable to commit to build and operate the LNG Depots as proposed, for reason of insufficient financing or otherwise?

Response

- a) See the response to Certarus-1.

Certarus-13

Ref: Exhibit A, Tab 13, Schedule 1, Page 7

Preamble

"The Utility will be required to provide and maintain evidence of satisfactory creditworthiness and provide the requisite financial assurances during the term of the proposed Contract, and the Utility may be required to execute a financial backstopping agreement, in form and substance reasonably acceptable to Nipigon LNG upon execution of the proposed Contract.

Nipigon LNG is under no obligation to order any equipment, materials or labour necessary for the construction of the LNG Depots prior to the execution of the proposed Contract." (lines 7 – 12)

Questions

- a) Please confirm that executing a financial backstopping agreement that is acceptable to Nipigon LNG does not preclude competitive natural gas supply options.
- b) Please describe the Utility's mitigation plan if Nipigon LNG does not execute the Contract and order any materials, equipment or labour.
- c) In terms of the Project's critical path, when must Nipigon LNG order any material, equipment or labour in order to meet the October 1, 2020 in service date?
- d) Please describe any evidence of credit worthiness or financial assurance the Utility requires from Nipigon LNG or any other potential competitive supply option.
- e) Are the municipal gas distributors prepared to backstop the costs of competitive gas suppliers as well? If not, please comment on whether this constitutes an undue preference for one gas supplier over another which would be contrary to the regulatory policies of the Board?
- f) How do the municipal gas distributors expect to recover any costs incurred in connection with the commitments to Nipigon LNG referred to above?

Responses

- a) The financial backstopping arrangements referred to are set out in Section 8.1 of the LNG Services Agreement. These arrangements are intended to ensure the prompt and orderly payment of charges to be paid by the Utility, to Nipigon LNG, in accordance with the terms of the LNG Services Agreement. The LNG Services Agreement contains no provisions that preclude the Utility from contracting for other sources of natural gas supply.
- b) See the response to Certarus-1.

- c) The critical path for the Project regarding the gas supply by Nipigon LNG is discussed in Article 3.1 of the LNG Services Agreement. The parties will establish a final schedule after the receipt of conditional approval of this application by the OEB. See also response to Certarus-8.
- d) The LNG Services Agreement includes appropriate safeguards with respect to financial matters, including in Section 3.6 thereof.
- e) Contracts for alternative supplies of natural gas will be negotiated on a case-by-case basis and will be subject to review by the Board in accordance with applicable policies in force at the time.
- f) As part of the Application in this proceeding, the Utility is seeking the approval of the cost consequences of the LNG Services Agreement.

Certarus-14

Ref: Exhibit A, Tab 13, Schedule 1, page 11

Preamble

"At present, there is no natural gas supply or distribution on the North Shore of Lake Superior..." (line 3)

Question

- a) Does the Corporation agree that the above statement no longer remains accurate in the circumstances today? If not, why not?

Response

- a) As of the date of this filing, natural gas distribution is not available to the residents and businesses within the Municipalities.

Certarus-15

Ref: Exhibit A, Tab 13, Schedule 1, page 15

Preamble

"Furthermore, the contemplated project is a stand-alone greenfield development that requires a sizable investment in new natural gas infrastructure to provide a relatively small quantity of natural gas. While the proposed Contract represents the entire portion of the Utility's overall gas supply portfolio, it is not unreasonable that the Utility would rely on a single contract during the initial term of the proposed Contract." (lines 3 – 7)

Questions

- a) Please explain why the Utility has chosen to rely upon a single supply contract, rather than having multiple competitive supply options in order to achieve the most economical rates and favourable contract terms?
- b) Has the Utility or its financial advisors considered the technology risk of a single greenfield LNG gas supply option and potential means of mitigating that risk? If so, please provide that analysis. If not, why not?
- c) Will the Utility require its customers to pay "in all events" the distribution costs as well as the gas supply costs of Nipigon LNG throughout any supply disruption? How long will utility customers be expected to bear those costs while not receiving gas supply?
- d) Are there any restrictions on the Utility's ability to provide interconnection facilities for alternative or supplemental gas suppliers as part of the municipal gas distribution systems?
- e) What would be the approximate cost of providing interconnection facilities for CNG suppliers?
- f) In order to enhance supply reliability and to provide competitive supply options for its customers, is the Utility prepared to include CNG interconnection facilities in its applied for facilities design to ensure two potential suppliers can access each new gas distribution system by October 1, 2020? If not, why not?

Responses

- a) See the Foreword to these responses as well as the response to OEB Staff-31.
- b) See the response to Certarus-8(g).
- c) The LNG Services Agreement includes certain safeguards (including cost relief) that would apply in the event of a failure by Nipigon LNG to provide the LNG Services (as defined in the LNG Services Agreement). Refer to Section 3.6 of the LNG Services

Agreement in this respect. Distribution rates charged by the Utility will be the subject of a subsequent rate application to be considered by the Board.

- d) See the response to OEB Staff-11(c).
- e) See the Foreword to these responses.
- f) See the Foreword to these responses.

Certarus-16

Ref: Exhibit A, Tab 13, Schedule 1, page 15

Preamble

"As with any greenfield natural gas project, actual attachments and demand may not match forecasts over the term of the proposed Contract and the discrepancy may be material, thereby creating financial risk to customers." (lines 12 – 14)

Questions

- a) Please advise what mitigation the Utility considered to reduce the financial risk borne by its customers in order to limit the costs they must bear in the event forecasted demand does not match forecasted levels? Will customers be responsible for all gas distribution costs on their bills separately from the costs incurred for gas supply?
- b) Will customers be able to choose an alternative gas supplier at any point over the term of the Nipigon LNG contract?
- c) What is the Utility prepared to do to reduce the high minimum payments under the Nipigon LNG contract in the event that:
 - i. actual and forecast demand fail to match; or
 - ii. cost overruns or delayed service at one or more of Nipigon LNG's facilities cause distribution costs (AFUDC etc.) to increase?
- d) Are the Utility's financial advisers also advising Nipigon LNG regarding the risks and financeability of its own project?
- e) Are the Utility and the Corporation at arms-length from Nipigon LNG and its owners?
- f) Would the availability of alternative gas supplies by means of new interconnection facilities on each municipal gas distribution system reduce the risk of the investment in those gas distribution facilities (separate from Nipigon LNG)?

Responses

- a) See the response to OEB Staff-12(a).
- b) The Utility will procure or will cause the procurement of natural gas and pipeline transportation to the TC Energy delivery point. Any customer who wishes to do so, may procure its own natural gas and transportation to this delivery point. See Application, Exhibit A, Tab 13, Schedule 1, p. 16, lines 16-20. See also the Foreword to these responses.
- c) See the response to OEB Staff-12(a).

- d) The Applicant is not party to the confidential business forecasts or financeability of Nipigon LNG. The two projects are managed independent of one another with the five Municipalities having no involvement or participation in who provides financial advisory services to Nipigon LNG and its owners.
- e) Yes. The Municipalities are acting wholly independently in the interests of local residents to supply the most efficient, clean, safe and reliable natural gas option.
- f) See the response to Certarus-16(a).

Certarus-17

Ref: Exhibit A, Tab 13, Schedule 1, page 16

Preamble

"Similarly, if the Utility expands faster than projected and lower priced gas supply and transportation options became available at some point during the proposed Contract, the Utility will have flexibility to take advantage of those opportunities by adding that capacity to its supply portfolio." (lines 1 – 4)

Question

- a) Please describe what arrangements the Utility is planning to take immediate advantage of lower-priced gas supply from the competitive gas supply offerings of Certarus Ltd. or other providers?
- b) What capacity limitations exist under the proposed distribution system design that might limit the ability to serve higher than expected demand? Please provide order of magnitude daily levels of incremental demand that the existing facilities design could reasonably handle.
- c) Please describe the plans made for interconnection infrastructure for alternative LNG or CNG supply and the timing of the availability of such facilities.

Responses

- a) See the Foreword to these responses.
- b) The capacity of the underground distribution systems to deliver unanticipated loads ranges from approximately 1.5 times the design load for Wawa to approximately four times the design load for Marathon. The underground distribution system for each Municipality is designed to serve the projected load with an allowance for uncertainty in the load forecast. The excess capacity in the distribution system is dependent on both the volume of the additional load and the location of the additional load. Also, the total available capacity is not the same in each community due to several factors, such as the geography, size of the proposed systems, and the minimum mains size.
- c) See the Foreword to these responses.

Certarus-18

Ref: Exhibit A, Tab 13, Schedule 1, page 17

Preamble

"The requested pre-approval will allow the Corporation to proceed confidently with this opportunity and for residents and businesses of the Municipalities to obtain the resulting benefits of natural gas service."
(lines 18 – 20)

Question

- a) Would the immediate availability of alternate or back-up gas supplies at an additional point of interconnection to each municipal gas distribution system increase the confidence of the Corporation and its customers in converting to natural gas service? If not, why not.

Response

- a) See the Foreword to these responses.

Certarus-19

**Ref: Exhibit A, Tab 13, Schedule 1, Attachment 5
[LNG Services Agreement]**

**Exhibit A, Tab 13, Schedule 1, Attachment 5, page 35
[LNG Services Agreement, SCHEDULE A - INTERRUPTION OF SERVICE]**

Questions

- a) Please advise if the agreement or any other agreement with Nipigon LNG or the Utility's financial advisers prevents the Utility from providing "open access" to competitive natural gas supply options at the outset, including supporting commissioning or supplying natural gas in the event of supply interruptions or in any circumstances where Nipigon LNG might otherwise be unable to deliver natural gas.
- b) Paragraph 3.1(a)(iv) of the LNG Services Agreement requires the Utility to provide to Nipigon LNG the Customer Financial Security within 30 days of signing. Please describe the Utility's mitigation if it is unable to, or determines it is economically unreasonable or unfavourable, to provide such financial security?
- c) Paragraph 3.1(a)(v) states that Nipigon LNG shall make a positive final investment decision, in its sole discretion, to construct the LNG facilities by some indeterminate date. Please describe the Utility's mitigation plan if Nipigon LNG decides in its sole discretion to not make the requisite investment decision due to inability to obtain financing or any other reason or that Nipigon LNG is materially delayed ?
- d) Paragraph 4.2 states that Nipigon LNG may offer additional LNG service above the MaxDQ to the Customer. Please advise if competitive natural gas supply options can provide service to the Utility or to its customers. If not, why not. If yes, please provide the proposed terms and conditions or other proposed agreement/term sheet applicable for the provision of such competitive service.
- e) Paragraph 5.3 references SCHEDULE B, which contains pressure and temperature specifications for gas received from Nipigon LNG. Please advise if similar information is available now for other competitive supply options from LNG or CNG providers.
- f) SCHEDULE A – Interruption of Services (Exhibit A, Tab 13, Schedule 1, Attachment 5, page 35) identifies a host of reasons why Nipigon LNG may discontinue or interrupt service, including "(d) in order to make repairs or improvements to any part of Nipigon LNG's pre-treatment, liquefaction, distribution, storage, control or loading systems.". Please advise as follows:

- a. the Utility's mitigation strategy if Nipigon LNG chooses to interrupt service for an extended period to make extended repairs or improvements to its equipment.
- b. what penalties, if any, Nipigon LNG could experience under the terms of the Contract for lack of service.
- c. whether the Utility would provide similar favourable terms to any other competitive supplier of natural gas with which the Utility contracts.
- d. whether the Utility's customers would receive any relief from the Nipigon LNG costs during periods where its gas supply service is interrupted or curtailed. If not, why not?
- e. how the Utility will proration available gas supplies to its customers under circumstances where Nipigon LNG is unable to provide gas supply.

Responses

- a) See the response to Certarus-8(i).
 - b) The Utility intends to comply with the terms of the LNG Services Agreement.
 - c) See the response to Certarus-1.
 - d) See the response to Certarus-15(a).
 - e) See the response to Certarus-15(a).
 - f)
-
- a. See the response to OEB Staff-45.
 - b. See Section 3.6 of the LNG Supply Agreement. This sets out the repayment to be made or credit to be applied to the Firm Capacity Charge in the circumstances described therein.
 - c. The Utility will negotiate the terms and conditions of any alternative gas supply options that it deems necessary, on a case-by-case basis.
 - d. See the response to Certarus-19(f)b.
 - e. Discussion of the hypothetical posed by this question is beyond the scope of Certarus' permitted intervention and addresses issues, the consideration of which are premature at this time. See also the response to Certarus-5(e).

PURCHASE ORDER	
Requisitioned By	Account Reference
Daryl Skworchinski	LN ₂ PROJECT FILE



EB-2018-0329
Attachment A to Certarus IR-4 c)
Page A-1

Elenchus
34 King Street East, suite 600
Toronto, ON
M5C 2X8

PO #:	002-2019
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Date:	26-Feb-19
Authorize d	
Signature:	

Item	Quantity	Description	Price
1	1	Elenchus will:	
		- prepare a draft Gas Supply Plan Report as outlined in Schedule 1 of the February 21 2019 proposal	
		- provide a presentation to the municipalities via conference call to review and discuss the outcomes	
		- finalize the Gas Supply Plan based on any feedback witht the Municipalities	
		- complete work by April 10, 2019	
		Terms as set in the proposal:	
		- any work outside of set scope will be charged hourly	
		- any travel expenses will be reimbursed at cost	
		HST 13%	
		Total	

IMPORTANT

Show purchase order number on all invoices, correspondence and shipping packages

MAIL TO:

P.O. Bag "TM" 4 Hemlo Drive,
Marathon, Ontario P0T 2E0



34 King Street East, Suite 600
Toronto, Ontario, M5C 2X8
elenchus.ca

Corporation of the Town of Marathon
Chief Administrative Officer
P.O. Bag "TM", 4 Hemlo Drive
Marathon, Ontario
P0T 2E0
Attention: Mr. Daryl Skworchinski

21 February 2019

Re: Development of a Gas Supply Plan

Dear Mr. Skworchinski

1) BACKGROUND

The Towns of: Manitouwadge, Marathon, Schreiber, Terrace Bay and Wawa (collectively the **Municipalities**), are proposing to develop a natural gas system in each of the Municipalities to service residences and businesses to lower energy costs. The development of these natural gas systems is expected to require the submission of several applications to the Ontario Energy Board ("**OEB**"). A Gas Supply Plan will need to be submitted either as an independent filing or in support of one or more of these applications. A Gas Supply Plan is required to be filed initially and every 5 years thereafter; as well as file an annual gas supply update¹. These Gas Supply filings are intended to assist the OEB in meeting one of OEB Objectives: "To protect the interests of consumers with respect to prices and the reliability and quality of gas service."²

Since the Municipalities will be developing a new distribution system, the Gas Supply Plan may be potentially required to support other applications including:

- A Leave to Construct ("**LTC**") application,
- A rate application, and

¹ EB-2017-0129 section 1.2

² OEB Act paragraph 2



- Any application dealing with obtaining long term gas supply or transportation contract approvals.

Elenchus has been asked to provide a proposal to complete the initial Gas Supply Plan to service the Municipalities so that it can be filed with the OEB. Elenchus is pleased to provide this proposal to prepare this initial plan. The initial Gas Supply Plan will follow the filing requirements as set out by the OEB in EB-2017-0129.

2) INTRODUCTION

The Municipalities have proposed to develop a natural gas distribution system in each of their respective towns. The location of these towns with respect to existing natural gas infrastructure, and the predominance of rock outcropping along any potential pipeline routing, has been, and continues to be a prohibitive cost barrier to serve these communities in an economical fashion. The Municipalities have therefore proposed serving these communities via a trucked liquified natural gas ("LNG") system. The LNG would be acquired from Nipigon LNG, situated near Nipigon Ontario where conventional natural gas would be converted to LNG, trucked, and stored in one or more cryogenic tanks located in a depot within each Municipality. As the demand dictated, the LNG would be warmed to ambient temperatures converting it back to conventional natural gas and piped in the conventional fashion throughout each Municipality.

The Gas Supply Plan is intended to demonstrate to the OEB that the Municipalities have a gas supply plan that is cost effective, reliable and of sufficient quality when compared to the other potential natural gas supply options.

3) SCOPE OF WORK

In order to complete the Gas Supply Plan, Elenchus will use the Municipalities' current long-term demand forecast and supply related work done by the Municipalities where available. These options will be updated as necessary Elenchus will evaluate the potential supply options available, including costs, risks and quality of service and rate impacts related to such potential supplies.

- a) Elenchus anticipates evaluating three alternative supply options including:
 - i. Traditional pipeline supply piped to each of the municipalities,
 - ii. A trucked LNG supplied by Nippigon LNG, and
 - iii. A trucked CNG supply to each municipality
- b) Utilizing the demand forecast, each of these options will be evaluated for:
 - Capital cost of each option

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- Commodity costs and other operating costs (fixed and variable) associated with the delivery of natural gas (e.g. transportation, storage, etc.), for each option.
 - Rate implication of each supply option
 - The relative risks of each supply source
 - Quality of service of each option
 - Potential cost and risk mitigation strategies for each option
 - Assessment of the potential for storage associated with the supply option,
- c) Based on the analysis, Elenchus will provide an overall recommendation to meet the best supply plan taking into account costs (and rate impact), reliability and quality of service.
- d) Elenchus will also:
- Provide suggested supply procurement policies,
 - Identify any readily available renewable natural gas options available, or other public policy initiatives,
 - Identify any long-term contracts that may be desirable to mitigate costs and risks or otherwise may be required to develop the appropriate infrastructure
 - Identify gas supply performance metrics for future evaluation of the plan, and
 - Identify areas of continuous improvement.

Completion of the work as outlined presumes that Elenchus is also developing the rate model for the project as this will be necessary to assess the customer impact.

4) DELIVERABLES

- Elenchus will prepare a draft Gas Supply Plan Report as outlined in Schedule 1 hereto in PDF version
- Elenchus will provide a presentation to the Municipalities via conference call to review and discuss the outcomes
- The Gas Supply Plan will be finalized based on any feedback with the Municipalities.

5) TIMING

- Provided the Municipalities commit to proceeding with this proposal by no later than Feb 28, work will be completed by April 10, 2019. Elenchus has other prior commitments during April and May. Delays in approving this proposal beyond February 28, may result in significant delays in completing this work.

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6) PERSONNEL

- John Wolnik will be the lead associate for the assignment
- Andrew Blair will provide any rate impact analysis
- John Todd will provide support as required

7) PRICING ARRANGEMENTS

a. Fees

- This work will be completed as a lump sum amount of \$ [REDACTED] (exclusive of HST)
- Any further work requested after the completion and presentation of the report, or work beyond the scope as set out herein, shall be done on hourly fee basis at the rate of:
 - John Todd [REDACTED]/hour
 - John Wolnik [REDACTED]/hour
 - Andrew Blair [REDACTED]/hour

b. Travel Expense Reimbursement

- While no travel expenses are anticipated; to the extent that any travel is authorized in advance by the Municipalities, such reasonable expenses will be reimbursed at cost.

Sincerely

John Wolnik

Accepted and Agreed to this 26 day of February 2019

Town of Marathon

DARRELL SEWON ACTON JR., CAO/CLERK



Schedule 1

Draft Outline of the initial Gas Supply Plan

- 1) Administrative Information
 - a) Table of Contents
 - b) Introduction
 - c) Process, Resources and Governance
- 2) Gas Supply Plan Criteria
 - a) Demand Forecast Analysis
 - Description of the process and rationale used to develop the demand forecast
 - Description of the risks associated with the demand forecast (e.g. weather, customer attachment rate, use per customer, etc.)
 - b) Supply Option Analysis
 - Supply options considered including a description of the costs and risks of each (including reliability, price volatility and predictability)
 - Description of supply and transportation route diversity and the cost and risk implication
 - Description of the level of price volatility that was deemed acceptable and why
 - Customer bill impact analysis for all the options considered
 - Description of the options considered for a reliable supply
 - Description of the approach taken to balance reliability and flexibility and cost and risk trade-off
 - Rationale for the option chosen
 - c) Performance Metrics
 - d) Risk Mitigation Analysis
 - e) Achieving Public Policy
 - Description of the potential for renewable natural gas
 - f) Procurement Process and policy
- 3) Gas Supply Plan Outlook
 - a) Quantitative forecast to include (but not limited to):
 - Forecasted demand
 - Commodity and other market-based solutions
 - Renewable natural gas portfolio
 - Transportation portfolio

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- Storage portfolio
 - Unutilized capacity
 - Long-term contracts
 - Other supply solutions
- 4) Gas Supply Plan Execution
 - a) Overview of natural gas procurement policies
 - 5) Description of Continuous Improvement
 - 6) Link to Other Applications

