

REF: Scott Madden Report on UFG, page 8

Preamble: We would like to understand better EGI's previous practices in applying the Supercompressibility Factor to customer meters.

- 1) Please provide the minimum level of pressure that had the Supercompressibility factor applied prior to the recent change in practice.
 - a) Please provide the settings on instruments for Supercompressibility on EGI customers who received:
 - i) Between 120-420 kPa
 - ii) Between 420-700 kPa
 - iii) Between 700-860 kPa
 - iv) Between 860-1380 kPa
 - v) Between 1380-1900 kPa
 - vi) Above 1900 kPa
- 2) For each of the above pressure categories, please provide the difference in the adjustment factor between what Enbridge Gas had applied versus what the adjustment factor would be at the minimum pressure of the range specified.
- 3) In tabular form, for each of the above pressure categories, please multiply the difference in adjustment factor to the volumes measured from meters whose average pressure throughout the year falls into the respective ranges.

REF: Scott Madden Report on UFG, page 13

- 4) Please provide the maximum and minimum allowance differences from Measurement Canada.

REF: Scott Madden Report on UFG, page 18

- 5) Please provide the NRRI study or report that supports the statement on UFG.

REF: Scott Madden Report on UFG, page 28

Preamble: The Madden Report states: *“Meters can fail over time leading to differences between actual and metered volumes. These differences can represent a source of UFG. In some cases, meters may run “fast”; i.e., metered volumes are more than actual volumes. In other cases, meters may run “slow”; i.e., metered volumes are less than actual volumes. Fast meters tend to decrease UFG, while slow meters tend to increase UFG.”*

- 6) Please provide the company’s opinion on whether, “over time”, meters run “fast” or “slow”.

REF: Scott Madden Report on UFG, page 28

Preamble: The Madden Report states: *“In Connecticut, the utilities require the worst performing meter classifications to undergo a greater number of periodic tests in subsequent years. Utilities have addressed the meter accuracy component by establishing a meter test program the results of which are reported to the Commission on an annual basis.”*

- 7) What does EGI take from the above observation as applied to its franchise?

REF: Scott Madden Report on UFG, page 33

Preamble: The Madden Report states: *Review and update Supercompressibility parameters to more accurately measure and record volumes at elevated pressures. There is an ongoing effort to standardize this procedure across the legacy Companies. The update of Supercompressibility parameters is expected starting March 2020.*

- 8) Please specify if the EGD rate zone is using elevation factors.
- a) If so, when were they implemented?
 - b) What aspects of the elevation protocol require more accuracy?
- 9) When did EGD first recognize the impact of Supercompressibility at moderate pressures?

REF: Scott Madden Report on UFG, page 34-35

Preamble: The Madden Report states: *“Gate station meter variations represent a potential source of UFG if there are differences between actual and metered volumes. Gate station meter variations have been recognized by gas utilities and the legacy Companies as a potential source of UFG and have implemented a number of practices and initiatives to monitor and manage gate station meter variations.”*

We understand that TransCanada experienced some significant challenges in applying chromatographic readings to delivered gas from October 2018 to January 2019.

- 10) Please explain in layman's term how the components of the gas stream impact energy content of the gas stream.
- 11) Please provide a summary of the issue with TransCanada's chromatographic readings from EGI's perspective?
- 12) In an Excel file, for 2016 to 2018, please provide:
 - a) the daily volumetric reading of gas transferred from TCE to EGI at Victoria Square Gate station (in 000's of cubic meters)
 - b) the daily Heat Content applied by TCE to determine the energy transferred (GJ/1000m³)
 - c) the resulting energy transfer determined
 - d) the daily Heat Content values measured at Parkway by Union/EGI (GJ/1000m³)
 - e) the produce of the daily volumetric reading at Victoria Square from a) and the daily Heat Content values in d)
- 13) In performing this study, was Scott Madden informed of this issue?
 - a) If not, why not?
 - b) If so, please provide their letter of advice or recommendation.

14) Please confirm that chromatographs were installed recently at TCE's Richmond and Ottawa stations.

- a) Please provide a pipeline map with EGI delivery stations for the TransCanada Eastern Ontario triangle.
- b) Please indicate where EGI understands chromatographs were located as of October 1, 2017
 - i) Please provide which TCE delivery stations to EGI were applied to each of the chromatograph as of October 1, 2017.
- c) Please indicate where EGI has knowledge of chromatographs currently.
 - i) Please provide which TCE delivery stations to EGI are now applied to each of the chromatograph.
- d) What is EGI's understanding of why two chromatographs were added where there were previously none.

15) Please provide the last year that each of these utilities used orifices plates for custody transfer.

16) Does DTE employ chromatographs or any energy content evaluation at any custody transfer location to verify accuracy?

REF: Scott Madden Report on UFG, page 39

Preamble: The report states; *"Legacy EGD implemented various practices and initiatives to monitor and manage gate station meter variations.*

Investment in Facilities

■ *Redesigned the Victoria Square Gate Station to more accurately measure gas flows. The project is scheduled to commence in 2020."*

We would like to understand better the nature of the measurement problem and the approach to resolve.

17) Please define the underlying problem and the designed fix?

- a) Please provide a drawing with dimensions to describe the systemic problem.
- b) Is the existing design AGA-8 compliant?

REF: Scott Madden Report on UFG, page 48

Preamble: The Madden report states: *UFG is not specifically budgeted for the Union North service area and therefore any UFG actually incurred per the legacy Union North calculation is a volume variance to the budgeted UFG.*

18) Please explain this sentence more specifically (e.g., a volume variance to “what” budgeted UFG?).

- a) More importantly, who pays for the actual volume variance.

REF: Exhibit B, Tab 1, Schedule 1 Appendix C, page 5, Table 1, lines 16, 20 and 21

19) Please confirm that EGD zone transportation needs are included in the M12/C1 Dawn-Parkway.

- a) Please provide the revenue requirement associated with these needs for each of the respective columns in Table 1 for each of lines 16, 20 and 21.

REF: Exhibit B, Tab 1, Schedule 1 Appendix C, page 6, Table 2

Preamble: We would like to understand the differences in the M4 and M5 contract rates and the changes in C1 attraction of costs.

20) Please provide the following information:

- a) Please describe the criteria for M4 Firm and Interruptible?
- b) Please describe the criteria for M5 Firm and Interruptible?
- c) Using the differentiations of the respective rate classes, please describe how those differences drive changes to the attraction of costs for revenue requirement and rate recovery.

21) Please specify what factors contribute to the significant reduction in C1 change in Table 2?

REF: Ex. B, Tab 1, Sch. 1 App. C, pages 10-11 & EB-2015-0166 Ex. A pages 33-35

Preamble: EGI states: “*Rate C1 transportation includes Union South and Union North sales service customers that transport volumes on the Panhandle and St. Clair System to Dawn. These customers are charged the firm Rate C1 transportation demand charge for transportation between Dawn and Ojibway, St. Clair and Bluewater to ensure there is no cross subsidy between sales service customers and other customers for the use of these assets. The use of the Rate C1 firm transportation demand rate to charge sales service customers for transportation to Dawn was introduced as part of Union’s Pre-Approval of the Cost Consequences of NEXUS Long Term Contract proceeding (EB-2015-0166).*”

22) Please file the referenced pages from EB-2015-0166.

- a) Is the referenced rate of \$0.035/GJ, a rate that is determined using the expectation of \$2.8M of S&T revenue from the St. Clair to Dawn service?
 - i) If so, what would the rate without the revenue?
- b) Is the practical effect that EGI is profiting from the gas commodity revenues?
Please explain.

REF: Exhibit B, Tab 1, Schedule 1 Appendix C, pg. 18, para. 38 & p. 20, para. 43

Preamble: EGI states: “*The Union South in-franchise design day demands at Parkway are allocated to rate classes in proportion to Union South Dawn-Parkway design day demands.*”

23) Is are the Union South Dawn-Parkway design day demands distance-weighted?

- a) If not, please differentiate what Dawn-Parkway costs are distance-weighted and those that are not.

REF: Exhibit B, Tab 2, Schedule 1, pages 20 & 23-27 &

EB-2019-0172 References contained in the footnotes below

Preamble: We want to understand better specifics around additional utilization of the eastern half of the proposed Windsor Line replacement in support of the proposed NPS 6 sizing. From the Leave to Construct proceeding¹:

When questioned about the need for the enormous levels of surplus capacity, the witnesses provided that there were additional potential customers east of Comber that were not included². We requested that the potential load additions be provided (respecting confidentiality) including the distance east of the T in the intersection north of the Comber Transmission station³. What was provided was that there for “four inquiries in the Port Alma and surrounding area”⁴. However, it is disconcerting that the distance from the T in the intersection was not provided. This distance could be provided without any risk to confidentiality. Further, it is very surprising that in the Project Charter approved only a year ahead of this application, in the Key Commercial Drivers Section, while growth benefits are identified for other areas, there is no mention of industrial inquiries in the Port Alma area⁵. We believe these potential load additions require additional scrutiny to establish the appropriate sizing of the pipe.

24) Please provide the Project Charter for the Windsor Line.

25) Please provide specifics on the customer inquiries for those requested load additions east of the T in the Windsor line north of Comber.

a) Please provide specific emails, service lateral requests, or other documentation in support of assertions of additional interest. Please ensure that the inquiries are

¹ FRPO_REQ ORAL HEARING_20200104

² TC1 Transcript, Dec. 5, 2019, pg. 48-49

³ TC1 Transcript, Dec. 5, 2019, pg. 51

⁴ Exhibit JT1.15

⁵ Exhibit JT1.17, Attachment 2, page 7

differentiated by some notation such as, Customer A, Customer B, etc. to distinguish individual inquiries from multiple inquiries from the same customer

- i) For each of the individual inquiry, please provide the distance from the T in the Windsor Line north of the Comber Station.
 - ii) Please provide the hourly load associated with the individual inquiry.
- b) Have any inquiries been attached to the system?
- i) If so, what hourly load was applied for?
 - (1) Using that load, what is the remaining surplus capacity at Port Alma using the criteria analyzed and reported in EB-2019-0172 Ex. KT1.2?
- c) Are any inquiries in active process with a scheduled installation in 2020?
- i) If so, what hourly load was applied for?
 - (1) Using that load, in addition to what was added in b), what is the remaining surplus capacity at Port Alma using the criteria analyzed and reported in EB-2019-0172 Ex. KT1.2?
- d) Was any aid-to-construction calculated for any of the load inquiries?
- e) What would the revenue requirement impact be for each of those potential customers?
- i) How did or does it affect the ICM request by the company?