January 25, 2018

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
Toronto, Ontario
M4P 1E4

Dear Ms. Walli:

RE: EB-2016-0137/0138/0139 - South Bruce Expansion - CIP Proposals
Submission of Union Gas Limited ("Union")

Pursuant to Procedural Order No.9, please find attached Union's submission regarding the South Bruce CIP Proposal process. The attached will be filed in RESS and copies will be sent to the Board.

If you have any questions please contact me at 519-436-5473.

Yours truly,

[original signed by]

Karen Hockin
Manager, Regulatory Initiatives

cc
Mark Kitchen, Union
Charles Keizer, Torys

South Bruce Expansion Applications

Applications to serve the Municipality of Arran-Elderslie, the Municipality of Kincardine and the Township of Huron-Kinloss with natural gas distribution services

Submissions of Union Gas Limited

1. These are the submissions of Union Gas Limited ("Union") in respect of the Ontario Energy Board's (the "Board") determination in this matter as to whether Union or EPCOR Southern Bruce Gas Inc. ("EPCOR") will be selected as the successful proponent to provide natural gas distribution service to the Municipality of Arran-Elderslie, Municipality of Kincardine and the Township of Huron-Kinloss ("the South Bruce Expansion Applications").

Introduction

2. The question before the Board is fundamentally an important one as the Board must decide as to which proponent will have the opportunity to serve the South Bruce Expansion areas for the long term. The Board has established an array of metrics which provide insights into the lowest revenue requirement to serve the areas and insights as to the scope of service at the proposed revenue requirement. No one metric necessarily governs and the Board should consider them in their entirety and within the intended purpose of this proceeding, which is to select a proponent that provides natural gas service to as many customers as possible at the lowest cost reflected by that proponent's revenue requirement.

3. In this regard, Union provides a scope and breadth of service that is more extensive at a revenue requirement that is lower than that proposed by EPCOR. In particular, Union's proposal will offer service to 862[1] more potential customers than the proposal submitted by EPCOR, at an associated 10 calendar year (110 in-service months) revenue requirement that is $5.5 million[2]

[1] Based on total potential customers from Exhibit I.Union.1 (Corrected), less total market size from EPCOR IR 1.
[2] $75.6M (EPCOR CIP p. 30, para.64) - $70.1M (Union CIP p.6 Table 1).

less than that required by EPCOR. Although EPCOR's volumes do skew volumetric based metrics, it is only with respect to industrial volumes which are not readily comparable between proposals and in any event reflect significant forecast uncertainty relative to Unions projected volumes. In fact, much of the correspondence filed in this proceeding and the Board's interrogatories relate to the confusion caused by EPCOR's industrial volume forecasts for approximately three customers, which has detracted from this proceeding's central intent of who is best able to serve the many customers that form the mass market. As such, it would not be in the public interest to hinge the delivery of gas service to the South Bruce Expansion areas on the uncertain industrial volume forecast of EPCOR which unlike Union, is not underpinned by a contract with the single largest industrial which represents 90% of the industrial volume. Aside from metrics that include industrial volumes, Union leads every other category set out in the table entitled "Summary of Metrics and CIP Criteria" attached to the Board's letter dated January 19, 2018.

4. The submissions that follow will consider:

- the Board's evaluation criteria
- a comparison between the Union and EPCOR proposals
- the basis for selecting Union.

The Board's Evaluation Criteria

5. The Board succinctly stated its evaluation criteria to select the best proponent when it stated as part of its Partial Decision on the Issues List and Procedural Order No. 6 (the Partial Decision) dated June 27, 2017:

> *In consideration of the numerous submissions on the issues list and the draft filing guidelines, the OEB has determined that it is appropriate in this case to grant certificates of Public Convenience and Necessity, on a conditional basis (subject to subsequent technical and financial acceptance),* ***to the proponent that demonstrates it has the lowest overall revenue requirement t****o provide an identified distribution service in the municipalities seeking that service. The primary benefit of the introduction of competition identified in the generic decision is the discipline it instills to control costs and the search for efficiencies in system expansion and operation. All other matters related to cost allocation, rate design and the general management of the utility are ongoing concerns of*

> *the OEB which it manages as a matter of course with all regulated entities.* ***The selection criteria can therefore be restricted to a comparison of revenues required for a specific identified service.*** (emphasis added)

6. The OEB further determined that ultimately a common format for applications will be required to complete the evaluation. The OEB saw merit in establishing common parameters for Union and EPCOR to use in determining their respective revenue requirements. In particular, the Board stated:

> *The OEB will establish a Common Infrastructure Plan (CIP) as the basis for the proponents to determine* **their respective revenue requirements***. Full consensus between the proponents on the plan's "fit for purpose" design attributes is not required as the CIP will act as a relative proxy or sample plan* ***to allow the OEB to undertake a comparison of the stated revenue requirements on a set of common parameters.*** *The CIP will be used as the basis for the revenue requirement submissions.(emphasis added)*

7. In the context of establishing a CIP as a proxy to permit a comparison, the Board agreed (with the proponents) with the comparison of the costs on the basis of three criteria – $/m3, number of customer years, and cumulative volume, but also indicated that it would be assisted in seeing the revenue requirement on an annual basis, the net present value of the gross revenue requirement, and the cumulative revenue requirement. Although there was no one comparative basis selected by the Board, there remained one constant criteria which was the lowest revenue requirement to serve as many customers as is feasible in the South Bruce expansion areas. As indicated in the OEB Staff Progress Update July 20, 2017[3] "*Proponents agreed that selection of only a single criterion provides an opportunity for gaming. For example, simply selecting revenue requirement $/m3 as the decision metric could provide an incentive for proponents to only select service to the most profitable customers,* ***whereas proponents understand that the goal of community expansion is to facilitate access to natural gas services to many customers.***" (emphasis added)

8. The Board intended for the evaluation of the CIP to occur on the basis of a common set of parameters. However certain assumptions made by Union and EPCOR lead to a circumstance where the volumetric metrics of the proposals are not comparable. The OEB reviewed the proposals and determined that "*it would be assisted by limited interrogatories for the purposes of*

[3] OEB Staff Progress Update July 20, 2017 pg 4

clarification, given that the proposals involve different routes and are to that extent not precisely common infrastructure." The Board's objective in selecting between competing proposals was to provide the optimal revenue requirement for rate payers through a process where the Board undertakes a common basis of assessment of revenue requirement. However, in advance of the interrogatory process and as highlighted further through the interrogatory process, different proponent assumptions (as noted below) made a common basis of comparison of some metrics impossible. Notwithstanding the foregoing, the Board has developed, through its procedural orders and the interrogatory questions posed by it, an array of metrics in which to evaluate the fundamental aspect of revenue requirement. These were set out in the Board's correspondence dated January 19, 2018 and the table attached entitled "Summary of Metrics and CIP Criteria". Union submits that no one of these metrics should govern and the Board should consider the totality of the metrics on which it can compare the proponents on a common basis, while giving no weight to those that are not on such a basis.

9. With respect to the Board's January 19, 2018 letter, EPCOR, in its correspondence dated January 22, 2018, made suggested changes to the above table. These changes were adjustments to volumetric amounts that do not alter the conclusion that Union is preferable. However, Union draws the Board's attention to an inaccuracy in EPCOR's proposed revision to the note at the bottom of the table. EPCOR indicated that by virtue of its changes the proposals are more directly comparable. However, Union notes that for the mass market volumes Union began its forecast on November 1 (on the in-service date) whereas EPCOR began its forecast on a mid-year basis starting on July 1 and before the in-service date of November 1. Although this may not reflect material differences in mass market volumes, it does go to the issue of the comparability on the basis of volume as set out below.

Consideration of volume does not provide a common basis

10. The inclusion of volume in some of the metrics available to the Board, prevents the Board from having a common basis on which to assess the proposals. In particular, industrial volume figures submitted by each of the proponents are not comparable in their respective CIP proposals. This is because there are two key differences in how each proponent treated industrial volumes in their proposals.

11. First, ignoring the capacity of the system used at various peak or non-peak periods, Union interpreted volume to be the amount of gas consumed or measured through the meter. EPCOR, on the other hand, only used that approach for mass market customers. For other customers, such as industrial, who EPCOR proposes will enter into capacity based contracts for service, EPCOR based their volumes on what the annual capacity was expected to be under the contract[4]. EPCOR's approach for industrial volumes does not align with the Board's definition of volume consumed. The definition in the OEB Staff Progress Update is as follows:

> "*Cumulative volume (m^3) – the cumulative volume of throughput per year, over the ten-year rate stability period. This metric would be calculated in a similar manner to the second criteria, but **based on the volume consumed** by the customers to better depict the various customer classes and their demand*." [5] (emphasis added).

12. The Board accepted this definition in their Decision on Preliminary Issues and Procedural Order No. 8 (August 22, 2017) at page 4.

13. With respect to industrial customers, it is important for the Board to understand the fundamental difference between the concept of the flow of gas consumed (consumption) in relation to capacity. Union's approach of consumption based volume is the actual quantity of natural gas delivered to the customer as measured through a meter contemporaneous to its consumption. Union's approach aligns with the definition above.

14. EPCOR's filed volumes were inconsistent with this Board approved definition. Under EPCOR's approach, annual "capacity under contract" equates to the notional maximum volume the utility is obligated to provide for the customer's consumption per day (the Contracted Daily Demand, or CD) x 365 days per year. This permits the reservation of pipeline capacity to ensure that the maximum quantity to be consumed will be available for the customer from the utility's system when needed, regardless of time of year or the occurrence of the applicable peak. EPCOR did not stipulate a particular load factor by which to convert capacity to consumption, which would imply that a 100 percent load factor is applied and seasonal peaks would be not be taken into account. There is no customer in Ontario that consumes gas at a 100% load factor. Industrial customers who have a portion of their consumption affected by weather would

[4] EPCOR CIP Proposal, p. 20, para. 10

[5] OEB Staff Progress Update , July 20,2017, Pg 5

typically only need that maximum quantity for consumption during the heating season, which typically extends for as many as 146 days each year. The implication of this is that by assuming 365 days of peak demand for a customer with heat sensitive consumption, volume consumed could be overstated by up to 219 days per year (60%). All 3 of the industrial customers identified for the South Bruce project will have weather sensitive consumption, and consequently "capacity under contract" cannot equate to consumption (or measured volume) for the South Bruce Project.

15. Volume based on capacity as provided by EPCOR and volume based on consumption as provided by Union are not just two entirely difference measures, but to treat them the same would be inappropriate since capacity based volume skews the metric of revenue requirement/m^3, by causing that metric to be understated.

16. This inconsistency and confusion brought about by EPCOR's approach is the focus of submissions made in this proceeding and of the Board's interrogatory questions related to industrial volumes. This has resulted in an inappropriate level of attention on the volume associated with 3 industrial customers instead of on the central intent of this proceeding - which proponent can best attach the most customers at the least cost.

17. The second key difference is that EPCOR calculated forecast volumes for a 10 calendar year period consisting of 110 in-service months, beginning November 1, 2019, that coincided with their revenue requirement period, whereas Union forecasted volumes for a full 120 month period with each annual period beginning on November 1[6]. At what point, during the project life, the 10-year rate stability period begins was not specified by the Board in its Partial Decision and Procedural Order No. 6 or its Decision and Procedural Order No. 8. In response to the Board's interrogatory, Union provided adjusted volume figures in Table 1 of Exhibit I.Union.4, to provide metric results based on similar time period to those set out in EPCOR's CIP proposal.[7] Union made this adjustment in a fully transparent manner as set out in the attachments to that interrogatory response and as shown there, the adjustment is not a new forecast but rather a removal of volumes to reflect the time period in question. This adjustment, however, does not correct the fundamental difference in the treatment of volume resulting from EPCOR recording

[6] Exhibit I.Union.4, p. 3 of 3

[7] Attachment 1 to Exhibit I.Union.4 demonstrates the simple and transparent approach that Union took to prorate its CIP proposed volumes to a 110 month period from a 120 month period.

notional volume as "capacity under contract" as opposed to a forecast of actual consumption for industrial customers employed by Union.

18. As noted above in the context of the Board's January 19 letter, in addition to the issue related to industrial volumes, for mass market volumes Union began its forecasted volumes on the in-service date of November 1 (2 months of volumes), whereas EPCOR began its forecast on a mid-year basis starting on July 1 and before the in-service date of November 1 (6 months of volumes). This difference in the two competing volume figures remains imbedded in the comparative metrics provided by Board's January 19 letter, despite adjustments Union made to synchronize its volume time periods with EPCOR's in Exhibit 1.Union .4.

19. The differences above have a direct impact on the interpretation of volume related metrics and thereby their validity as a basis for common comparison between the two proposals[8]. Because of the different interpretations of how volume was to be applied in the CIP proposals, Union submits that volume related metrics forming part of the Board's array of metrics should be disregarded by the Board and given no weight in its decision on the successful proposal[9]. The remaining metrics available to the Board provide an appropriate comparison on a common basis as part of its assessment of the lowest revenue requirement to provide service.

20. Separate from the issue of usefulness of the volume related metrics in the Board's assessment is the concern that the validity of EPCOR's industrial volume figures remain highly questionable. In EPOCR interrogatory response 2(b), EPCOR adjusted its proposed industrial volume from one based on capacity to one supposedly reflecting volume consumed. EPCOR appears to have overstated such volumes. In determining this adjustment, EPCOR reduced its forecasted 10-year total volume from 428.0 million m^3 in their CIP proposal to 342.1 million[10] m^3. The difference in these two figures of 85.8 million m^3 equates to the difference between industrial volumes based on capacity and industrial volumes based on consumption. This

[8] The metrics (comparison criteria) provided in the Board's Decision on Preliminary Issues and Procedural Order 8 that are affected include Cumulative Revenue Requirement per Unit of Volume, and Cumulative Volume. Other volume related metrics requested through the IR process are also affected.

[9] Refer to Union letters filed with the OEB on October 20 and 25, 2017.

[10] EPCOR IR 2 (b).

represents a reduction of industrial volume of only 28% (85.8/300.2)[11] as applied by EPCOR when converting from capacity to consumption, which appears to be abnormally low when the total overstatement of consumption by applying capacity based figures could be as high as 60% as noted earlier.

21. EPCOR's resulting forecast industrial consumption based volume is unrealistic relative to the marketplace in the South Bruce Expansion areas. Union has a contractual commitment underpinning approximately 90% of the industrial consumption in its proposal[12], whereas EPCOR has not indicated it has any of its industrial consumption figures underpinned by contractual commitments with customers. The customer that has signed a contract with Union would have no reason whatsoever to provide EPCOR with a different volume forecast than what it agreed to with Union.

22. Because large industrial volumes will need to be underpinned by contractual commitments with the customers over the duration of the rate stability period, Union submits that if the Board chooses to consider industrial volumes in the metrics, the Board should only give weight to the volumes that have been underpinned by a signed commitment from the customer at the time the CIP proposals were filed in its comparison of CIP proposals. Otherwise, there will be a significant incremental risk to EPCOR's proposal relative to Union's proposal.

23. Further to the above, in EPCOR's response to IR 5, they indicate that their CIP proposal includes the volume, capacity and costs of "industrial fuel switching to support energy loads in addition to heating". However, their response also references their CIP proposal which in Table 7 on p. 38 indicates that their CIP proposal's \$/ m^3 metric result of \$0.1766/m3 is based on a "boiler based HVAC" system consuming 2 million m^3 per year (or 18.3 million m^3 over 110 months) for the greenhouse customer. Union submits that these two pieces of evidence are inconsistent, and concludes that any consumption volumes related to "fuel switching to support energy loads in addition to heating" were added to EPCOR's proposal only when converting industrial volumes from capacity based to consumption based figures. In effect, the opportunity

[11] EPCOR industrial capacity based volume of 300.2 million m^3 is equal to filed volume (428 million m^3) less volume excluding industrial volumes (127.8 million m^3) as per EPCOR 2d)ii).

[12] The industrial customer which Union has a contractual commitment represents approximately 50% of total project volumes. Applied to Union's 110 month volume figures from Exhibit I.Union.4, this represents roughly 143 million m^3 of the 155.8 million m^3 for industrial customers, or over 90% of industrial volumes.

to convert industrial capacity to consumption provided EPCOR with the opportunity to supplement its proposal. Union also notes that in Table 7 of EPCOR's CIP proposal the same customer with fuel switching "based on Co-Gen HVAC with Electricity Generation" would consume 8.25 million m^3 per year, which would equate to an incremental 57 million m^3 over 110 months in consumption volume over what was included in the CIP proposal.

24. For the above reasons Union submits that if the Board wishes to give weight to volume related metrics in its deliberations, Industrial volumes should be excluded from the figures.

Updates Subsequent to the CIP Proposal Provides an Inappropriate Advantage

25. The above EPCOR amounts for industrial volumes are based on a conversion from capacity to consumption provided by EPCOR in response to an IR. In performing this conversion EPCOR was asked to apply new consumption volume information for Industrial customers that was not provided in their CIP proposal. In doing so, EPCOR had full knowledge of Union's annual industrial consumption as well as Union's annual revenue requirement figures. This provided an unwarranted competitive advantage for EPCOR and gave EPCOR an opportunity to use that knowledge to provide industrial consumption volume subsequent to filing their CIP proposal. Union submits that if the Board gives weight to this new information in its deliberations, the fairness of the competitive process is brought into question.

26. EPCOR's response to IR 3 provides revenue requirements for a 120 month period beginning November 1, 2019, when the system enters service[13]. Union notes that the data available for EPCOR to determine a 120 month revenue requirement required the introduction of new revenue requirement information for the last 10 months in the 120 month period. This revenue requirement information was not included in EPCOR's CIP proposal. In determining this new 10 month revenue requirement EPCOR had full knowledge of Union's annual revenue requirement figures, which could inform their determination of the revenue requirement for the added 10 month period and create a resulting unwarranted competitive advantage. EPCOR's conversion of revenue requirements from a 110 month period to a 120 month period lacks transparency. EPCOR's cumulative revenue requirement increased from $75.6 million for 110

[13] Union notes there is no comparative revenue requirement data provided by Union to compare to 120 months, only 110 months.

months, to $76.4 million for 120 months. This is an increase of only $0.8 million for 10 months and seems unreasonably low when the revenue requirement for the previous 12 month period as filed in EPCOR's CIP proposal was $9.9 million. The combined competitive advantage and the lack of transparency brings the amended numbers into question and the Board should give them little weight accordingly.

Municipal Preference Is Not Based On Lowest Cost Of Service and Should Be Given No Weight

27. The expressions of support made by municipalities in the South Bruce Expansion areas should be given no weight by the Board. The public interest considerations of the Board are rooted in the provision of natural gas distribution services at the lowest cost and, by extension, the lowest rate. The public interest considerations of a municipality are not the same as that of the Board such that municipalities can be motivated by any number of factors, including tax considerations and additional revenue sources. EPCOR has been open in its plan to pay a royalty to the municipalities in the South Bruce Expansion areas. Notwithstanding whether it is included in the revenue requirement during the rate stability period, the intended royalty (whether it is paid or deferred until the end to the rate stability period) reflects a direct monetary benefit to the municipalities in question that is unrelated to the central question before the Board of the provision of service at the lowest cost. As such, the endorsement by those municipalities should not be taken as one based on the appropriate cost of service result. Furthermore, it would not be appropriate for the Board to be accepting of an arrangement that is ultimately not to the benefit of rate payers and which is outside the terms and conditions of the Board's Model Franchise Agreement.

Union Provides the Best Overall Proposal

28. The question is a fundamentally important one as the Board must decide as to which proponent will have the opportunity to serve the South Bruce Expansion areas for the foreseeable future. The Board has established an array of metrics which provide insights into the revenue requirement to serve the areas and insights as to the scope of that service that revenue requirement represents. No one metric necessarily governs and the Board should consider them in their entirety. In this regard, Union provides the scope and breadth of service that is greater

and a revenue requirement that is lower than that proposed by EPCOR. Although EPCOR's volumes do skew volumetric based metrics to its favour, it is only with respect to industrial volumes which are not readily comparable and in any event reflect significant uncertainty. It would not be in the public interest to hinge the delivery of gas service to the South Bruce Expansion areas on the uncertain industrial volume forecast of EPCOR. The acceptance of these volume metrics in any fashion contradicts the intent of a fair and competitive process given the timing of the updates.

29. Aside from metrics that include industrial volumes, which based on the foregoing are of questionable validity from a comparative perspective and highly uncertain from a forecast perspective based on known market conditions (such that they should be disregarded) Union leads every other category set out in the table entitled "Summary of Metrics and CIP Criteria" attached to the Board's letter dated January 19, 2018. In effect, relative to EPCOR's proposal Union:

- attaches more customers and does so earlier,
- has higher system density on a customer per km basis,
- serves a larger market area,
- has a greater total estimated market size, and
- can seek regulatory approvals sooner,

all at a lower revenue requirement whether on a NPV, cumulative or on a per cubic meter basis.

30. Table 2 below provides a summary of the metrics from the two competing CIP proposals with Industrial volumes excluded.

Metric Comparisons with Industrial Volumes Removed and Common Rate Stability Period (Nov. 1 2019 to Dec.31, 2028)

Metric	EPCOR[14]	UNION[15]	Most Competitive
NPV of 10-Year Revenue Requirement ($ million)	56.189	54.640	Union by 1.549
Cumulative 10-Year Revenue Requirement ($ million)	72.018	69.344	Union by 2.674
NPV of 10-year Revenue Requirement per Metre of Pipe ($/m)	182.06	170.590	Union by 11.470
NPV of 10-Year Revenue Requirement per 10^3 m^3 NAC volume delivered ($ per 10^3 m^3)	439.45	416.84[16]	Union by 22.61
Average number of Customers per kilometre:	17.09	21.4	Union by 4.3
Cumulative 10-Year Revenue Requirement per Unit of NAC Volume ($/ m^3)	0.5633	0.5290	Union by 0.0343
Customer Years	42,539	54,141	Union by 11,602
Cumulative 10-Year Volume (million m^3)	127.861	131.083	Union by 3.222

Conclusion

31. As set out above, Union's proposal provides the best overall response to the Board's fundamental question in this proceeding as to which proponent will serve as many customers as is feasible in the South Bruce Expansion areas over the long term at the lowest revenue requirement.

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[14] From EPCOR IR 2 (d).

[15] From Exhibit 1.Union.3, Table 2.

[16] Figure is not provided in Exhibit 1.Union.3, but can be calculated from volume and revenue requirement metric results in the Table.

All of which is respectfully submitted, this 25th day of January, 2018.

UNION GAS LIMITED

By its Counsel Torys LLP

[original signed by]

Charles Keizer