November 20, 2017

BY COURIER & RESS

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

RE: EB-2017-0087 – Union Gas Limited ("Union") – 2018 Rates – Interrogatory Responses

Dear Ms. Walli:

Please find attached Union's responses to interrogatories for the above proceeding.

Union received additional interrogatories on November 16, 2017, submitted on behalf of Industrial Gas Users Association ("IGUA"). Union will respond to these late IGUA interrogatories in a separate submission later this week.

If you have any questions with respect to this submission please contact me at 519-436-4558.

Yours truly,

[original signed by]

Adam Stiers
Manager, Regulatory Initiatives

cc: Crawford Smith (Torys)
EB-2017-0087 Intervenors

UNION GAS LIMITED

Answer to Interrogatory from
Ontario Energy Board Staff ("OEB Staff")

Reference: Exhibit A, Tab 1, p.7

In its evidence, Union Gas Limited (Union) has noted that it will continue to adjust volumes and calculate rates to capture Loss Revenue Adjustment Mechanism (LRAM) volume impacts for the contract rate classes. As the audit processes associated with the 2015 and 2016 Demand Side Management (DSM) Program results are not yet completed, Union is not able to true up the 2015 pre-audit volume adjustments made in 2017 rates and proposes to adjust 2018 volumes by 2016 pre-audit results.

a) When will the 2015 audited LRAM volumes be available? If the audited volumes are available, please update the evidence.

b) What are the reasons for the delay in completion of the audit process related to 2015 LRAM volumes?

Response:

a) and b) Union received the 2015 Final Audit Report from the OEB's Evaluation Contractor on October 16, 2017, 22 months after the close of Union's 2015 DSM program year and approximately 12 months later than historical utility-coordinated Final Audit Reports. In part this delay was the result of a prolonged OEB Staff-coordinated Evaluation, Measurement and Verification process which took 19 months to complete compared to historical utility-coordinated audits that took 10 months to complete. In comparison, during the last year of the utility-coordinated audit process, the final 2014 auditor's report was released October 29, 2015 which was 10 months after the close of the 2014 DSM program year.

Further, Union submits that the OEB Staff-coordinated 2015 DSM audit incorrectly applies the results of an incomplete and ongoing Net to Gross Study of Commercial and Industrial Custom Projects retroactively to Union's 2015 DSM program results.

Union will file 2015 DSM Deferrals evidence in the coming weeks that addresses these issues. Accordingly, final 2015 LRAM volume adjustments will be available once the OEB has approved them as part of the 2015 DSM Deferral proceeding and Union will include the final 2015 LRAM volume adjustment with the next available annual rates proceeding.

UNION GAS LIMITED

Answer to Interrogatory from
Ontario Energy Board Staff ("OEB Staff")

Reference: Exhibit A, Tab 1, p.7

The application notes that in order to align the 2016 pre-audit LRAM results with the 2013 OEB-approved volumes, Union transferred a portion of 2016 LRAM pre-audit volumes for customers in Rate M7 to rate classes M4 and M5A based on the rate class of customers in 2013 OEB-approved volumes.

a) Why did Union transfer a portion of 2016 LRAM pre-audit volumes for customers in Rate M7 to rate classes M4 and M5A? Has the OEB approved this transfer in a prior proceeding? If yes, please provide details.

b) Please provide the total number of customers impacted by the transfer?

Response:

a) Union's current approved forecast volume by rate class is based on its 2013 Cost of Service application plus subsequent OEB-approved volume adjustments. Effective January 1, 2014, Union changed the eligibility criteria for customers in Rate M4, Rate M5A and Rate M7 in Union South causing customers to transfer to Rate M7 from Rate M4 and Rate M5A. The 2016 pre-audit LRAM results by rate class are determined based on the rate class of a customer at December 31, 2016. In order to align the 2016 pre-audit LRAM results with the rate class of the customer in the OEB-approved volumes, Union transferred the LRAM pre-audit results of identified customers in Rate M7 to Rate M4 and Rate M5A based on the rate class of the customer in 2013 OEB-approved volumes.

   This transfer was first proposed and approved as part of Union's 2016 Rates Application and Evidence (EB-2015-0116, Exhibit A, Tab 1, p. 6).

b) There are 18 Rate M7 customers included in the 2016 LRAM pre-audit volumes whose 2016 LRAM pre-audit results were transferred to Rate M4 and Rate M5A based on the rate class of these customers in the 2013 OEB-approved forecast.

   The transfer of volumes results in delivery rate impacts for all customers within Rate M4, Rate M5A and Rate M7.

UNION GAS LIMITED

Answer to Interrogatory from
Ontario Energy Board Staff ("OEB Staff")

Reference: Exhibit A, Tab 1, pp.4, 8

Union has included OEB-approved 2018 costs for a number of capital projects that it is seeking to recover as capital pass-through costs. The summary of 2018 proposed revenue changes on page 4 shows the 2018 capital pass-through amounts as $52.855 million.

a) Please confirm that the $52.855 million is an addition to the proposed revenue requirement for 2018 rates.

b) The Rate Order working papers, Schedule 3, Page 2 shows the total in-franchise and ex-franchise adjustment to 2018 base rates related to capital pass-throughs as $129.63 million. Please reconcile this amount with the capital pass-through amount of $52.855 million referenced above.

Response:

a) Confirmed. The increase of $52.855 million for the capital pass-through cost is the incremental 2018 revenue requirement included in 2018 rates.

b) The $129.633 million provided at Rate Order, Working Papers, Schedule 3, column (k) is the total capital pass-through cost included in 2018 proposed revenue. The change in 2018 proposed revenue related to the capital pass-through cost is $52.855 million which is calculated as the capital pass-through cost of $129.633 million included in 2018 proposed revenue less the capital pass-through cost of $76.778 million included in 2017 approved revenue. The 2017 and 2018 capital pass-through cost is provided at Rate Order, Working Papers, Schedule 3, p.2, line 14, columns (d) and (k), respectively.

UNION GAS LIMITED

Answer to Interrogatory from
Ontario Energy Board Staff ("OEB Staff")

Reference: Exhibit A, Tab 1, p.9

Union has indicated that in accordance with the OEB Decision, Union has included the cost consequences of the Panhandle Reinforcement Project in 2018 rates based on the estimated capital cost of $264.5 million and a forecasted in-service date of November 1, 2017.

Please confirm whether the Panhandle Reinforcement Project is in-service. If the project is in-service, please provide the date of service. If the project is not in-service, please provide the expected in-service date and the adjustment to the associated revenue requirement.

Response:

Confirmed. The Panhandle Reinforcement Project was placed into service commercially on November 1, 2017 and operationally November 11, 2017.

UNION GAS LIMITED

Answer to Interrogatory from
Ontario Energy Board Staff ("OEB Staff")

Reference: Exhibit A, Tab 1, pp.14-15

Union is proposing to update the Rate M12 Schedule C to include the fuel ratio and fuel rate for westerly transportation from Kirkwall to Dawn available under the M12-X service, effective January 1, 2018.

a) Do shippers currently pay a different rate for the M12-X service as compared to the M12 service?

b) If shippers were previously not charged a fuel rate for the M12-X service, were they paying lower charges than what they should have been paying?

c) What class of customers are subsidising shippers for the M12-X service as a result of Union not charging a fuel rate?

Response:

a) No. Under the Rate M12 Schedule "C", fuel ratios and fuel rates for westerly transportation from Kirkwall to Dawn are only applicable as part of the Rate M12-X service.

b) No. Currently, Rate M12-X westerly transportation from Kirkwall to Dawn is charged the M12-X fuel ratios for westerly transportation from Parkway to Kirkwall or Dawn, as these are the only fuel ratios included on the Rate M12 Schedule "C" for westerly transportation service.

   The 2017 current Rate C1 and Rate M12-X Parkway to Kirkwall or Dawn fuel ratio is 0.293% in the summer months and 0.157% in the winter months. Union is proposing to set the M12-X Kirkwall to Dawn fuel ratio to be equal to the Rate C1 Kirkwall to Dawn fuel ratio, which was 0.157% for all months in 2017. Accordingly, the proposed change will result in a decrease to the fuel ratio customers are currently charged.

c) As stated in part b), M12-X westerly customers are currently charged the M12-X fuel ratios for westerly transportation from Parkway to Kirkwall or Dawn.

   There is no cross subsidization from other rate classes as a result of the proposal to include M12-X Kirkwall to Dawn fuel ratios on the Rate M12 Schedule "C". Union had correctly accounted for this service when it calculated fuel ratios as part of its 2013 Cost of Service proceeding (EB-2011-0210) however, the fuel ratio was not included on the Rate M12 Schedule “C”.

There is no impact to customers as Union has trued-up the difference between the fuel provided in kind for M12-X Kirkwall to Dawn transportation and the actual fuel usage for each customer through the Yearly Commodity Required (“YCR”) process.

UNION GAS LIMITED

Answer to Interrogatory from
Ontario Energy Board Staff ("OEB Staff")

Reference: Exhibit A, Tab 1, p.14

Union has proposed to update the authorized overrun Kirkwall to Dawn fuel ratio to 0.778% under both Rate C1 and Rate M12.

a) What was the previously OEB approved overrun Kirkwall to Dawn fuel ratio?

b) Why has Union proposed to modify the authorized overrun Kirkwall to Dawn fuel ratio for Rate C1 and Rate M12?

Response:

a) The 2017 current approved Rate C1 Kirkwall to Dawn overrun fuel ratio is 0.157%.

b) Union is proposing to update the Rate C1 Kirkwall to Dawn authorized overrun fuel ratio and to introduce an M12 Kirkwall to Dawn authorized overrun fuel ratio to be consistent with other Dawn to Parkway Rate M12 and Rate C1 authorized overrun fuel ratios.

The 2018 proposed fuel ratio for transportation from Kirkwall to Dawn of 0.158% is set to recover UFG only, which is the same as the fuel ratio in the winter months for westerly transportation from Parkway to Kirkwall or Dawn under both Rate C1 and Rate M12-X. Union is also proposing to set the authorized overrun fuel ratio at 0.778% for transportation from Kirkwall to Dawn under Rate M12 and Rate C1. This proposed fuel ratio is consistent with the authorized overrun fuel ratio in the winter months for westerly transportation from Parkway to Kirkwall or Dawn, under both Rate C1 and Rate M12-X.

UNION GAS LIMITED

Answer to Interrogatory from
Ontario Energy Board Staff ("OEB Staff")

Reference: Exhibit A, Tab 1, p.4
Rate Order Working Papers, Schedule 3, p.2

In the summary of proposed changes in revenue, the revenue change in 2018 related to the Parkway Delivery Obligation (PDO) is a credit of $1.13 million. In the Rate Order Working Papers, Schedule 3, the adjustments to 2018 base rates shows an amount of $24.855 million related to PDO.

a) Please explain the derivation of the $1.13 million credit for 2018 rates.

b) Does Union expect to incur actual costs of $24.855 million in 2018 related to PDO or is the amount as per the settlement agreement in EB-2013-0365?

Response:

a) The change in revenue related to the Parkway Delivery Obligation ("PDO") is a credit of $1.130 million for 2018. The $1.130 million is calculated as the PDO cost of $24.855 million included in 2018 proposed revenue less the PDO cost of $25.985 million included in 2017 approved revenue. The 2017 and 2018 PDO cost is provided at Rate Order, Working Papers, Schedule 3, p.2, line 14, columns (e) and (l), respectively.

b) Union expects to incur $24.855 million of costs related to PDO in 2018 in accordance with the Parkway Delivery Obligation Settlement Agreement filed as part of Union's 2014 Rates proceeding (EB-2013-0365). The $24.855 million includes $11.431 million of demand and fuel costs associated with PDO turnback and $13.424 million of Parkway Delivery Commitment Incentive costs for payment to customers for any remaining obligated deliveries at Parkway. The calculation of the $24.855 million included in 2018 Rates is provided at Rate Order, Working Papers, Schedule 20.

UNION GAS LIMITED

Answer to Interrogatory from
Ontario Energy Board Staff ("OEB Staff")

Reference: Rate Order, Working Papers, Schedule 6, p.2

Please explain the reasons for the significant increase in 2018 proposed rates for rate classes M4, M7 and T2.

Response:

The 2018 rate increases for Rate M4, Rate M7 and Rate T2 are primarily driven by the addition of the Panhandle Reinforcement Project ("Panhandle") and LRAM volume adjustments. A summary of the rate impacts by rate class is provided at Table 1 and Rate Order, Working Papers, Schedule 5.

Table 1
2018 Rate Impact Summary

Line		Capital Pass-Throughs		Volume		
No.	Rate Class	Panhandle	Other	Adjustments	Other	Total
		(a)	(b)	(c)	(d)	(e)
1	Rate M4	9.0%	1.3%	3.3%	0.2%	13.8%
2	Rate M7	8.5%	2.1%	5.2%	0.3%	16.0%
3	Rate T2	14.5%	1.2%	0.8%	-0.3%	16.2%

UNION GAS LIMITED

Answer to Interrogatory from
Ontario Energy Board Staff ("OEB Staff")

Reference: Exhibit A, Tab 2, pp.3, 6

Union has forecasted that no additional PDO reductions will be available to Union South direct purchase customers in 2018. Further in the evidence, Union notes that effective November 1, 2018, Union will no longer have any shortfall at Parkway related to PDO.

a) Please reconcile the two statements above.

b) Will Union South direct purchase customers require PDO reductions in 2018?

Response:

a) The two statements referenced in the question are independent.

   The first statement, relating to no further PDO reductions in 2018, is a result of Union not receiving any Dawn to Kirkwall turnback effective November 1, 2018 to shift direct purchase PDO volumes to Dawn. As outlined in the PDO Settlement Agreement, Union will only facilitate PDO reductions by utilizing Dawn to Kirkwall capacity that has been turned back.

   The second statement, that Union will no longer have any shortfall at Parkway related to PDO, is in reference to the temporarily available capacity that Union utilized to provide the first tranche of PDO reduction in 2014. This temporarily available capacity was no longer available effective November 1, 2015. However, Union agreed to manage the Parkway shortfall that this temporarily available 2014 capacity had created beyond 2014 by utilizing Dawn to Kirkwall capacity turnback to reduce the shortfall. As of November 1, 2017, Union had received sufficient Dawn to Kirkwall capacity turnback to completely eliminate the Parkway shortfall.

b) No further PDO reductions for Union South direct purchase customers will be available for 2018 or 2019 as Union did not receive any Dawn to Kirkwall turnback for those years.

UNION GAS LIMITED

Answer to Interrogatory from
Ontario Energy Board Staff ("OEB Staff")

Reference: Exhibit A, Tab 3, pp.19-2017/18 Gas Supply Plan Memorandum

In its 2017/18 Gas Supply Plan Memorandum, Union has indicated that the total annual contract market has increased by 3,924 TJ in Union South and decreased by 1,298 TJ in Union North. The decrease in Union North is due to lower forecasted consumption by Rate 25 sales service customers.

Please explain the reasons for the decline in forecasted consumption by Rate 25 sales service customers.

Response:

Rate 25 is a discretionary interruptible service available to large industrial customers in Union North that is used primarily to complement firm distribution service under Rate 20 and Rate 100.

As Rate 25 service is discretionary, the degree to which customers avail themselves of the service can vary significantly from year to year as customers consider their operational requirements and any alternative service options available to them.

The Rate 25 sales service forecast is largely based on prior year actual activity. The 2017/2018 Gas Supply Plan forecast is based on 2016 actual activity; the 2016/2017 forecast was based on 2015 actual activity. The decrease in forecast consumption for Rate 25 sales service customers reflects actual Rate 25 sales service activity in 2016 being lower than actual activity in 2015.

UNION GAS LIMITED

Answer to Interrogatory from
Building Owners and Managers Association ("BOMA")

Reference: Exhibit A, Tab 1, Schedule 14

a) What is the current fuel ratio and rate under M12-X service? Please explain the rationale for the increase, and provide the calculation.

b) What is the proposed increase in the C1 Kirkwall/Dawn fuel ratio rate? What was in 2017?

c) What is the current C1 and M12 authorized overrun fuel ratio and rate? Why is the fuel ratio higher for authorized overrun than normal service? (our emphasis)

Response:

a) As described in Exhibit B.Staff.5 part b), Rate M12-X customers are charged the M12-X fuel ratios for westerly transportation from Parkway to Kirkwall or Dawn. The 2018 proposed M12-X westerly fuel ratio for Parkway to Kirkwall or Dawn is 0.301% in the summer months and 0.158% in the winter months. Union is proposing to set the M12-X Kirkwall to Dawn fuel ratio to be equal to the Rate C1 Kirkwall to Dawn fuel ratio at 0.158% for all months, which results in a decrease to the fuel ratio. Please see Exhibit B.VECC.2 for the derivation of the Rate C1 Kirkwall to Dawn transportation service and proposed authorized overrun fuel ratios.

b) As described in part a) there is no proposed increase to the Rate C1 Kirkwall to Dawn fuel ratio as a result of this proposal.

As described in Exhibit B.VECC.2 part b), Union is proposing to increase the Rate C1 Kirkwall to Dawn fuel ratio by 0.001% to 0.158% in 2018, from 0.157% in 2017 as a result of the PCI adjustment during the IRM term.

c) The current authorized overrun Rate C1 Kirkwall to Dawn fuel ratio is 0.157% (or $0.006 /GJ) based on Union's October QRAM (EB-2017-0278). The Rate M12-X Kirkwall to Dawn authorized overrun fuel ratios were not included on the Rate M12 Schedule "C". Union is proposing to set the authorized overrun fuel ratio in 2018 at 0.778% (or $0.179/GJ) for both Rate C1 and Rate M12-X transportation from Kirkwall to Dawn. Please refer to Exhibit B.Staff.6 for explanation of Union's rationale and Exhibit B.VECC.2 for the derivation of the 2018 proposed authorized overrun fuel ratios.

The authorized overrun fuel ratios are higher because the Rate M12 and Rate C1 transportation overrun ratio is calculated to recover incremental rather than average rates of fuel. The recovery of incremental fuel in the authorized overrun fuel ratio was first introduced and approved in Union's 1999 Rates proceeding (EBRO 499).

UNION GAS LIMITED

Answer to Interrogatory from
Building Owners and Managers Association ("BOMA")

Reference: Appendix 1

Please provide the 2018/2017 percentage increase in delivery charges for each rate class.

Response:

Please see Rate Order, Working Papers, Schedule 6 for the change to the average delivery rate for each in-franchise rate class, relative to current approved rates.

UNION GAS LIMITED

Answer to Interrogatory from
Building Owners and Managers Association ("BOMA")

Reference: Schedule C, Rate M12 in Rate Order (Appendix A)

Why is the M12 fuel ratio of 0.158% M12X West much less than the Kirkwall to Parkway fuel ratio (0.49%) and the fuel rate (0.006) (April) for M12X much less than the fuel rate (0.017) (April), for Kirkwall to Parkway, when the distance travelled is much less?

Response:

The fuel ratio and fuel rate for transportation from Kirkwall to Dawn is less than Kirkwall to Parkway because of compressor fuel requirements, not the distance travelled. Kirkwall to Parkway transportation requires Parkway compression, while Kirkwall to Dawn transportation does not require compression. Accordingly, the 0.158% ratio (or $0.006/GJ) for westerly transportation is comprised of UFG only and the Kirkwall to Parkway April fuel ratio of 0.491% (or $0.017/GJ) includes 0.158% (or $0.006/GJ) for UFG and 0.333% (or $0.011/GJ) for compressor fuel requirements.

UNION GAS LIMITED

Answer to Interrogatory from
Building Owners and Managers Association ("BOMA")

Reference: Panhandle Reinforcement Project;
Exhibit A, Tab 1, pp.8-10, Appendix G, p.6

a) When did the Panhandle Reinforcement Project commence service? Is it currently in-service over its entire length at forecast volumes?

b) What was the actual capital cost of the project?

c) Please provide a calculation of the Incremental proposed project revenue amount of $3,104 million. Please provide a calculation for the forecast 2017 incremental Panhandle Project revenue.

Response:

a) The Panhandle Reinforcement Project was placed into service commercially on November 1, 2017 and operationally on November 11, 2017. The project is currently in-service over its entire length at forecast volumes.

b) The actual capital cost of the Panhandle Reinforcement Project as of October 31, 2017 is $175.2 million (see Attachment 1, p. 2 for a detailed breakdown). Attachment 1, p. 1 provides a detailed breakdown of the $264.5 million estimate from the original filing. The latest total forecasted capital cost upon project completion is $242.8 million.

   Due largely to weather conditions in 2017 and consistent with Union's past practices for project clean-up, the following typical post project in-service expenditures are forecasted through 2018 (approximately $31 million):

   - Temporary land use and crop damage payments;
   - Contractor clean-up and deficiencies, including inspection and outside services; and
   - Post-construction tiling (design and construction).

c) The 2018 incremental project revenue of $3.104 million is estimated based on the forecast incremental demands of the project by rate class converted to billing units and the distribution and transmission margin included in current approved rates (October 2017 QRAM).

   Please see Attachment 2 for the calculation of the forecast 2018 incremental project revenue of $3.104 million and Attachment 3 for the calculation of the forecast 2017 incremental project revenue of $0.459 million associated with the Panhandle Reinforcement Project.

TOTAL ESTIMATED PIPELINE & STATION COSTS

	Mainline	Dawn M&R	Dover Centre Stn	Dover Transmission Stn	Mersea Gate Stn	
Materials	$16,578,000	$3,958,000	$381,000	$2,162,000	$721,000	
Construction and Labour	$176,147,000	$17,399,000	$2,056,000	$5,362,000	$2,790,000	
Contingencies	$28,909,000	$3,204,000	$365,000	$1,128,000	$527,000	
Interest During Construction	$2,321,000	$251,000	$43,000	$116,000	$50,000	
Total Estimated Capital Costs – 2017 Construction	$223,955,000	$24,812,000	$2,845,000	$8,768,000	$4,088,000	**$264,468,000**

TOTAL ACTUAL EXPENDITURES PIPELINE & STATION COSTS

Panhandle Reinforcment

	Mainline	Dawn M&R	Dover Centre Stn	Dover Transmission Stn	Mersea Gate Stn	
Materials	$15,248,000	$4,247,000	$370,000	$2,468,000	$1,092,000	
Construction and Labour	$129,786,000	$11,900,000	$627,000	$5,840,000	$1,995,000	
Contingencies						
Interest During Construction	$1,413,000	$125,000	$8,000	$82,000	$19,000	
Total Estimated Pipeline Capital Costs – 2017 Construction	$146,447,000	$16,272,000	$1,005,000	$8,390,000	$3,106,000	**$175,220,000**

Actuals as of October 31, 2017

UNION GAS LIMITED
Calculation of Panhandle Reinforcement Project 2018 Incremental Project Revenue

Line No.	Particulars	Billing Units	2018 Project Forecast (1) (a)	EB-2017-0278 Approved Rates (cents/m^3) (2) (b)	2018 Incremental Project Revenue ($000's) (c) = (a * b)
	Rate M1				
1	Monthly Charge	bills	16,800	$21.00	353
	Monthly Delivery Commodity Charge				
2	First 100 m^3	10^3m^3	943	4.6653	44
3	Next 150 m^3	10^3m^3	838	4.4242	37
4	All over 250 m^3	10^3m^3	1,351	3.8012	51
5	Total Rate M1 Incremental Project Revenue	10^3m^3	3,132		485
	Rate M2				
6	Monthly Charge	bills	-	$70.00	-
	Monthly Delivery Commodity Charge				
7	First 1,000 m^3	10^3m^3	119	4.6486	6
8	Next 6,000 m^3	10^3m^3	578	4.5609	26
9	Next 13,000 m^3	10^3m^3	653	4.3740	29
10	All over 20,000 m^3	10^3m^3	835	4.0546	34
11	Total Rate M2 Incremental Project Revenue	10^3m^3	2,185		94
	Rate M4				
	Monthly Demand Charge				
12	First 8,450 m^3	$10^3m^3/d$	886	56.9923	505
13	Next 19,700 m^3	$10^3m^3/d$	3,331	25.5539	851
14	All over 28,150 m^3	$10^3m^3/d$	3,195	21.4688	686
	Monthly Delivery Commodity Charge				
15	First Block	10^3m^3	92,646	1.3523	1,253
16	All remaining use	10^3m^3	-	0.5306	-
17	Interruptible Commodity Charge	10^3m^3	(2,553)	2.6601	(68)
18	Rate M4 - Total Delivery Including Storage	10^3m^3	90,093		3,227
19	Less: Storage Margin (3)	10^3m^3	90,093	(0.3614)	(326)
20	Total Rate M4 Incremental Project Revenue	10^3m^3	90,093		2,901
	Rate M5				
	Interruptible Contracts				
21	Monthly Charge	bills	(552)	$654.15	(361)
22	Delivery Commodity Charge (Avg Price)	10^3m^3	(73,115)	2.6601	(1,945)
23	Rate M5 - Total Delivery Including Storage		(73,115)		(2,306)
24	Less: Storage Margin (3)	10^3m^3	(73,115)	(0.1679)	123
25	Total Rate M5 Incremental Project Revenue	10^3m^3	(73,115)		(2,183)
	Rate M7				
	Firm Contracts				
26	Monthly Demand Charge	$10^3m^3/d$	4,302	30.8246	1,326
27	Monthly Delivery Commodity Charge	10^3m^3	50,392	0.3873	195
	Interruptible / Seasonal Contracts				
28	Monthly Delivery Commodity Charge	10^3m^3	(29,787)	1.2348	(368)
29	Rate M7 - Total Delivery Including Storage	10^3m^3	20,605		1,154
30	Less: Storage Margin (3)	10^3m^3	20,605	(0.3862)	(80)
31	Total Rate M7 Incremental Project Revenue	10^3m^3	20,605		1,074
	Rate T1				
32	Monthly Charges	Meter/mo.	12	$1,905.94	23
	Transportation Demand				
33	First 28,150 m^3	10^3m^3/d/mo.	923	35.4376	327
34	Next 112,720 m^3	10^3m^3/d/mo.	390	24.4833	95
	Delivery Commodity Charge				
35	Firm	10^3m^3	15,786	0.1360	21
36	Interruptible	10^3m^3	(7,453)	1.3392	(100)
37	Total Rate T1 Incremental Project Revenue	10^3m^3	8,333		367
	Rate T2				
38	Monthly Charges	Meter/mo.	12	$5,513.81	66
	Transportation Demand				
38	First 140,870 m^3	10^3m^3/d/mo.	1,089	26.4455	288
39	All Over 140,870 m^3	10^3m^3/d/mo.	-	13.9884	-
	Delivery Commodity Charge				
40	Firm	10^3m^3	27,000	0.0406	11
41	Interruptible	10^3m^3	-	1.0047	-
42	Total Rate T2 Incremental Project Revenue	10^3m^3	27,000		365
43	Total Incremental Project Revenue	10^3m^3	78,233		$ 3,104

Notes
(1) 2018 incremental project forecast based on 10 months of the Year 1 forecast and 2 months of the Year 2 forecast of the project.
(2) Delivery and transportation rates per October 2017 QRAM (EB-2017-0278), excluding Cap-and-Trade charges.
(3) Bundled delivery rates include distribution, transmission and storage margin. Incremental Project revenue excludes storage margin.

UNION GAS LIMITED
Calculation of Panhandle Reinforcement Project 2017 Incremental Project Revenue

Line No.	Particulars	Billing Units	2017 Project Forecast (1)	EB-2017-0278 Approved Rates (cents/m^3) (2)	2017 Incremental Project Revenue ($000's)
			(a)	(b)	(c) = (a * b)
	Rate M1				
1	Monthly Charge	bills	2,400	$21.00	50
	Monthly Delivery Commodity Charge				
2	First 100 m³	10³m³	135	4.6653	6
3	Next 150 m³	10³m³	120	4.4242	5
4	All over 250 m³	10³m³	193	3.8012	7
5	Total Rate M1 Incremental Project Revenue	10³m³	447		69
	Rate M2				
6	Monthly Charge	bills	-	$70.00	-
	Monthly Delivery Commodity Charge				
7	First 1,000 m³	10³m³	17	4.6486	1
8	Next 6,000 m³	10³m³	85	4.5609	4
9	Next 13,000 m³	10³m³	96	4.3740	4
10	All over 20,000 m³	10³m³	122	4.0546	5
11	Total Rate M2 Incremental Project Revenue	10³m³	320		14
	Rate M4				
	Monthly Demand Charge				
12	First 8,450 m³	10³m³/d	112	56.9923	64
13	Next 19,700 m³	10³m³/d	495	25.5539	127
14	All over 28,150 m³	10³m³/d	532	21.4688	114
	Monthly Delivery Commodity Charge				
15	First Block	10³m³	14,457	1.3523	195
16	All remaining use	10³m³	-	0.5306	-
17	Interruptible Commodity Charge	10³m³	(426)	2.6601	(11)
18	Rate M4 - Total Delivery Including Storage	10³m³	14,031		489
19	Less: Storage Margin (3)	10³m³	14,031	(0.3614)	(51)
20	Total Rate M4 Incremental Project Revenue	10³m³	14,031		438
	Rate M5				
	Interruptible Contracts				
21	Monthly Charge	bills	(92)	$654.15	(60)
22	Delivery Commodity Charge (Avg Price)	10³m³	(12,186)	2.6601	(324)
23	Rate M5 - Total Delivery Including Storage	10³m³	(12,186)		(384)
24	Less: Storage Margin (3)	10³m³	(12,186)	(0.1679)	20
25	Total Rate M5 Incremental Project Revenue	10³m³	(12,186)		(364)
	Rate M7				
	Firm Contracts				
26	Monthly Demand Charge	10³m³/d	717	30.8246	221
27	Monthly Delivery Commodity Charge	10³m³	8,399	0.3873	33
	Interruptible / Seasonal Contracts				
28	Monthly Delivery Commodity Charge	10³m³	(4,964)	1.2348	(61)
29	Rate M7 - Total Delivery Including Storage	10³m³	3,434		192
30	Less: Storage Margin (3)	10³m³	3,434	(0.3862)	(13)
31	Total Rate M7 Incremental Project Revenue	10³m³	3,434		179
	Rate T1				
32	Monthly Charges	Meter/mo.	2	$1,905.94	4
	Transportation Demand				
33	First 28,150 m³	10³m³/d/mo.	154	35.4376	54
34	Next 112,720 m³	10³m³/d/mo.	65	24.4833	16
	Delivery Commodity Charge				
35	Firm	10³m³	2,631	0.1360	4
36	Interruptible	10³m³	(1,242)	1.3392	(17)
37	Total Rate T1 Incremental Project Revenue	10³m³	1,389		61
	Rate T2				
38	Monthly Charges	Meter/mo.	2	$5,513.81	11
	Transportation Demand				
38	First 140,870 m³	10³m³/d/mo.	181	26.4455	48
39	All Over 140,870 m³	10³m³/d/mo.	-	13.9884	-
	Delivery Commodity Charge				
40	Firm	10³m³	4,500	0.0406	2
41	Interruptible	10³m³	-	1.0047	-
42	Total Rate T2 Incremental Project Revenue	10³m³	4,500		61
43	Total Incremental Project Revenue	10³m³	11,936		$ 459

Notes
(1) 2017 incremental project forecast based on 2 months of the Year 1 forecast of the project.
(2) Delivery and transportation rates per October 2017 QRAM (EB-2017-0278), excluding Cap-and-Trade charges.
(3) Bundled delivery rates include distribution, transmission and storage margin. Incremental Project revenue excludes storage margin.

UNION GAS LIMITED

Answer to Interrogatory from
Building Owners and Managers Association ("BOMA")

Reference:

Panhandle Reinforcement Project; Exhibit A, Tab 1, pp.8-10, Appendix G, p.6

a) Please provide the calculation which shown the reduction of Panhandle Project by the increased revenue allocated to rate class in proportion to the Panhandle system and St. Clair system design day demand.

b) Please show the calculation for, and provide and explanation for, each number shown in column 2, Table 2, entitled "2018 Revenue Requirement Allocation to Rate Classes".

Response:

a) Please see Rate Order, Appendix G, p.7 for the allocation of incremental Panhandle Reinforcement Project revenue by rate class deducted from the allocation of Panhandle Reinforcement Project costs.

b) Please see Exhibit B.BOMA.4, Attachment 2 for the calculation of the 2018 incremental project revenue of $3.104 million. The incremental project revenue is allocated to rate classes using the 2013 OEB-approved allocation methodology for Ojibway/St.Clair Demand costs updated for the Panhandle Reinforcement Project as shown at Exhibit B.CME.1, Attachment 1, line 18.

   See Table 1 for the detailed calculation of the incremental Project revenue allocation by rate class. There is an immaterial variance in the allocation by rate class compared to the allocation in Rate Order, Appendix G, p.7 which Union proposes to address with final disposition of the account balance in the 2018 Panhandle Reinforcement Project Costs deferral account.

Table 1
Allocation of 2018 Panhandle Reinforcement Project Revenue

Line No.	Particulars	Updated Ojibway/ St. Clair Design Day Demands (10^3m^3/d) (1)	Project Revenue Allocation ($000's) (2)	Proposed Revenue Allocation ($000's) (3)	Variance in Revenue Allocation ($000's)
		(a)	(b)	(c)	(d) = (c-b)
1	Rate M1	3,789	656	648	(8)
2	Rate M2	1,289	223	221	(2)
3	Rate M4	1,174	203	237	34
4	Rate M5	18	3	3	(0)
5	Rate M7	338	59	73	15
6	Rate T1	1,023	177	180	3
7	Rate T2	7,560	1,309	1,295	(14)
8	Subtotal - Union South	15,191	2,630	2,658	28
9	Rate C1	2,264	392	368	(23)
10	Rate M16	473	82	77	(5)
11	Subtotal - Ex-franchise	2,737	474	445	(28)
12	Total	17,927	3,104	3,104	-

Notes:
(1) Exhibit B.CME.1, Attachment 1, line 18.
(2) Allocated in proportion to column (a).
(3) Rate Order, Appendix G, p.7, column (b).

UNION GAS LIMITED

Answer to Interrogatory from
Building Owners and Managers Association ("BOMA")

Reference: Rate Order Appendix F, p.38

Please provide a blacklined copy of Account 179-156 which shows the revisions to the Order noted in Union's evidence at Exhibit A, Tab 1, p.11.

Response:

Please see Attachment 1 for a blacklined copy of account 179-156. The blacklined copy compares the draft accounting order in Union's Panhandle Reinforcement Project Leave-to-Construct application with the order noted in Union's evidence at Exhibit A, Tab 1, p.11.

The revised draft accounting order reflects the OEB's decision regarding the Panhandle Reinforcement Project Leave-to-Construct proceeding to include the words "net delivery" (EB-2016-0186, Decision and Order, p. 23). This is to reflect the purpose of the deferral account to track the difference between the forecast and actual net delivery revenue requirement.

UNION GAS LIMITED

Accounting Entries for
Panhandle Reinforcement Project Costs
Deferral Account No. 179-~~XXX~~156

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit	-	Account No.179-~~XXX~~156 Other Deferred Charges – Panhandle Reinforcement Project Costs
Credit	-	Account No. 579 Miscellaneous Operating Revenue

To record, as a debit (credit) in Deferral Account No. 179-~~XXX~~156, the difference between the actual net delivery revenue requirement related to the costs for the Panhandle Reinforcement Project and the net delivery revenue requirement included in rates as approved by the Board.

Debit	-	Account No.179-~~XXX~~156 Other Deferred Charges – Panhandle Reinforcement Project Costs
Credit	-	Account No. 323 Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-~~XXX~~156, interest on the balance in Deferral Account No. 179-~~XXX~~156. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

UNION GAS LIMITED

Answer to Interrogatory from
Building Owners and Managers Association ("BOMA")

Reference: Working Papers, Schedule 21, p.l

a) Please confirm that the 0.001% increase in the 2017 M12-X Westerly Kirkwall/Dawn fuel ratio in column 2 under the heading PCI Adjusted Ratio is determined by applying the Price Cap formula increase to the 2017 fuel ratio (GJs) for that route.

b) If so, please explain why the price cap adjustment is applied to the fuel ratio (our emphasis).

c) If the 0.001% represents some other charge, please explain fully.

Response:

a) Confirmed.

b) In accordance with Union's 2014-2018 Incentive Regulation Settlement Agreement (EB-2013-0202), Union applies the PCI adjustment to the fuel ratios and fuel rates as this revenue was part of Union's 2013 OEB-approved revenue. Per the Settlement Agreement (EB-2013-0202), the PCI mechanism applies to Union's adjusted 2013 OEB-approved regulated distribution, transmission and storage revenue, excluding certain predetermined pass through costs (Y-factors). These pass though costs include upstream gas costs, upstream transportation costs, DSM costs, LRAM volume adjustments and major capital projects.

c) Please see the response to part a).

UNION GAS LIMITED

Answer to Interrogatory from
Consumers Council of Canada ("CCC")

Does Union intend to use its 2018 approved rates as the basis for its rates beyond 2018? If not, what will be the basis of rates going forward beyond 2018? If yes, will Union be proposing any adjustments to the 2018 rates?

Response:

This question is not relevant to the 2018 Rates proceeding. Rates beyond 2018 will be determined through a future proceeding.

UNION GAS LIMITED

Answer to Interrogatory from
Consumers Council of Canada ("CCC")

Reference: Exhibit A, Tab 1, p.9

Is the Panhandle Project in-service as of November 1, 2017? Please provide a schedule setting out the full Panhandle Project forecast costs as set out in the EB-2016-0186 Decision and the current actual costs of the Project.

Response:

Please see the response at Exhibit B.BOMA.4.

UNION GAS LIMITED

Answer to Interrogatory from
Consumers Council of Canada ("CCC")

Reference: Exhibit A, Tab 1, p.9

Please explain, in detail, how the $14.574 million of net revenue requirement associated with the Panhandle Project was derived.

Response:

The calculation of the 2018 net revenue requirement of $14.574 million associated with the Panhandle Reinforcement Project is provided at Rate Order, Appendix G, p.6.

UNION GAS LIMITED

Answer to Interrogatory from
Canadian Manufacturers & Exporters ("CME")

Reference: Exhibit A, Tab 1, p.9, Rate Order Appendix G, p.7

At Exhibit A, Tab 1, page 9, Union states that "In the OEB Decision and Order, Union's proposal to use a 20-year depreciation period and a revised cost allocation methodology was not approved by the OEB. Accordingly, Union has prepared the total revenue requirement and allocation of the total revenue requirement to rate classes based on OEB-approved depreciation rates and cost allocation methodologies."

In Appendix G, Union states that "Allocation of Incremental Project Revenue to rate classes based on the 2013 Board-approved Ojibway/St. Clair design day demands updated for the demands of the project."

a) CME wishes to better understand the allocation design that Union has chosen. Please provide a full break out of the Ojibway/St. Clair design day demands, and what changes were made to update the allocation for the demands of the project.

b) Please also explain what process Union used to select that allocation, and whether any other allocation methods were chosen.

Response:

a) Please see Attachment 1 for the detailed calculation of the Ojibway/St. Clair demand allocation factor by rate class.

   The 2013 OEB-approved Ojibway/St. Clair demand allocation reflects the maximum design capacity of 15,188 10^3m^3/d, which includes the Panhandle System capacity of 12,355 10^3m^3/d and St. Clair System import capacity of 2,833 10^3m^3/d. Of the total maximum design capacity of 15,188 10^3m^3/d, the firm long-term ex-franchise Rate C1 and Rate M16 demands represent 2,737 10^3m^3/d and the remaining 12,452 10^3m^3/d is allocated to Union South in-franchise rate classes. The allocation to Union South in-franchise rate classes is in proportion to the combined Panhandle System and St. Clair System firm design day demands. Please see Attachment 1, lines 1-8 for the calculation of the 2013 OEB-approved allocator.

   To update the 2013 OEB-approved Ojibway/St. Clair demand allocation for the Project, Union increased the maximum design capacity by the 2,739 10^3m^3/d capacity created by the Project. As a result, the maximum design capacity increased to a total capacity of 17,927 10^3m^3/d. The updated maximum design capacity is first reduced by the firm long-term ex-franchise Rate C1 and Rate M16 demands of 2,737 10^3m^3/d. Consistent with the OEB-approved methodology, the remaining capacity of 15,191 10^3m^3/d is allocated to Union South in-franchise rate classes in proportion to the combined Panhandle System and St. Clair System design day demands, updated to include the incremental Project design day demands of 1,884 10^3m^3/d. Please see Attachment 1, lines 9-18 for the calculation of the OEB-approved allocator updated for the Panhandle Reinforcement Project.

b) Union allocated the Project revenue in proportion to the Ojibway/St. Clair demand allocation which is consistent with the allocation of Project costs. This proposed allocation of Project revenue provides a proportionate reduction to allocated costs that includes all rate classes with Panhandle System and St. Clair System demands regardless of whether the demands are as a result of the Project.

   Union also considered the following two methodologies for allocating the incremental Project revenue:

   i. *The allocation of Project revenue in proportion to the total cost allocation impacts of the Project including the impacts of the shift in indirect costs, as provided at Rate Order, Appendix G, p.7, column (a)* – Union did not propose this allocation because it results in a reduction to the benefit of the shift in indirect costs to rate classes that do not have demands on the Panhandle System or St. Clair System.

   ii. *The allocation of Project revenue in proportion to the calculation of incremental revenue by rate class as provided at Exhibit B.BOMA.4, Attachment 2* – Union did not propose this allocation because other cost allocators are not adjusted during the IRM and the resulting impacts are not reasonable. The calculation of revenue includes the conversion of existing interruptible customers to firm service. This conversion is not reflected in other cost study allocators. As a result, Rate M5 would see a negative revenue adjustment due to the conversion of customers to Rate M4. The negative revenue adjustment is much greater than the allocation of Project costs which would result in an unreasonable rate increase for the remaining Rate M5 customers. In addition, this allocation results in no benefit of revenue to rate classes who are allocated Project costs but do not have incremental revenue resulting from the Project.

UNION GAS LIMITED

Detailed Allocation Factors Derivation

Line No.	Particulars ($10^3m^3/d$)	Capacity (a)	M1 (b)	M2 (c)	M4 (d)	M5 (e)	M7 (f)	T1 (g)	T2 (h)	Total In-Franchise (i) = (sum b-h)	C1 (j)	M16 (k)	Total Ex-Franchise (l) = (j+k)	Total (m) = (i+l)	
	2013 Board-Approved Allocation Methodology														
1	Ojibway/St. Clair Design Maximum Capacity	15,188													
2	Less: C1 Transportation - Ojibway/St. Clair Firm Demand	(2,264)													
3	Less: M16 Firm Demand (West of Dawn)	(473)													
4	Remaining Pipe Capacity to be Allocated to In-Franchise	12,452													
5	2013 Panhandle Firm Design Day Demands		5,567	1,870	929	30	131	524	3,051	12,102	-	-	-	12,102	
6	2013 Sarnia Industrial Line Firm Design Day Demands		764	257	12	-	-	1,047	9,541	11,620	-	-	-	11,620	
7	Total Firm Design Day Demands		6,331	2,127	941	30	131	1,570	12,592	23,722	-	-	-	23,722	
8	2013 Board-Approved Allocation Methodology		3,323	1,116	494	16	69	824	6,610	12,452	2,264	473	2,737	15,188	(1)
			22%	7%	3%	0%	0%	5%	44%	82%	15%	3%	18%	100%	
	2013 Board-Approved Allocation Methodology Updated for Project														
9	2013 Approved Ojibway/St. Clair Demand Allocator	15,188													
10	Less: C1 Transportation - Ojibway/St. Clair Firm Demand	(2,264)													
11	Less: M16 Firm Demand (West of Dawn)	(473)													
12	Add: Incremental Capacity related to the Project	2,739 (2)													
13	Remaining Pipe Capacity to be Allocated to In-Franchise	15,191													
14	2013 Panhandle Firm Design Day Demands		5,567	1,870	929	30	131	524	3,051	12,102	-	-	-	12,102	
15	2013 Sarnia Industrial Line Firm Design Day Demands		764	257	12	-	-	1,047	9,541	11,620	-	-	-	11,620	
16	2018 Incremental Firm Design Day Demands for the Project		56	45	1,039	-	439	154	151	1,884	-	-	-	1,884	
17	Total Firm Design Day Demands		6,387	2,172	1,980	30	570	1,725	12,743	25,606	-	-	-	25,606	
18	2013 Board-Approved Allocation Methodology Updated for Project		3,789	1,289	1,174	18	338	1,023	7,560	15,191	2,264	473	2,737	17,927	(3)
			21%	7%	7%	0%	2%	6%	42%	85%	13%	3%	15%	100%	

Notes:

(1) In-franchise capacity (Line 4) allocated using total Panhandle and St. Clair Design Day Demands (Line 7) to in-franchise rate classes. Rate C1 demand (Line 2) and Rate M16 demand (Line 3) added to total in-franchise allocation.

(2) Incremental capacity of 2,739 $10^3m^3/d$ equal to 106 TJ/d based on a heat value of 38.55 $GJ/10^3m^3$.

(3) In-franchise capacity (Line 13) allocated using total Panhandle, St. Clair, and 2018 Incremental Project Design Day Demands (Line 17) to in-franchise rate classes. Rate C1 demand (Line 10) plus Rate M16 demand (Line 11) added to total in-franchise allocation.

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe Research Foundation ("Energy Probe")

Reference: Exhibit A Tab 1 Schedule 1; Rate Order Working Papers Schedule 11

Preamble: Consistent with the OEB's revised decision in the 2015-2020 DSM plan proceeding (EB- 2015-0029), Union has included an approved DSM budget of $63.3 million in 2018 rates. The difference between the 2018 DSM budget and actual 2018 DSM budget will be captured in the Demand Side Management Variance Account ("DSMVA"). The allocation of the 2018 DSM budget to rate classes can be found at Rate Order, Working Papers, Schedule 11. Even though this matter will also be addressed in the Deferral Account clearance proceeding, Energy Probe has the following questions.

a) Please indicate if Union has spent the approved 2016 and 2017 DSM budgets.

b) Please provide an update and indicate if the residential sector budgets and targets were met in 2016 and based on year-to-date in 2017.

c) Please confirm funds unspent are recorded in the DSMCEIDA (179-50)

d) Provide an estimate of the 2017 DSMCEIDA funds that represent the difference between Enbridge's approved 2017 DSM budget and the actual amount spent to achieve Union's total 2017 Cumulative Cubic Metres ("CCM") of natural gas targets i.e.:

- How did the actual budget compare to approved?
- How many Cumulative Cubic Metres of gas savings were achieved relative to target?

Response:

a) In 2016 Union did not spend the entire approved DSM budget. In 2017 Union is forecasting to spend the entire approved DSM budget.

b) In 2016 Union did meet the budget and target as approved for the Home Reno Rebate (HRR) offering in the residential sector.[1] In 2017 Union is forecasting to meet the approved budget and targets for the HRR offering.[2]

c) In the Decision and Order (EB-2015-0029 / EB-2015-0049), the OEB states:

[1] 2016 Home Reno Rebate results are draft and will not be finalized until the completion of 2016 audit
[2] 2017 Home Reno Rebate targets are draft and will not be finalized until the completion of 2016 audit

> *"In the event that a gas utility is able to meet its overall annual natural gas savings target, the gas utility may choose to roll-forward and use any remaining approved DSM budget amounts in the following year with no subsequent impact on the approved targets for the following year."*

In 2016 Union did not record unspent funds in the DSMCEIDA since Union did not meet the annual natural gas savings target.

d) In 2017 Union is forecasting to spend the entire approved DSM budget; therefore, Union does not expect any remaining budget to be recorded in the DSMCEIDA.

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe Research Foundation ("Energy Probe")

Reference: Rate Order Working Papers Schedule 12, p.1:
EB-2017-0091 Exhibit A, Tab 1, Appendix A, Schedule 1

Preamble: Account 179-133 Normalized Average Consumption (NAC) had an ending 2016 balance of $23.631 million.

a) For the period between 2014 and 2017(forecast) show the targets, actual NAC and adjustments for rates M1 Rate 01 (residential) and M2 and Rate 10 (commercial).

b) Please provide the volumetric changes and costs for each rate class, based on the Average Use Formula (AUF).

c) Please provide two graphs showing the historical forecast and actual NAC between 2007 and 2017(forecast) and also show the 2018 forecast for:

1. Rate M1 and Rate 01
2. Rate M2 and Rate 10

d) Please provide a statistical trend analysis and discussion for the historic periods.

Response:

a) Consistent with the EB-2013-0202 Settlement Agreement, Union adjusts general service rates annually during the 2014-2018 IR term for changes in NAC to Rate M1, Rate M2, Rate 01, and Rate 10. The target NAC is established for each rate class as a whole and not at the residential, commercial or industrial level.

Annual Actual NAC (m^3)

	2014	**2015**	**2016**	**2017**
Rate M1	2,748	2,676	2,667	
Rate M2	167,537	163,129	159,933	
Rate 01	2,923	2,799	2,788	
Rate 10	172,516	162,078	159,855	

Annual Target NAC (m^3)

	2014	2015	2016	2017
Rate M1	2,751	2,761	2,852	2,738
Rate M2	165,085	169,121	172,693	166,297
Rate 01	2,898	2,901	3,015	2,844
Rate 10	167,443	169,025	177,214	164,329

Annual Target NAC Adjustment

	2014	2015	2016	2017
Rate M1	-0.9%	0.4%	3.3%	-4.0%
Rate M2	14.7%	2.4%	2.1%	-3.7%
Rate 01	4.8%	0.1%	3.9%	-5.7%
Rate 10	6.4%	0.9%	4.8%	-7.3%

b) The current methodology to calculate the volumetric changes for 2018 is based on the NAC variance between 2015 actual NAC and 2016 actual NAC, as seen in Rate Order, Working Papers, Schedule 12. There are no costs associated with NAC; it is a revenue neutral adjustment.

c) Please see Chart 1 and Chart 2 below for the actual NAC and the forecast (target) NAC for Rates M1, 01, M2 and 10. The forecasted NAC is the target NAC used to adjust rates.

Chart 1

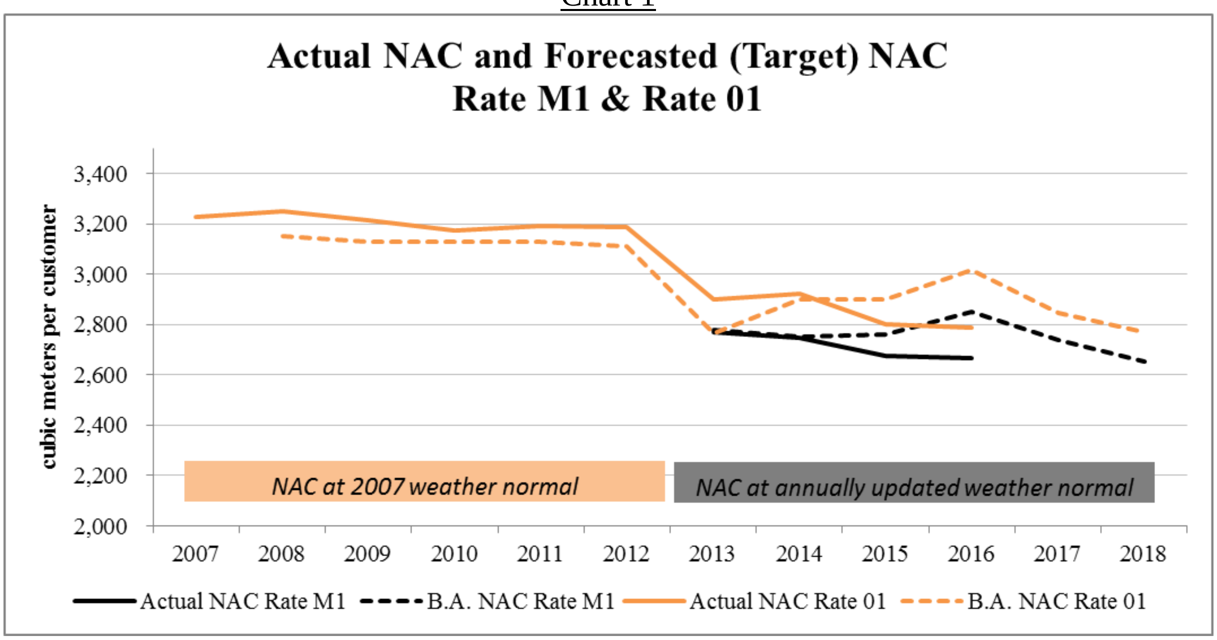
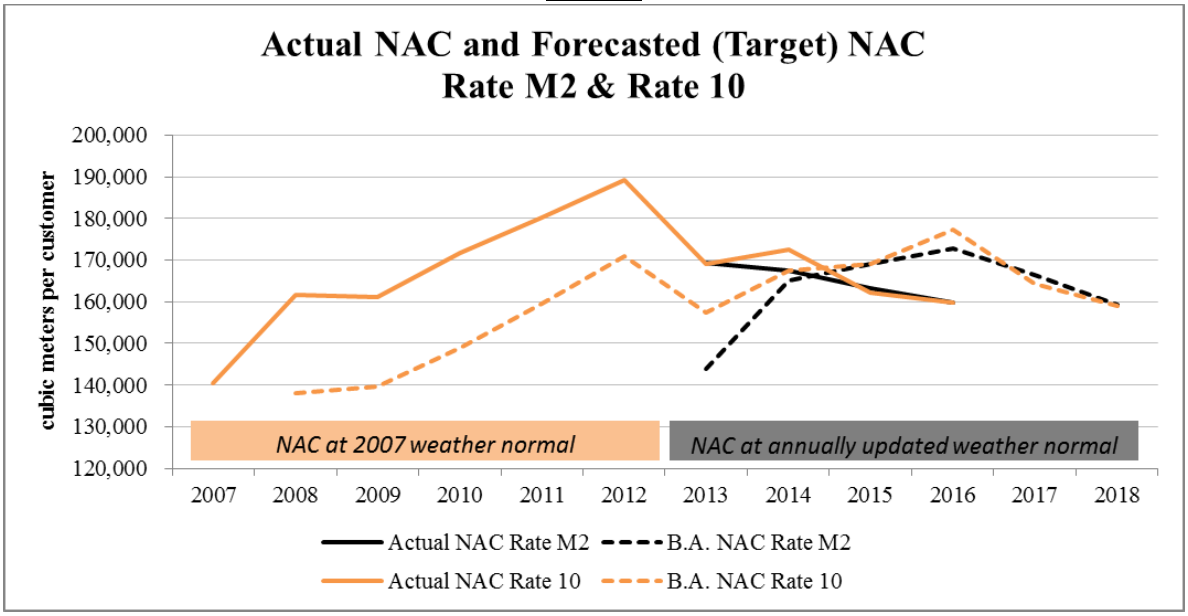


Chart 2



d) Please see Table 1 and Table 2 below for historical actual NAC data. Since 2007, actual NAC has been trending downwards at an average rate of 0.9% per year, being driven by:
   a. Efficiency gains due to improved technology (furnace replacements, building code updates, etc.)
   b. DSM programs promoted by Union, and other energy savings initiatives
   c. Customer behavior (thermostat settings, comfort level, persons per household, etc.)

Table 1: Annual Actual NAC (m^3)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Former Rate M2	4,359	4,271	4,182	4,103	4,209	4,090				
Rate M1							2,768	2,748	2,676	2,667
Rate M2							169,422	167,537	163,129	159,933
Rate 01	3,230	3,252	3,213	3,175	3,190	3,186	2,900	2,923	2,799	2,788
Rate 10	140,491	161,615	161,203	171,803	180,325	189,164	168,975	172,516	162,078	159,855

Table 2: Annual Actual NAC Percentage Change

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Average annual change in use
Former Rate M2		-2.0%	-2.1%	-1.9%	2.6%	-2.8%					-1.2%
Rate M1								-0.7%	-2.6%	-0.3%	-1.2%
Rate M2								-1.1%	-2.6%	-2.0%	-1.9%
Rate 01		0.7%	-1.2%	-1.2%	0.5%	-0.1%	-9.0%	0.8%	-4.2%	-0.4%	-1.6%
Rate 10		15.0%	-0.3%	6.6%	5.0%	4.9%	-10.7%	2.1%	-6.1%	-1.4%	1.7%
									Total Average		**-0.9%**

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe Research Foundation ("Energy Probe")

Reference: EB-2017-0091 Exhibit A Tab 1 Page 19 Table 6;
Rate Order Working Papers Schedule 12, Page 1

a) Please provide a table showing the forecast and actual NAC for rates M1 and Rate 01 for 2016 and 2017.

b) Please explain the difference between forecast and actual/forecast NAC in terms of contributing causes (including, Building Code, Heat Content etc…). In terms of Union's residential models for forecasting NAC, please provide a discussion based on the Rate M1 and Rate 01 data for 2014-17, if trends – weather and other factors – and/or structural change has/is occurring.

c) Please discuss how Union will address such trends/changes in the next rebasing application.

Response:

a) Please see the response at Exhibit B.Energy Probe.2, part a).

b) The forecast (target) NAC is derived from two years' prior actual NAC, weather-normalized to the forecast year. Therefore the difference between actual and target NAC is two years of actual efficiency gains, DSM programs and other energy saving initiatives, and customer behavior. The current rate classes are Rate M1, Rate M2, Rate 01, and Rate 10. The target NAC is established for each rate class as a whole and not at the residential, commercial or industrial level. Since 2014, Rate M1 has been declining at an average of 1.2%, and Rate 01 has been declining at an average rate of 1.3%.

c) Changes to NAC, if appropriate, will be considered as part of a future rate proceeding.

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe Research Foundation ("Energy Probe")

Reference: Exhibit A, Tab 2, Table 1, Attachment 1
EB-2016-0245 Exhibit B. Energy Probe.4, p.2
EB-2016-0245 Exhibit B. Energy Probe.5, p.1

Preamble: In EB-2016-0245 Union stated: "By November 2017, Union is forecasting sufficient M12 Dawn to Kirkwall turn-back to provide an additional PDO reduction of 73 TJ/d, as shown at Exhibit A, Tab 2, Attachment 1, line 8. Should the forecast turn-back be realized, Union will record the additional costs in the Parkway Obligation Rate Variance Deferral Account, as this account is used to record rate variances associated with the timing differences between the effective date of the PDO changes and the inclusion of the cost impacts in approved rates (January 1 of the following year). The 2017 rate increase applicable to Rate M1 customers resulting from the PDO is related to the inclusion of PDCI costs in 2017 rates as well as updates to the Rate M12 Dawn to Parkway demand rate and fuel charges used to calculate the PDO costs."

a) Please confirm, as outlined at EB-2016-0275 Exhibit A, Tab 2, p. 5, lines 9-12, if there is/was a projected shortfall for the period November 1, 2016 to October 31, 2017 of 13 TJ/day and whether no shortfall exists beyond November 1, 2017.

b) Please report on the actual November 1, 2016 - October 31, 2017 shortfall and the costs (if any) for third party service to meet any shortfall. Compare to the M12 rate.

Response:

a) Confirmed. As can be seen at Exhibit A, Tab 2, Attachment 1, lines 2 to 5, there was a shortfall of 13 TJ/day from November 1, 2016 to October 31, 2017. There is no shortfall beyond November 1, 2017.

b) The shortfall for November 1, 2016 to October 31, 2017 was 13 TJ/d. Union did not purchase any services to backstop the shortfall.

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe Research Foundation ("Energy Probe")

Reference: Exhibit A, Tab 2, Table 1, Attachment 1
Rate Order App. F - Parkway Obligation Rate Variance Deferral Account 179-138; Rate Order Working Papers, Schedule 20

Preamble: For 2017, Union is using M12 Dawn to Kirkwall turn-back to manage the remaining initial Parkway shortfall of 13 TJ/day without purchasing additional services.

a) Please provide an additional schedule and a chart showing:

- the total annual volumes and total DP deliveries/volumes transferred from Parkway to Dawn under the PDO settlement from 2015 to 2017
- the total annual volumes and total sales deliveries/volumes transferred from Parkway to Dawn from 2015-2017

b) In addition, show in the schedule:

- the cost of the PDO settlement to DP customers ($ and per unit of transportation)
- the cost of the PDO settlement to sales customers ($ and per unit of transportation)

Response:

a) Please see Attachment 1, line 4 for the shift of direct purchase PDO volumes to Dawn and Attachment 1, line 5 for the shift of sales service PDO to Dawn from 2015 to 2017.

b) The PDO and PDCI costs are included in delivery rates and are paid for by both direct purchase and sales service customers. Please see Attachment 1, lines 10 to 12 for the PDO and PDCI unit cost.

UNION GAS LIMITED
PDO and PDCI Cost and Volumes

Line No.	Particulars	EB-2014-0271 2015 Rates	EB-2015-0116 2016 Rates	EB-2016-0296 2017 Rates	EB-2017-0087 2018 Rates
		(a)	(b)	(c)	(d)
	Total Cost in Rates ($000s)				
1	PDO cost	7,043	7,491	8,426	11,431
2	PDCI cost (1)	-	-	17,559	13,424
3	Total	7,043	7,491	25,985	24,855
	PDO Reduction (TJ/d)				
4	Direct Purchase customers	146	146	146	200
5	Sales Service customers	-	-	84	8
6	Total	146	146	230	208
	Remaining PDO Obligation (TJ/d)				
7	Direct Purchase customers (2)	254	278	285	220
8	Sales Service customers	103	103	19	11
9	Total	357	381	304	231
	Per Unit Cost ($/GJ/d)				
10	PDO cost (line 1/line 4) (3)	48.24	51.30	57.71	57.29
11	PDCI cost (line 2/line 9)	-	-	57.67	58.04
12	Average Per Unit Cost (line 3/(line 4+line 9)	14.00	14.21	57.68	57.69

Notes:

(1) The effective date of the PDCI credit payment to customers for obligated deliveries at Parkway was November 1, 2016. Union included the PDCI costs in rates effective January 1, 2017.

(2) Remaining PDO for direct purchase customers shown as the annual average daily obligation.

(3) The PDO cost in rates includes costs associated with direct purchase PDO reduction only.

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe Research Foundation ("Energy Probe")

Reference: Exhibit A, Tab 2, Table 1, Attachment 1

Preamble: Effective November 1, 2018 Union will no longer have any shortfall at Parkway related to PDO.

a) Please provide the residual DP Volumes and sales volumes obligated at Parkway.

b) Please confirm that there will/will not be any additional PDO shift for either DP or sales customers in 2018 (or 2019).

c) Please explain why 11Tj/d for sales service is not transferred to Dawn.

d) If there are requests for additional DP PDO Shift in 2018, please discuss how this will be addressed?

e) Please provide, with appropriate explanations, the opening and forecast closing balances in the 2017 Parkway Obligation Rate Variance Deferral Account. Please indicate the proposed allocation to DP and sales customers.

f) Please provide estimates of the amounts forecast to be recorded in the PODRVA for 2018 and the basis for these.

Response:

a) The remaining direct purchase volumes and sales service volumes obligated at Parkway can be found at Exhibit A, Tab 2, Attachment 1, col (j), rows 9 and 25, which are 298 TJ/day and 11 TJ/day, respectively.

b) Union did not receive additional Dawn to Kirkwall turnback for 2018 or 2019, and therefore will not be facilitating a shift of obligated deliveries from Parkway to Dawn for direct purchase or sales service customers.

c) Union currently holds 2 contracts with TransCanada Pipelines Limited for the rights to deliver up to 11 TJ/day to the Union ECDA at the Bronte Gate Station and/or Burlington Gate Station. A portion of the sales service customers will be served from the Parkway point using this Union ECDA capacity.

d) Union did not receive any capacity turnback requests from Dawn to Kirkwall shippers for 2018 or 2019 and therefore will not provide any additional PDO relief for these years.

e) The forecast balance in the 2017 Parkway Obligation Rate Variance Deferral Account ("PORVDA") is a credit to ratepayers of $0.1 million. The balance reflects the rate variances associated with the timing of the November 1, 2017 effective date of PDO changes and the inclusion of the cost impacts in rates beginning January 1, 2018. Effective November 1, 2017, Union reduced direct purchase customers obligated Parkway deliveries by 54 TJ/d and reduced sales service Parkway delivery contracts by 8 TJ/d. Please see Exhibit A, Tab 2, Attachment 1, column (j).

   The PDO and PDCI costs are included in delivery rates and are paid for by both direct purchase and sales service customers. Consistent with the EB-2013-0365 Settlement Agreement and the OEB-approved cost allocation methodology, Union will propose to allocate the 2017 PORVDA balance in the following manner:

   - Variances related to PDO and PDCI demand costs to Union South in-franchise rate classes in proportion to 2013 OEB-approved Dawn-Parkway design day demands;

   - Variances related to PDO commodity costs to Union South in-franchise rate classes in proportion to 2013 OEB-approved delivery volumes for customers located east of Dawn and to Union North in-franchise rate classes in proportion to Union North in-franchise winter volumes excluding T-service and Rate 25 volumes; and

   - Variances related to PDCI commodity costs to Union South in-franchise rate classes in proportion to 2013 OEB-approved delivery volumes for customers located east of Dawn.

f) Union is not forecasting Dawn to Parkway capacity to be available to facilitate a reduction in direct purchase customers obligated Parkway deliveries for 2018. Accordingly, no amount is forecast to be recorded in the Parkway Obligation Rate Variance Deferral Account for 2018. Please see Exhibit A, Tab 2, Attachment 1, column (k).

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe Research Foundation ("Energy Probe")

Reference: Exhibit A, Tab 3, p.27

Preamble: On March 16, 2017, the OEB launched an initiative to develop a Framework for the Assessment of Distributor Gas Supply Plans ("Framework"). The Framework will establish the OEB's expectations and objectives for distributor gas supply plans and clearly articulate the approach the OEB will take to assess whether the plans meet those objectives. The development of the Framework will also address what role Renewable Natural Gas ("RNG") should play in the system gas supply portfolios of distributors.

a) Please provide the Terms of Reference and Membership of the GSP Working Group.

b) Please indicate if the Working Group operates on the basis that Union and Enbridge will continue separate GSP processes and plans, or whether consolidation of supply, upstream transportation and storage will occur post-merger.

Response:

a) Please see Attachment 1, a letter dated April 26, 2017 issued by the OEB pertaining to the Framework for the Assessment of Distributor Gas Supply Plans Working Group.

b) The consolidation of supply, upstream transportation and storage has not been contemplated with the Gas Supply Working Group.

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Ontario

By Email and Web-posting

April 26, 2017

To: **All Regulated Natural Gas Distributors**
All Interested Parties

Re: **Framework for the Assessment of Distributor Gas Supply Plans**
OEB File No. EB-2017-0129

On March 16th, 2017 the OEB issued a letter (March 16th Letter) initiating the consultation to develop a Framework for the Assessment of Distributor Gas Supply Plans ("Framework").

The Framework will establish the OEB's expectations and objectives for rate-regulated distributors' gas supply plans and clearly articulate the approach the OEB will take to assessing whether the plans meet those objectives in order to ensure cost effectiveness and value to consumers. As stated in the March 16th Letter, the development of the Framework will also address what role Renewable Natural Gas (RNG) should play in the system gas supply portfolios of the distributors.

OEB staff will be preparing a draft Framework relying on the work done in the earlier Gas Supply Planning Initiative as well technical input from a working group. Once the draft Framework has been developed, OEB staff will consult broadly on it to gather input from all stakeholders.

This letter provides an update for the next steps in this consultation.

Working Group

To assist OEB staff in developing a draft Framework for consideration, the OEB has established a Technical Working Group made up of the following organizations:

- Enbridge Gas Distribution Inc.
- Union Gas Limited
- Consumers Council of Canada (CCC)
- Industrial Gas Users Association (IGUA)
- School Energy Coalition (SEC)
- Federation of Rental-Housing Providers of Ontario (FRPO)
- Canadian Biogas Association (CBA)
- City of Hamilton
- Ministry of Agriculture, Food and Rural Affairs

The Working Group has been designed to ensure that there is a balanced and broad representation of relevant interests with a focus on bringing the appropriate level of expertise on the issues to assist OEB staff. The Working Group is expected to meet several times over the next two to three months. Materials related to the Working Group, including agendas, meeting schedules, presentations, and meeting notes will be posted on the OEB's website as they become available.

Issues for the Working Group

In developing a draft Framework, staff has identified certain issues where additional technical information would be of assistance. The working group will focus initially on the issues related to RNG as a component of gas supply plans, including:

- Understanding the current RNG marketplace and sources in Ontario
- Drivers for inclusion of RNG in the system gas supply plan?
- Availability and reliability of supply of RNG that should be taken into consideration in developing the Framework
- What are the barriers and enablers to including RNG in the supply mix?
- What are the key metrics that the OEB should be looking to help inform the appropriate contribution of RNG to the supply mix?

The first meeting of the working group members will be held on May 2nd via conference call (details below). This meeting will focus on a discussion regarding the RNG sector in Ontario and the issues that focus specifically on RNG.

A second working group meeting on RNG will be held on May 23rd, 2016. Further details and an agenda will be provided prior to this meeting.

A third working group meeting is anticipated to be held during the week of June 12th and will focus on the Multi-Year Gas Supply Plan and the Annual Gas Supply Memorandum.

More detail about this meeting will be provided at a later date.

Working Group Meeting #1
Date: May 2nd, 2017
Time: 9:30 to 11:30
Conference Number: 1-866-832-4446
Conference ID: 2812741

Working Group Meeting #2
Date: May 23rd, 2017
Location: OEB 25th Floor ADR
Time: 9:30 to 4:30

Working Group Meeting #3
Date: Week of June 12th
Location: OEB 25th Floor ADR
Time: TBA

While not anticipated at this time, staff may set up additional working group meetings.

Any questions relating to this letter should be directed to Jason Craig at Jason.craig@oeb.ca or at 416-440-8139. The OEB's toll-free number is 1-888-632-6273.

Yours truly,

Original Signed By

Brian Hewson
Vice President, Consumer Protection & Industry Performance

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe Research Foundation ("Energy Probe")

Reference: Exhibit A Tab 3 p.28

Preamble: Union has not included any specific RNG in its GSP for the 2017/18 gas year. To the extent that programs discussed above, advance and RNG is available to include in Union's GSP, Union will adjust its gas supply purchases accordingly.

a) Has Union applied to the Board for approval for procurement and use of RNG in its supply portfolio?

b) Has Union conducted feasibility studies on RNG? If so please provide copies.

c) In the last few years delivered gas prices have fallen due to supplies from Marcellus and other Shale gas sources; please explain why RNG is more feasible than 5 years ago? Provide supporting references and extracts to support the explanation(s).

d) Is Union aware that Enbridge applied to the Board for approval for development and procurement of RNG and subsequently withdrew its application? What has changed to make RNG cost-effective? Be specific regarding each type/source of RNG.

Response:

a) As indicated at Exhibit A, Tab 3, Page 28 of 33, Union has identified RNG as a potential future customer abatement program. This was also discussed in Union's 2017 Cap-and-Trade Compliance Plan (EB-2016-0296). Union has been examining how RNG can become part of the gas supply portfolio in order to deliver GHG reductions as soon as practically possible. RNG programs will require Government of Ontario ("Government") support and funding in order to proceed.

Ontario has committed funding to RNG in the 2017 Long-Term Energy Plan, released October 26, 2017, acknowledging RNG as an "innovative Ontario-made source of energy" that can leverage the existing natural gas distribution system. In addition, in a December 10, 2016 letter, the MOE requested the OEB proceed in a timely manner to explore RNG as part of utility gas supply portfolios. Subsequently the OEB incorporated RNG into the Framework for the Assessment of Distributor Gas Supply Plans which was initiated on March 16, 2017. Union is supportive of the Government and the OEB direction with respect to RNG.

Union recently filed its 2018 Cap-and-Trade Compliance Plan (EB-2017-0255). In that pre-filed evidence, Union noted that the Government and the OEB have clearly and consistently articulated support for the pursuit of RNG as a component of utility gas supply portfolios. As part of the 2018 Cap-and-Trade Compliance Plan, Union has requested approval of the cost consequences associated with the RNG mechanism proposed. The RNG mechanism will facilitate RNG procurement funding and cost recovery. Union's RNG proposal provides for:

- Long term, fixed price contracts with producers that supports the development of RNG in Ontario, consistent with Climate Change Action Plan objectives of long term emissions reductions; and,
- Utilization of government funding to purchase RNG while minimizing the impact to ratepayers relative to the cost of conventional natural gas supply.

b) Subsequent to the reports filed as part of the RNG application in 2011 (EB-2011-0283), Union has not completed any RNG feasibility studies. The OEB issued the Long-Term Carbon Price Forecast ("LTCPF") and Marginal Abatement Cost Curve ("MACC") on May 31, 2017 and July 20, 2017, respectively. The OEB engaged ICF as a consultant to lead the development of the LTCPF and the MACC. The MACC is a tool used to illustrate the potential for incremental abatement opportunities and the marginal cost of these opportunities relative to the cost of carbon. ICFs RNG analysis referenced the following studies:

- Canadian Biogas Study: Benefits to the Economy, Environment and Energy, Biogas Association, December 2013.
- Potential Production of Renewable Natural Gas from Ontario Wastes, Alberta Innovates Technology Futures, May 2011.
- Economic Study on Renewable Natural Gas Production and Injection Costs in the Natural Gas
- Distribution Grid in Ontario: Biogas plant costing report, Electrigaz Technologies, September 2011.

c) RNG becomes feasible when provincial funding is used to address cost differences between RNG and conventional natural gas. Otherwise the cost of RNG is very high compared to conventional natural gas.

d) In September 2011, Union and Enbridge submitted a joint application (EB-2011-0283) to the OEB for approval of a Renewable Natural Gas program. Union and Enbridge subsequently withdrew their application. Further, Union is aware that Enbridge included Cap-and-Trade related proposals in its 2018 Rates Application and was subsequently directed to remove the Cap-and-Trade related proposals (including Renewable Natural Gas) from its 2018 Rates Application and to file those proposals under a new proceeding.

Since that time, the Government has focused efforts to fight climate change, reduce greenhouse gas pollution and transition to a low-carbon economy. In June 2016, Ontario released its 5 year Climate Change Action Plan. On January 1, 2017, the Government implemented its Cap-and-Trade Program in Ontario. As noted in Union's 2018 Cap-and-Trade Compliance Evidence (EB-2017-0255), by investing in and supporting RNG, Ontario stands to benefit from the diversification of Union's gas supply portfolio and, subsequently, the development of a provincial RNG industry. This satisfies both the interest expressed by the Minister of Energy in the development of RNG in Ontario and the inclusion of RNG in utility gas supply portfolios. This will also support Ontario's transition to a low-carbon economy.

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe Research Foundation ("Energy Probe")

Reference: Exhibit A, Tab 3, p.28

Preamble: The Rover Pipeline (anticipated to be in-service December 2017) and NEXUS pipeline (anticipated to be in-service late third quarter 2018) projects, both of which have been approved by the Federal Energy Regulatory Commission ("FERC") will provide new infrastructure between Appalachian producers and Dawn.

a) Please provide an update to the status/timing of Rover and NEXUS pipelines.

b) Please discuss the effect of timing of these projects on the 2018 GSP in terms of supply and transportation costs.

c) Who will bear the costs of any delays? Be specific for each of Direct Purchase and System Sales Customers.

Response:

a) NEXUS is still on target to meet a Q3 2018 estimated in-service date; this was confirmed in the Enbridge Inc. Q3 2017 results, as shown in Exhibit B.TCPL.4, Attachment 1. Rover Phase 1A from Cadiz Township to Defiance Compressor station was in-service as of August 31, 2017. Rover Phase 1B from Defiance to Vector is estimated to be in-service by December 2017. Rover Phase 2 from Vector to Dawn Hub is expected to be in service by end of Q1 2018.

b) When the 2017/2018 Gas Supply Plan was prepared, NEXUS was still targeting to be in service November 1, 2017. Union received formal notice from NEXUS of a delay in the in-service date on August 1, 2017 and subsequently filed as part of its Gas Supply Memorandum the NEXUS Contingency Planning, referenced in Exhibit A, Tab 3, p.30. Below is the excerpt:

"As part of an ongoing process, Union evaluates the portfolio to ensure it meets the needs identified in the GSP. This includes monitoring the impacts of in-service delays for new transportation projects.

In order to backstop delays to the NEXUS in-service date, Union has secured alternate upstream contracts to replace the NEXUS transportation capacity. Union has increased its DTE/MichCon capacity by 30,000 Dth/day to hold 90,000 Dth/day of capacity until NEXUS is in-service. This DTE/MichCon contract expiry is tied to the earlier of the NEXUS in-service *date or October 31, 2018. Union also secured 60,000 Dth/day of capacity on Vector Pipeline for November 1, 2017 through March 31, 2018. This combination of DTE/MichCon and Vector capacity will fully backstop the 150,000 Dth/day of NEXUS capacity for the winter of 2017/18."*

The estimated net impact, including the removal of NEXUS and addition of contingency transportation and supply arrangements, is a total savings of $21.2 M and is based on the April 2017 QRAM pricing included in the 2017/2018 Gas Supply Plan.

c) Union has contracted for replacement supply and transportation (as noted above) and the estimated savings will benefit all sales service customers.

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe Research Foundation ("Energy Probe")

References: Exhibit A, Schedule 1, Rate Order Appendix G, pp.6, 7;
Panhandle reinforcement Project – EB-2016-0186.

Preamble: In accordance with the OEB Decision, Union has included the cost consequences of the Panhandle Project in 2018 Rates based on the estimated total capital cost of $264.5 million and the forecasted in-service date of November 1, 2017. The OEB Decision and Order included a directive for Union to update the Panhandle Project's 2018 delivery revenue forecast in its 2018 rates application and evidence for OEB approval. Accordingly, Union has increased the 2018 incremental Panhandle Project revenue from $1.572 million to $3.104 million to reflect the incremental transmission and distribution margin attributable to the Panhandle Project based on current approved rates. The update to the incremental Panhandle Project revenue results in a net revenue requirement of $14.574 million as provided at Rate Order, Appendix G.

a) Please provide the actual in-service date of the Panhandle Reinforcement Project.

b) Please indicate both the capital-related and revenues recorded in the Panhandle Reinforcement Project Costs Deferral Account; in the latter case relative to a 2017 net delivery revenue forecast of $4.768 million.

c) Please explain the basis of the 2018 PRP revenue forecast and the difference to OEB forecast.

Response:

a) The Panhandle Reinforcement Project was placed into service commercially on November 1, 2017 and operationally on November 11, 2017.

b) To clarify, the OEB-approved net delivery revenue forecast, using OEB-approved depreciation rates, is $0.100 million (EB-2016-0186, Exhibit A, Appendix B, Schedule 1). $4.768 million was the forecast net delivery revenue forecast using alternative depreciation rates (EB-2016-0186, Exhibit A, Tab 8, Schedule 1).

Union expects that the 2017 balance in the Panhandle Reinforcement Project Deferral Account will be a credit of approximately $0.4 million payable to ratepayers. This balance is comprised of forecast distribution and transmission margin of $0.459 million and a forecast revenue requirement of $0.1 million. Union will seek approval to dispose of the actual deferral account balance in Union's annual non-commodity deferral account disposition application, to be filed in 2018.

c) Please see Exhibit B. BOMA.4 part c) for an explanation and the calculation of the 2018 incremental project revenue of $3.104 million associated with the Panhandle Reinforcement Project.

The incremental project revenue increase of $1.532 million, compared to the $1.572 million included with the Panhandle Reinforcement Project (EB-2016-0186), to the $3.104 million included with this application is a result of two factors:

1) $1.065 million increase related to the addition of incremental distribution margin attributable to the Project, as directed by the OEB in the EB-2016-0186 Decision.
2) $0.467 million increase related to the update of the transmission margin from April 2016 QRAM unit rates to October 2017 QRAM unit rates.

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Reference: Exhibit A, Tab 1, p.8
EB-2014-0261 Settlement Agreement Article 3

Preamble: Article 3 of the Settlement Agreement contains a section on Capacity Turnback that is pertinent to the rate impacts of the Major Capital Projects. The Settlement Agreement reads:

Capacity Turnback

"CME, FRPO and OGVG submitted evidence relating to concerns regarding potential capacity turnback and the resulting rate impacts. To address these concerns, the intervenor evidence called for conditions of approval that would extend the terms of existing transportation contracts and set a floor on the ex-franchise demand factors used for allocating Dawn to Parkway costs or a period of ten years.

The parties do not agree on the risk of Dawn Parkway capacity turnback post-2018. For the purposes of settlement, while the parties agree that leave to construct should be granted; there is no agreement of how turnback risk should be dealt with in the context of the proposed facilities. Parties agree that this issue will be dealt with in Union's next cost of service proceeding. For greater certainty, intervenors are in no way restricted or precluded from making any argument before the Board in that proceeding that it is appropriate that certain cost allocation measures should be put in place to insulate ratepayers from the effect of unutilized and underutilized capacity on the Dawn-Parkway system due to potential turnback risk. Accordingly, parties agree that no conditions related to capacity turnback are required at this time."

With the prospect of a deferred cost of service proceeding, we would like to understand better Union's views on the appropriate forum for the Board to consider the above issue.

1) Please provide Union's views on the appropriateness of including this issue in the following proceedings:

   a) The 2018 Rates proceeding

   b) The Enbridge-Union merger application

   c) Any other proceeding Union believes is appropriate

Response:

This question is not relevant to the 2018 Rates proceeding.

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

If Union favours the 2018 Rates proceeding, what evidence has Union provided in its application that addresses this issue.

Response:

Please see the response at Exhibit B.FRPO.1.

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Reference: Exhibit A, Tab 1, p.14
EB-2015-0200 Settlement Agreement, Issue 4, p.15

Preamble: We would like to understand better the impetus and determination of the proposed changes to the M12 rate schedule.

For the M12-X rate, what was the Kirkwall to Dawn fuel rate in 2017?

a) What prompted the change to the rate in 2018?

b) Please show the derivation of the fuel rate for 2018.

Response:

Please see the response at Exhibit B.Staff.5, part b).

a) Union is proposing to add the Rate M12-X Kirkwall to Dawn fuel ratio because the fuel ratio is not included on the Rate M12 Schedule "C". Union is proposing to set the fuel ratio to be the same as the Rate C1 Kirkwall to Dawn fuel ratio.

   There is no impact to customers as a result of this proposal as the difference between the fuel provided in kind for the M12-X Kirkwall to Dawn transportation and the actual fuel usage for each customer is trued-up quarterly through the Yearly Commodity Required ("YCR") process.

b) Please see the response at Exhibit B.VECC.2.

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Has Union Gas considered making Kirkwall a designated receipt point for obligated deliveries?

a) If not, why not?

b) Has Union tested the market to determine if an incentive paid to ex-franchise shippers to deliver firm at Kirkwall during the winter would be an economic alternative to the next tranche of Dawn-Parkway expansion. If not, why not?

c) Upon determination of any future Dawn-Parkway capacity needs, will Union initiate an assessment of incented Kirkwall deliveries as an alternative?

Response:

a) Union has not considered making Kirkwall a designated receipt point for obligated deliveries. Union's efforts have been focused on shifting direct purchase customer obligated deliveries from Parkway to Dawn guided by market desire and agreed to as per the PDO Settlement Agreement. There are a number of complications involved with introducing an obligation for deliveries to Kirkwall, not the least of which is that since Kirkwall is not at the end of the Dawn Parkway System and the benefit of deliveries at this point do not result in a proportionate reduction in capacity from Dawn to Parkway. This can be seen in the Dawn to Parkway equivalency factor that is applied to Dawn to Kirkwall turnback in order to determine the amount this turnback can reduce direct purchase PDO amounts.[1]

b) To date, Union has not proposed any Dawn-Parkway expansions beyond 2017.

   Union has not tested paying an incentive to obligate deliveries to Kirkwall during the winter as an alternative to constructing the next tranche of Dawn-Parkway expansion for the reasons identified in part a) above.

c) When transportation requests on the Dawn Parkway System exceed capability, Union will examine all feasible options to reduce or eliminate the potential of building incremental capacity including a reverse open season. It is however unlikely that obligated deliveries at Kirkwall will provide sufficient benefit to mitigate a Dawn Parkway System build.

[1] The methodology for using the equivalency factor is explained in Union's 2014 Rates evidence (EB-2013-0365, Exhibit A, Tab 4, p. 24).

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Please explain how the VT3 service is different from M12 service from Parkway to Kirkwall or Dawn.

a) Why does Union not offer this service anymore?

b) What are Union's views on the impact of removing this service option on the potential for Kirkwall deliveries?

Response:

VT3 is the same as the Rate M12 Parkway to Kirkwall or Dawn service.

a) As no customers contract for Parkway to Kirkwall or Dawn under Rate M12, Union is requesting to remove this service option from the Rate M12 Schedule "C". Union currently offers and will continue to offer long-term westerly transportation from Parkway to Kirkwall or Dawn under Rate C1 and as part of the Rate M12-X service, which allows shippers to receive and deliver gas between any two M12 points (Dawn, Parkway or Kirkwall) on any day and in any direction.

b) There is no impact of removing this service option as Union will continue to offer this service under Rate C1 and as part of the M12-X service.

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Reference: EB-2017-0087 Rate Order Working Papers, Schedule 23, p.3

Please confirm that the Union Gas relies on M12 capacity to meet the storage needs of Union North customers

a) Please update the above reference to include the allocation of those M12 costs.

b) Please explain why these M12 costs are not shown in the schedule.

c) Were these M12 costs evidenced to the Board in the original EB-2015-0181 Dawn Reference Price proceeding? If not, why not?

d) Using October 2017 QRAM, including commodity costs, please provide a total bill comparison, broken down for the different components of commodity, transportation and supply for Rate 1 and Rate 10 customers with Gas Supply plan sourcing and again, specifically, if these customers were supplied with the same approach as WDA customers

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Response:

Confirmed. Union relies on Dawn to Parkway transportation for both the storage and transportation needs of Union North customers.

a) Rate Order, Working Papers, Schedule 23, p.3 is used to calculate the cost variance between the 2018 Gas Supply Plan included in 2018 rates and the 2017 Gas Supply Plan included in 2017 rates. The costs of the Gas Supply Plan are third party pass through costs Union incurs to serve Union North customers. There is no cost variance associated with the Dawn Parkway System costs to update for in 2018 Rates and inclusion of these costs on the schedule is not necessary. Union treats Dawn Parkway System costs consistent with Union's other storage costs (i.e. wells and lines, compressors, etc.) required to serve Union North customers.

The total 2018 Dawn Parkway System costs recovered in Union North storage and transportation rates is $17.7 million. Dawn Parkway System costs are based on Union's 2013 cost allocation study, updated for approved adjustments during IRM term, such as PCI, capital pass through projects and other one-time adjustments.

b) Please see the response to part a).

c) Yes. Dawn Parkway System costs were included in the Dawn Reference Price proceeding (EB-2015-0181).

d) The detailed bill impacts for Rate 01 and Rate 10 customers are provided at Rate Order, Working Papers, Schedule 8, p.2 and p.3. The detailed bills are based on October 2017 QRAM and provide rate impacts based on each component of the bill for customers located in both the Union North West Zone (Centrat MDA, Union WDA and Union SSMDA) and Union North East Zone (Union NDA, Union NCDA and Union EDA).

Union has not provided the total bill comparison as requested because Union cannot serve the customers located in the Union North East Zone the same as the customers located in the Union WDA. Union has contracted for short-haul transportation contracts from Dawn to the respective Union North East delivery area on TransCanada Pipelines Limited for 15 years, with no option to turnback. Union also has OEB-approval to base the Union North East Zone's gas supply commodity rate on a Dawn Reference Price consistent with the gas supply portfolio, per Union's Dawn reference Price proceeding (EB-2015-0181).

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Reference: Exhibit A, Tab 2
EB-2013-0365 Settlement Agreement
EB-2016-0245 Settlement Agreement pp.17-20

Preamble: We are interested in understanding better the application of principles from the EB-2013-0365 Settlement Agreement to the current situation and the inclusion of PDO costs in 2018 applied for in rates.

Excerpts from the EB-2013-0365 read:

The ultimate objective of the modified proposal is to remedy an inequity. The guiding principle is to keep Union whole rather than to enhance or reduce its earnings during the operation of the Incentive Regulation Mechanism ("IRM") to December 31, 2018. *(Emphasis added)…*

10. Union will include in its annual rate case filings a report on:
(a) Capacity that could become available, or could be made available, in the 2 years commencing with the test year, and could be used to further reduce the PDO in place at the time of the rate case filing on a more cost effective (i.e. lower revenue requirement) basis than the cost of the PDCI. Parties in the rate review process may explore any such options and advocate for further physical displacement of remaining PDOs to Dawn or other delivery points less costly to deliver to than Parkway.

(c) The measures that Union used and the costs incurred to manage the Parkway delivery shortfall (described in paragraph B.2) to acquire incremental resources, the costs of which are not already recovered in base rates, Y factors and/or existing deferral and variance accounts.

If the costs incurred to manage the Parkway delivery shortfall component of the PDO reduction in any year are less than the annual demand costs related to the shortfall inthat year and actual fuel costs in that year for capacity equal to the shortfall capacity, then the entire amount of such cost savings will accrue to Union.

Conversely, if the actual costs in any year to manage the Parkway Delivery shortfall in that year exceed annual demand costs and actual fuel costs in that year for capacity equal to the shortfall amount, then Union will be entirely responsible for those excess costs. ***Parties further agree that ratepayers will be entitled to recover from Union that portion of the costs incurred by Union to manage the Parkway Delivery shortfall to the extent that the cost of the measures used by Union to manage the shortfall are already covered in base rates, Y factors and/or existing deferral or variance accounts.***

Please update the Nov. 1, 2019 turnback with up-to-date information

a) Please double-check the Nov. 1, 2018 turnback information.

b) Please include this information in the table below in question 8.

Response:

a) Union did not receive any Dawn to Kirkwall turnback effective November 1, 2018 or November 1, 2019.

b) The information included in Exhibit B.FRPO.8 part b) does not include any Dawn to Kirkwall turnback for either November 1, 2018 or November 1, 2019 (see part a) above).

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

For each of 2014/15, 2015/16, 2016/17, 2017/18 and 2018/19, please provide:

a) The amount of capacity recovered in base rates, Y factors and/or existing deferral or variance accounts (broken out by each category of recovery).

b) In one table, the forecasted amount of Dawn-Parkway capacity as determined in a) and the forecasted peak-day requirements (including updates from turnback identified in the above question 7).

c) The measures that Union used and the costs incurred to manage the Parkway delivery shortfall to acquire incremental resources, the costs of which are not already recovered in base rates Y factors and/or existing deferral and variance accounts.

d) For each of the requested winters, please provide the dates of interruptions of customers on the Dawn-Parkway system and the Heating Degree Days associated with each day of interruption.

e) In a separate table, for each year, please provide the amount of PDO collected and the additional costs to manage the Parkway delivery shortfall that are not already recovered in base rates Y factors and/or existing deferral and variance accounts.

Response:

a) Please see Attachment 1, line 6.

b) Please see Attachment 1, lines 8 and 9.

c) For 2014/2015 through to date in 2017/2018, Union did not experience Design Day conditions and therefore did not need to acquire incremental resources or employ additional measures to manage the Parkway delivery shortfall.

d) The Dawn Parkway System was not interrupted from 2014/2015 through to date.

e) Please see Table 1 for the PDO costs included in rates. Union did not incur any additional costs to manage the Parkway delivery shortfall.

Table 1
PDO Costs in Rates

Line No.	Particulars		Total Cost ($000s)
1	EB-2014-0271	2015 Rates	7,043
2	EB-2015-0116	2016 Rates	7,491
3	EB-2016-0296	2017 Rates	8,426
4	EB-2017-0087	2018 Rates	11,431

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Dawn to Parkway Capacity in Rates

Line No.	Particulars (TJ/d)	2014 Rates W14/15	2015 Rates W15/16	2016 Rates W16/17	2017 Rates W17/18
		(a)	(b)	(c)	(d)
	Base Rates				
1	2013 Cost of Service	6,803	6,803	6,803	6,803
	2014-2018 IRM Y Factor Rate Adjustments				
2	Capital Pass-though Projects				
3	Brantford-Kirkwall / Parkway D Project (1)	-	433	433	433
4	Dawn Parkway 2016 System Expansion Project (2)	-	-	443	443
5	2017 Dawn Parkway Project (3)	-	-	-	457
6	Total Dawn-Parkway Capacity in Rates as Filed	6,803	7,236	7,678	8,135
	Other Changes (not included in Rates)				
7	Other Dawn-Parkway Capacity Changes (4)	(2)	(222)	(170)	(246)
8	Total Forecasted Dawn-Parkway Capacity (Line 6 + Line 7)	6,801	7,014	7,508	7,889
9	Total Forecasted Dawn-Parkway Demands	6,643	7,049	7,443	7,783

Notes:

(1) The in-service date of the Brantford-Kirkwall / Parkway D Project was forecast for November 2015. 2015 Rates includes the 2015 revenue requirement and two months of demands added to the Rate M12 billing units associated with the project.

(2) The in-service date of the Dawn Parkway 2016 System Expansion Project was forecast for November 2016. 2016 Rates included the 2016 revenue requirement and two months of demands added to the Rate M12 billing units associated with the project.

(3) The in-service date of the 2017 Dawn Parkway Project is forecast for November 2017. 2017 Rates includes the 2017 revenue requirement and two months of demands added to the Rate M12 billing units associated with the project.

(4) Total Dawn-Parkway capacity has been reduced due to year to year modelling changes and ex-franchise and in-franchise demand changes along the Dawn-Parkway system. These changes in the Dawn-Parkway capacity do not impact filed rates.

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Please confirm that the costs original capacity that was temporarily available to allow for the original shift of customers from Parkway to Dawn were included in the 2013 Base Rates for the Dawn-Parkway system.

Response:

Confirmed.

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

If there is no shortfall as a result of D-P builds that have been put in place and whose recovery are included in rates, please explain why Union is seeking PDO recovery in 2018.

Response:

Union has included the PDO costs in 2018 Rates in accordance with the Parkway Delivery Obligation Settlement Agreement, approved as part of Union's 2014 Rates proceeding (EB-2013-0365). The guiding principle of the PDO Settlement Agreement is to keep Union whole rather than enhance or reduce its earnings during the operation of the IRM. Including the PDO costs in 2018 Rates ensures Union is kept whole because the Dawn to Parkway capacity used to facilitate the PDO reduction is capacity that could otherwise be sold in the S&T markets as short-term transportation revenue.

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Reference: Exhibit A, Tab 2 and EB-2013-0365 Settlement Agreement
EB-2016-0245 Settlement Agreement pp.17-20

Preamble: We are interested in understanding better the application of principles from the EB-2013-0365 Settlement Agreement to the current situation and the inclusion of PDO costs in 2018 applied for in rates.

Excerpts from the EB-2013-0365 read:

> ***The ultimate objective of the modified proposal is to remedy an inequity. The guiding principle is to keep Union whole rather than to enhance or reduce its earnings during the operation of the Incentive Regulation Mechanism ("IRM") to December 31, 2018.*** *(emphasis added).*
>
> *….*
>
> *10. Union will include in its annual rate case filings a report on:*
> *(a) Capacity that could become available, or could be made available, in the 2 years commencing with the test year, and could be used to further reduce the PDO in place at the time of the rate case filing on a more cost effective (i.e. lower revenue requirement) basis than the cost of the PDCI. Parties in the rate review process may explore any such options and advocate for further physical displacement of remaining PDOs to Dawn or other delivery points less costly to deliver to than Parkway.*
> *(c) The measures that Union used and the costs incurred to manage the Parkway delivery shortfall (described in paragraph B.2) to acquire incremental resources, the costs of which are not already recovered in base rates, Y factors and/or existing deferral and variance accounts.*
> *If the costs incurred to manage the Parkway delivery shortfall component of the PDO reduction in any year are less than the annual demand costs related to the shortfall in that year and actual fuel costs in that year for capacity equal to the shortfall capacity, then the entire amount of such cost savings will accrue to Union.*
> *Conversely, if the actual costs in any year to manage the Parkway Delivery shortfall in that year exceed annual demand costs and actual fuel costs in that year for capacity equal to the shortfall amount, then Union will be entirely responsible for those excess costs.* ***Parties further agree that ratepayers will be entitled to recover from Union that portion of the costs incurred by Union to manage the Parkway Delivery shortfall to the extent that the cost of the measures used by Union to manage the shortfall are already covered in base rates, Y factors and/or existing deferral or variance accounts.***

For the last 4 calendar years, including calendar 2017 to this point, please provide:

a) The monthly revenues generated from Dawn-Parkway optimization.

b) The amount of Dawn-Parkway sold or utilized for optimization in the month.

c) The maximum amount sold or utilized for optimization on any given day in each month.

d) The resulting average $/GJ/day of for each month.

e) The number of days in each respective month where Union was required to turn down requests or IT service due to insufficient capacity.

f) The total for each calendar year

g) For those days where IT was unavailable, please provide the Union Gas communication to the party (not to be named for confidentiality purposes) indicating insufficient IT available to meet their request.

Response:

a) - f) As Union had excess Dawn Parkway System capacity during the last four calendar years (2014-2017) Union did not optimize the Dawn Parkway System.

g) IT was available each day for the last four calendar years (2014-2017). Therefore, Union did not communicate to any party that IT was unavailable during the last four calendar years (2014-2017).

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

For each of the last 2 calendar years (2017 year to date), please provide the total PDCI collected in rates and the amount of PDCI paid out to the parties who obligated volumes at Parkway.

Response:

The effective date of the PDCI credit payment to customers for obligated deliveries at Parkway was November 1, 2016.

In 2016, Union included $2.8 million of PDCI costs in the Parkway Obligation Rate Variance deferral account (EB-2017-0091) related to the period November 1, 2016 to December 31, 2016 and paid out $2.8 million of PDCI credit to customers with obligated deliveries at Parkway during that same time period.

Effective January 1, 2017, Union included $17.6 million in rates related to the 2017 PDCI costs (EB-2016-0296) for the period January 1, 2017 to December 31, 2017. Union has paid out $13.7 million of PDCI credit to customers with obligated deliveries at Parkway for the period January 1, 2017 to October 31, 2017. The amount of PDCI costs included in rates for the same time period is $14.6 million. The difference between the amount paid out and the amount included in rates (approximately $0.9 million) is a result of contract changes to the Parkway obligation deliveries that have occurred since the PDO forecast was approved as part of 2017 Rates.

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Reference: Exhibit A, Tab 3, pp.9, 12, 30, Appendix B

Preamble: We would like to understand better Union's Gas Supply plan for this coming winter.

Please provide the presentation and report made to receive executive approval of the GSP as stated on page 12.

Response:

Please see Attachment 1.

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2018-2027 Gas Supply Plan Executive Approval Presentation

June 19th, 2017

2018-2022 Gas Supply Plan Agenda

- Gas Supply Plan Overview
  - Key Inputs and Assumptions of the Gas Supply Plan
  - Inputs
    - Demand Forecast
    - Transportation Portfolio
    - In-franchise Storage Requirement
  - Outputs
    - Dawn Supply
    - Design Day Plan
    - Portfolio Costs
- Key Outcomes
- Appendix

Gas Supply Plan Overview

Gas Supply Plan Overview

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- Objective of Gas Supply Plan (GSP):
  - Create an efficient supply portfolio that will meet the needs of sales service and bundled direct purchase customers, while adhering to our planning principles
- GSP provides strategic direction in guiding long-term supply acquisition process
- GSP identifies the transportation and supply volume requirements to meet annual, seasonal and design day demand
- GSP is created with inputs from multiple groups
- Based on the inputs a specialty software (SENDOUT) is utilized to find the lowest cost portfolio

Gas Supply Plan Overview

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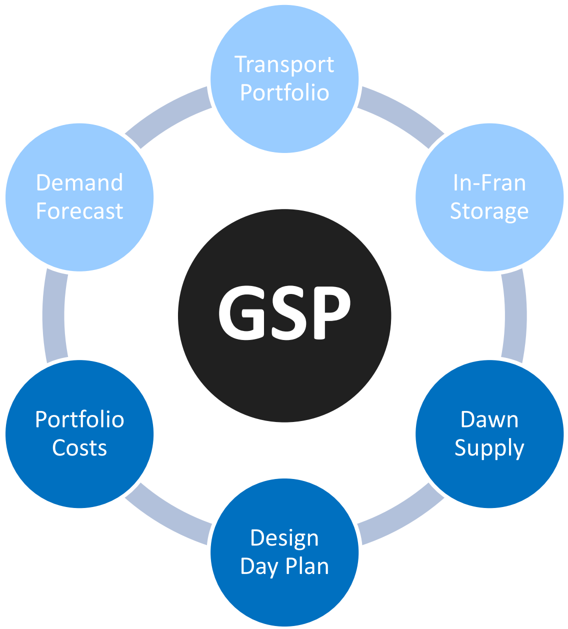

Key Inputs and Assumptions

Key Inputs of the Gas Supply Plan

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- Union's in-franchise monthly demand forecast (excludes T-Service and Unbundled);
- All upstream transportation contracts held by Union plus existing obligated Ontario deliveries for the bundled DP market;
- Only firm transportation assets are included within the plan (except diversions during summer)
- Sales Service and bundled DP storage requirements;
- Sales service and bundled DP storage requirements are cycled completely each year with storage full on November 1 and empty by March 31 assuming normal weather
- Sufficient inventory at February 28 is available to meet the design day requirements for sales service and bundled DP customers;

Key Inputs of the Gas Supply Plan

- Decrease from 9.5 PJ of system integrity space to 9.4 in 18/19 (3.4 PJ left empty and 6.0 still full).
- Supply pricing – A monthly commodity price forecast using the same pricing methodology as the Quarterly Rate Adjustment Mechanism ("QRAM") process; based on April 2017 QRAM consistent with the corporate forecast
- Transportation pricing - transportation tolls in effect at April 1, 2017;
- Exchange rate - $1.35 CAD = $1.00 USD
- North design day demand forecast

Key Assumptions of the Gas Supply Plan

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- Assume transportation contracts with renewal rights are renewed unless they are tied to turn back associated with the new TCPL builds
- Assume STS current contracted quantities for the term of the plan
- No migration between sales service and bundled DP customers for the term of the plan

Key Assumptions of the Gas Supply Plan

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- Delivery vs Redelivery
  - Assume that any capacity that replaces current long-haul from Empress is transport.
  - Assume that any capacity that replaces current STS is storage [includes Enhanced Market Balancing Service (EMB) replacing some STS]
- Assume that North DP DCQ's will be:
  - 100% Empress for MDA, WDA and SSMDA (the Union 'Northwest Zone')
  - 15% Empress and 85% Dawn for NDA, NCDA and EDA (the Union 'Northeast Zone') from Nov 1, 2016 – Oct 31, 2018 and then goes to 100% Dawn

Input: Demand Forecast

General Service and Contract Demand Comparison

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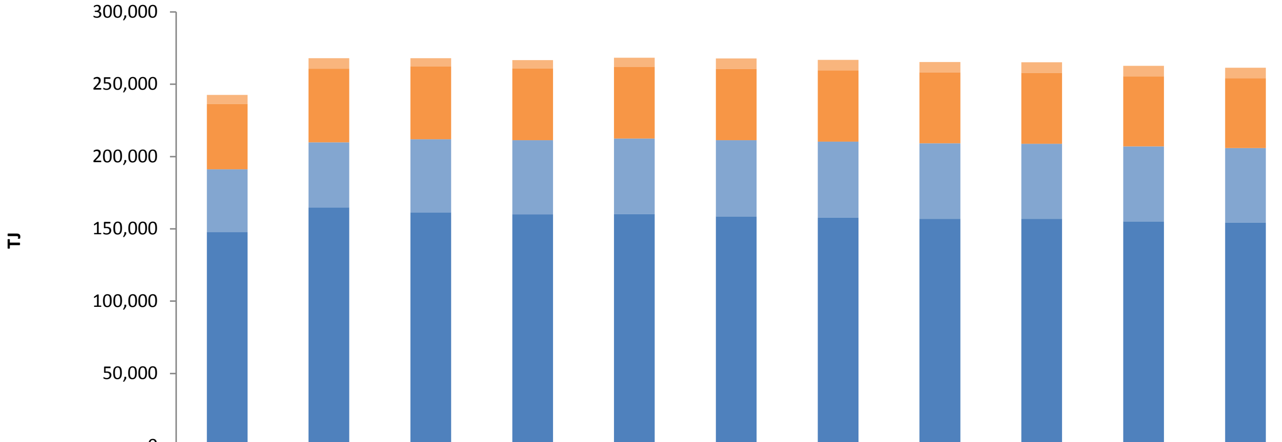
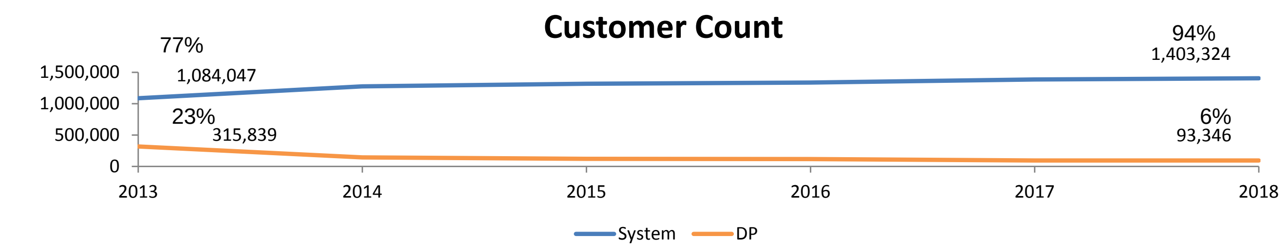
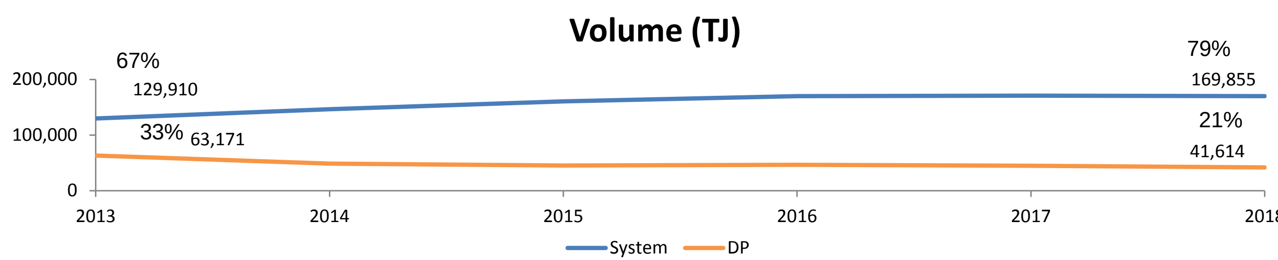


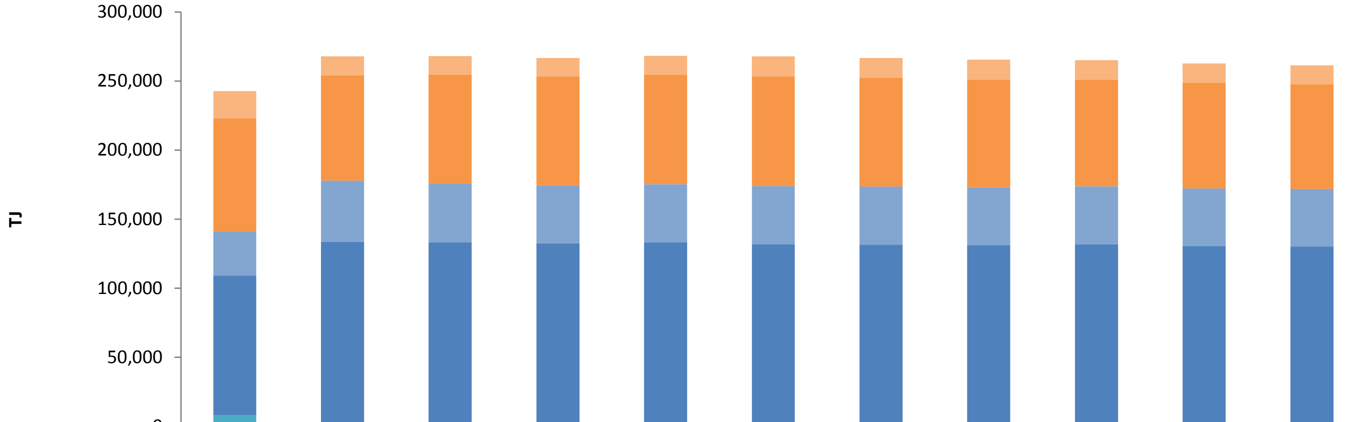
	2013 B.A	2017 (17-21 Plan)	2018	2019	2020	2021	2022	2023	2024	2025	2026
North Contract	6,246	7,224	5,816	5,783	6,251	7,297	7,379	7,354	7,327	7,301	7,276
North GS	45,286	50,944	50,168	49,559	49,654	49,223	49,040	48,855	48,934	48,489	48,309
South Contract	43,333	45,021	50,729	51,249	52,274	52,773	52,624	52,350	52,076	51,802	51,528
South GS	147,796	164,768	161,301	160,062	160,155	158,573	157,736	156,886	156,831	155,170	154,308
Annual Demand	242,661	267,957	268,014	266,652	268,335	267,866	266,779	265,445	265,169	262,762	261,421

Return to System (General Service)





System and Bundled-DP Demand Comparison



	2013 B.A	2017 (17-21 Plan)	2018	2019	2020	2021	2022	2023	2024	2025	2026
North DP	19,528	13,829	13,348	13,312	13,648	14,557	14,505	14,346	14,192	14,031	13,875
South DP	82,058	76,249	78,778	78,875	79,390	79,373	78,723	77,950	77,202	76,424	75,668
North System	32,005	44,339	42,636	42,030	42,258	41,963	41,913	41,864	42,068	41,759	41,710
South System	101,194	132,607	133,251	132,436	133,039	131,973	131,637	131,286	131,706	130,548	130,167
Unbundled GS	7,876	933	0	0	0	0	0	0	0	0	0
Annual Demand	242,661	267,957	268,014	266,652	268,335	267,866	266,779	265,445	265,169	262,762	261,421

Input:
Transportation Portfolio

Allocated Transportation Capacity

- Transportation Contracts are broken down by 3 types
  - Allocated North and South
  - South
  - North
- Assumption that all capacity upstream into Dawn will flow at 100% load factor in both Union North and Union South

VECTOR

- Allocated 52,753 GJ/d of Vector capacity to the North Nov 1, 2016 – Oct 31, 2017 consistent with Nexus allocation which starts Nov 1, 2017

NEXUS

- Effective November 1, 2017, Union is contracting for 158,259 GJ/d (150,000 Dth/d) of NEXUS supply originating at Kensington
  - Union North portion 52,753 GJ/d (50,000 Dth/d)
  - Union South portion 105,506 GJ/d (100,000 Dth/d)

Transportation contracting assumptions are for planning purposes and can change from year to year and may be executed differently

South Transportation Portfolio

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- PEPL/Trunkline
  - 35,000 DTH/d (ROFR) assumed renewal for entire forecast period
  - 22,000 DTH/d increase in Nov 1, 2019, this capacity replaces 21,101 GJ/d supply at Ojibway Nov 1, 2016 – Oct 31, 2019
- Vector
  - Includes contracts signed in April
  - Allocated 52,753 GJ/d to the North Nov 1, 2016 – Oct 31, 2017

Vector	Contracted Capacities (GJ/d)	Incremental/(Expiring)
Nov-16	159,345	
Dec-16	222,648	63,303
Apr-17	131,882	(90,766)
Nov-17	84,404	(47,478)

- DTE
  - 63,303 GJ/d terminates when NEXUS operational

South Transportation Portfolio

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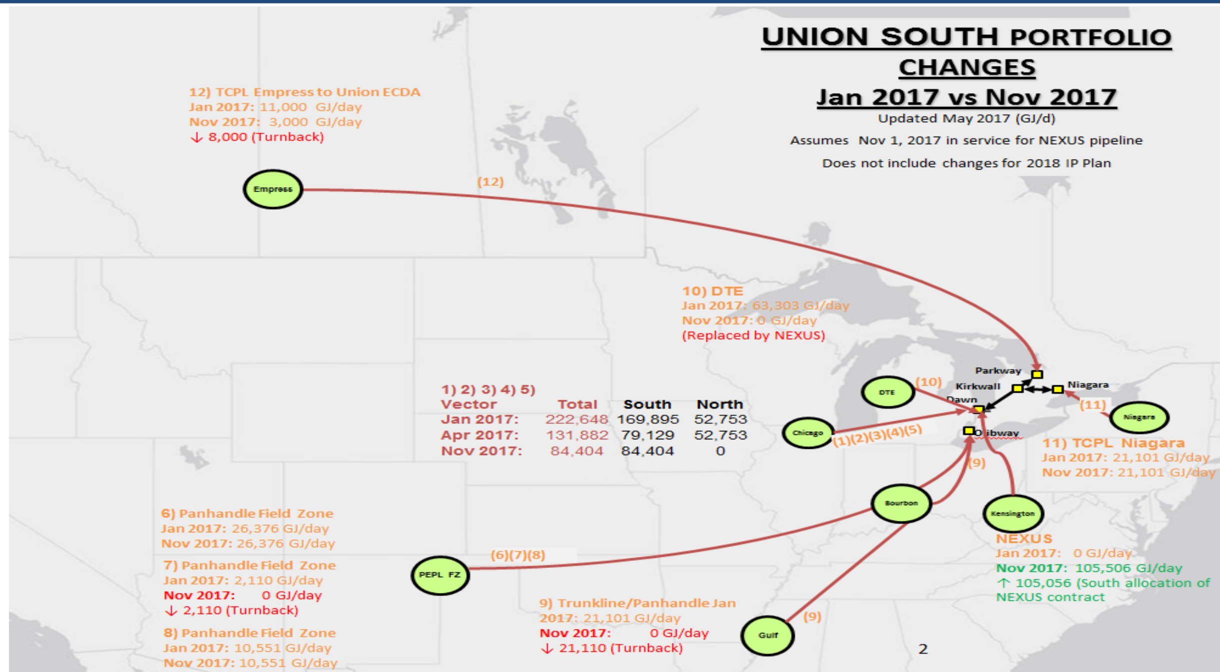

North Transportation Portfolio

- Over 2017 and 2018 Union continues to reduce the amount of longhaul into the Eastern Zone through TCPL NCOS capacity
  - In the Eastern zone (EDA, NDA, NCDA) Bundled customers will have 100% of their supply at Dawn by 2018
  - The Western zone (MDA, WDA, SSMDA) will continue to purchase gas at Empress
    - Still relying on STS services to gain access to Dawn storage
  - Union will hold a nominal amount of pipe to the EDA/NDA/NCDA to maintain access to STS (Between 1 to 2 TJ/day to each area net of T-Service assignments)
- NEXUS volumes will help to fill a significant portion of the North supply requirements for Sales Service customers.

North Transportation Portfolio

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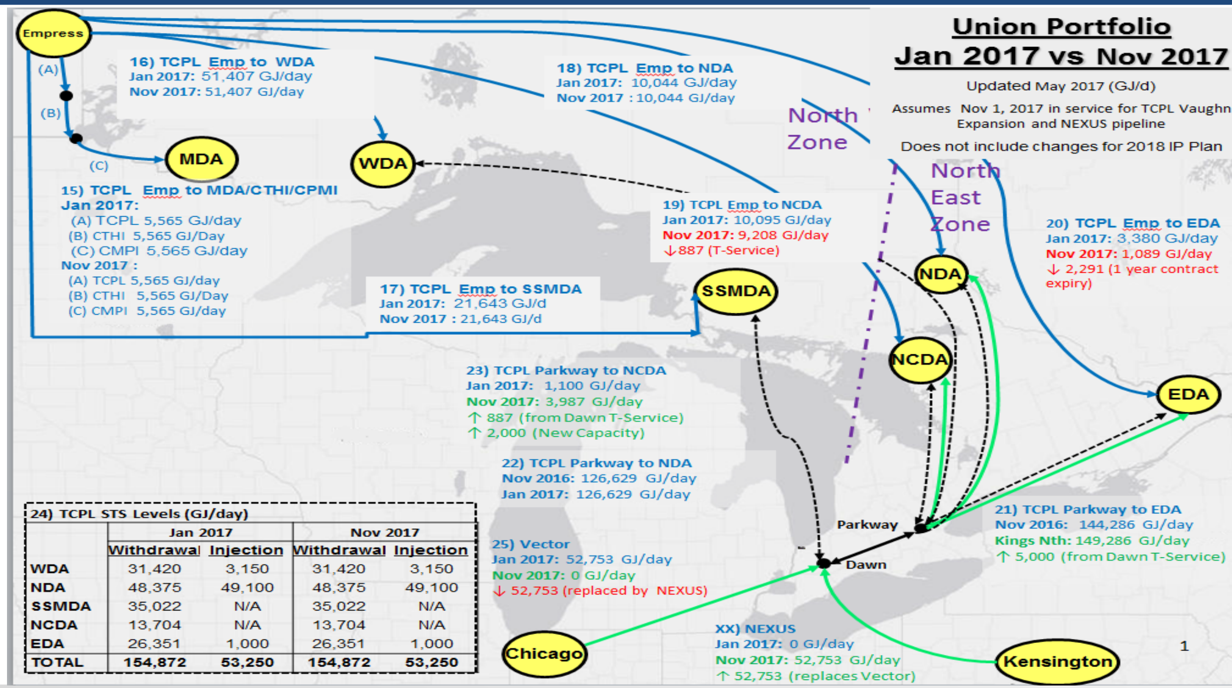

24) TCPL STS Levels (GJ/day)

	Jan 2017		Nov 2017	
	Withdrawal	Injection	Withdrawal	Injection
WDA	31,420	3,150	31,420	3,150
NDA	48,375	49,100	48,375	49,100
SSMDA	35,022	N/A	35,022	N/A
NCDA	13,704	N/A	13,704	N/A
EDA	26,351	1,000	26,351	1,000
TOTAL	154,872	53,250	154,872	53,250

Input:
In-franchise Storage

In-franchise Storage Requirements

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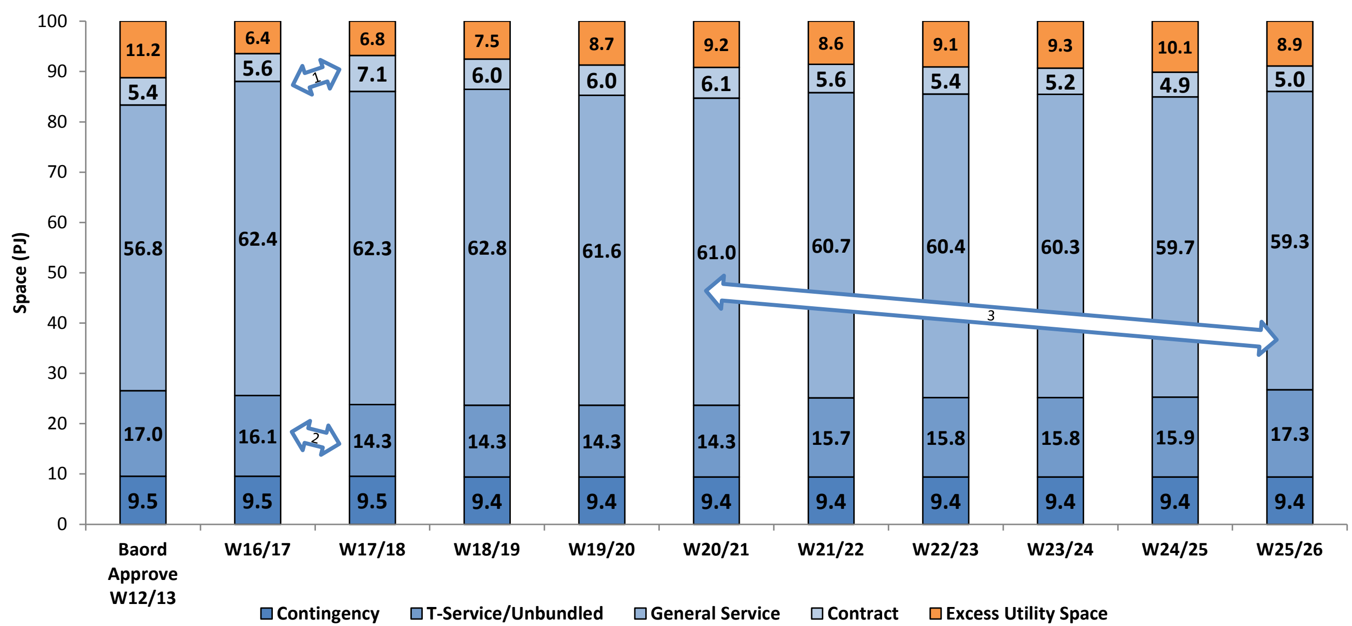

Output: Dawn Supply

Dawn Supply

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- Dawn supply is supply required to meet South and Northeast System Sales annual demand requirements.

2018-2026 Gas Supply Plan Dawn Purchases

Particulars (GJ/d)	2017 Summer	2017/18 Winter	2018 Summer	2018/19 Winter	2019 Summer	2019/20 Winter	2020 Summer	2020/21 Winter	2021 Summer	2021/22 Winter
South Dawn Supply	57,129	101,731	101,514	93,089	96,233	94,136	91,026	91,675	89,924	91,722
North East Dawn Supply	-	20,632	20,594	30,697	29,605	30,260	31,289	27,559	28,412	27,426

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Design Day Plan

Union South Design Day

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- For Union South, the Gas Supply Plan focuses on upstream supply and transportation to meet Union's annual demand requirements.
  - upstream pipe flows at 100% utilization each day of the year (annual volume requirement is divided by 365 days).
  - when usage is less than the upstream supply, the excess supply is injected into storage.
  - when demands are greater than the upstream supply, gas is withdrawn from storage.
  - the design day weather condition is based on the coldest observed degree day experienced - for Union South is 43.1.

Winter 2017/2018 Design Day
Union South Design Day Demand and Resources (TJ/day)

Demand	
Union South*	3,027
Supply	
Storage at Dawn	1,688
Non-obligated (e.g. Power Plants)	278
TCPL Empress to Union CDA	3
Panhandle	37
Ojibway	21
TCPL Niagara	21
Ontario Parkway	214
Vector	84
Nexus	106
Ontario Dawn	575
Total Supply	3,027

* includes Sales Service, Bundled Direct Purchase, T-service, Unbundled

Union North Design Day

Union North design day demand - total firm requirement of the in-franchise sales service and bundled DP customers.

- The design day weather condition is based on the coldest observed degree day experienced in each of the six delivery areas.
  - MDA 54.7 Fort Frances
  - WDA 51.6 Thunder Bay
  - SSMDA 48.2 Sault Ste Marie
  - NDA 51.9 Sudbury
  - NCDA 49.3 Muskoka / Gravenhurst
  - EDA 47.1 Kingston
- Union North gas supply portfolio ensures sufficient, but not excess, firm transportation services.
- The full suite of assets is only required when a design day occurs so there are days when the pipe is not fully utilized.

Union North Design Day

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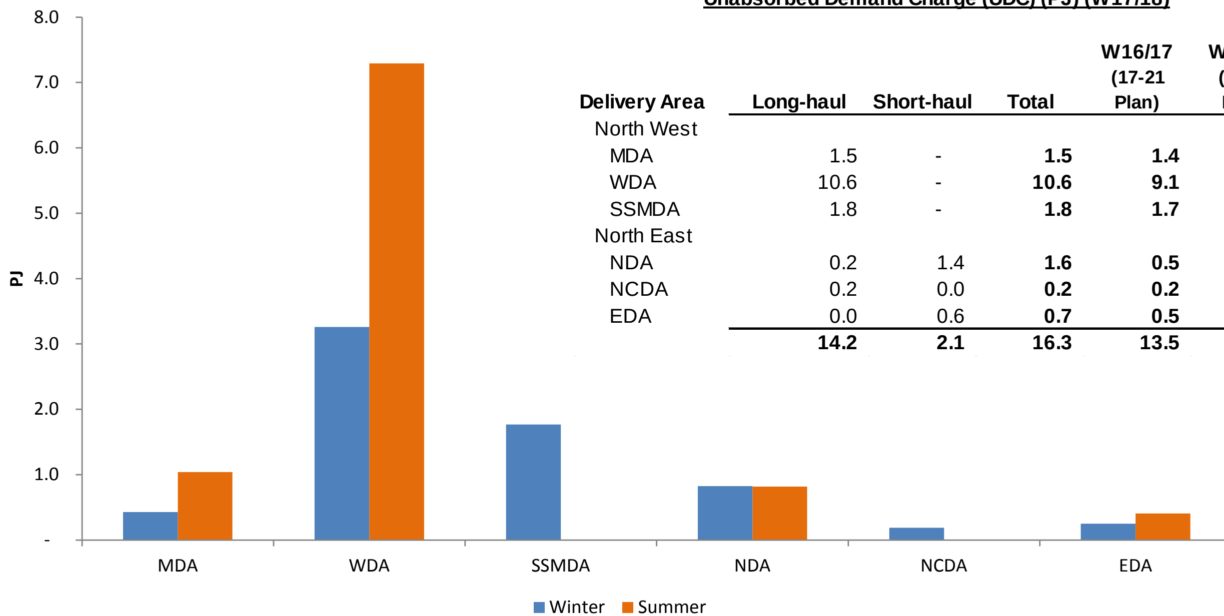
Winter Northern Firm Demand on Peak Day in GJ/Day (2018-27 Plan)

	MDA	WDA	SSMDA	NDA	NCDA	EDA	Total
Firm Demand							
Bundled Firm Contract Demand	-	4,241	993	2,102	-	10,587	17,923
Non-Industrial Design Day Demand	5,897	79,692	38,798	146,174	37,337	152,745	460,643
T-Service Storage Redelivery Demand	-	-	386	12,606	-	-	12,992
North Dawn T-Service Demand	-	-	-	16,629	1,987	14,286	32,902
Peak Day Demand for the Region	**5,897**	**83,933**	**40,178**	**177,510**	**39,324**	**177,618**	**524,460**
Firm Supply							
TCPL FT from Empress	5,565	51,407	20,943	7,687	8,796	1,000	95,398
TCPL SH from Parkway	-	-	-	43,000	2,000	57,831	102,831
North Dawn T-Service	-	-	-	16,629	1,987	14,286	32,902
STS Firm Withdrawals from Parkway	-	31,420	-	43,194	13,704	26,351	114,669
STS Firm Pooling Withdrawls from Parkway	-	-	-	-	12,837	-	12,837
STS Firm Withdrawals from Dawn	-	-	19,235	-	-	-	19,235
STS Firm Pooling Rights from Dawn	-	-	-	-	-	-	-
Firm Backhauls from Dawn	-	-	-	-	-	-	-
LNG	-	-	-	-	-	-	-
Parkway to NDA/EDA/NCDA FT (Redelivery)	-	-	-	67,000	-	52,169	119,169
Parkway to EDA EMB	-	-	-	-	-	25,000	25,000
Peak Day Supply to the Region	**5,565**	**82,827**	**40,178**	**177,510**	**39,324**	**176,637**	**522,040**
Excess(Shortfall) by delivery area	(332)	(1,106)	-	-	-	(981)	(2,420)

Check:
(if neg, undersupply on peak day)

Check:	
Total STS Withdrawl Rights including Pooling Available	154,872
Total STS Withdrawls including Pooling Rights Used	146,740
Unutilized STS Withdrawal Rights	**8,132**

Unabsorbed Demand Charge (UDC) - (PJs)



Unabsorbed Demand Charge (UDC) (PJ) (W17/18)

Delivery Area	Long-haul	Short-haul	Total	W16/17 (17-21 Plan)	W17/18 (17-21 Plan)
North West					
MDA	1.5	-	**1.5**	**1.4**	**1.4**
WDA	10.6	-	**10.6**	**9.1**	**9.3**
SSMDA	1.8	-	**1.8**	**1.7**	**1.7**
North East					
NDA	0.2	1.4	**1.6**	**0.5**	**1.3**
NCDA	0.2	0.0	**0.2**	**0.2**	**0.3**
EDA	0.0	0.6	**0.7**	**0.5**	**0.3**
	14.2	**2.1**	**16.3**	**13.5**	**14.3**

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Output: Portfolio Costs

Portfolio Costs – South

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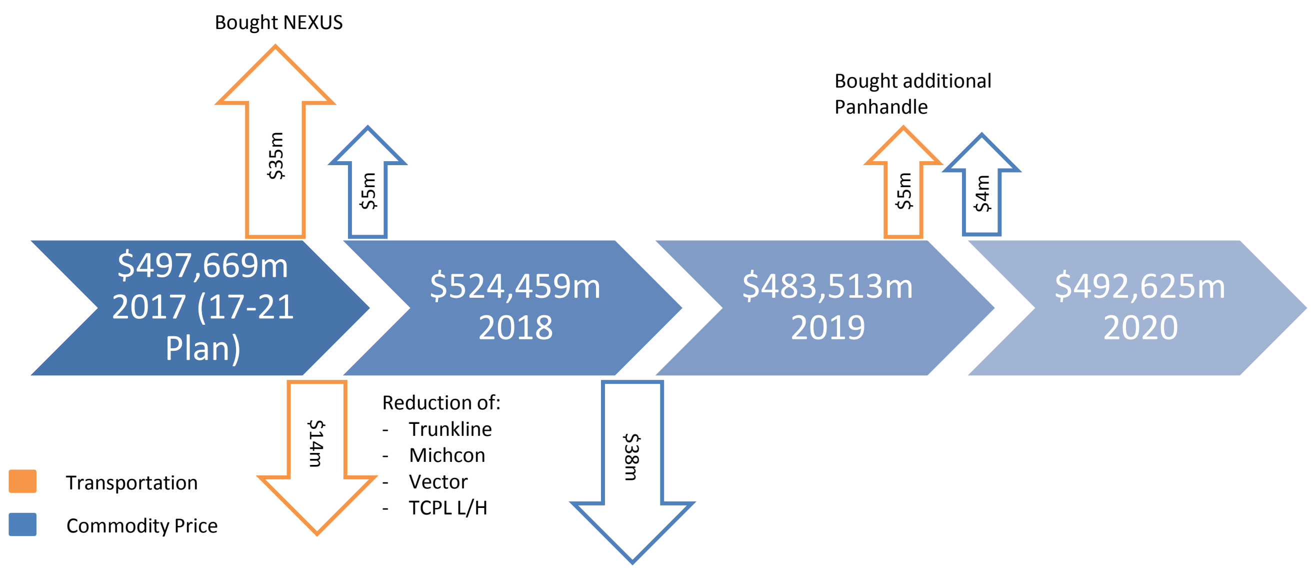

Portfolio Costs – North

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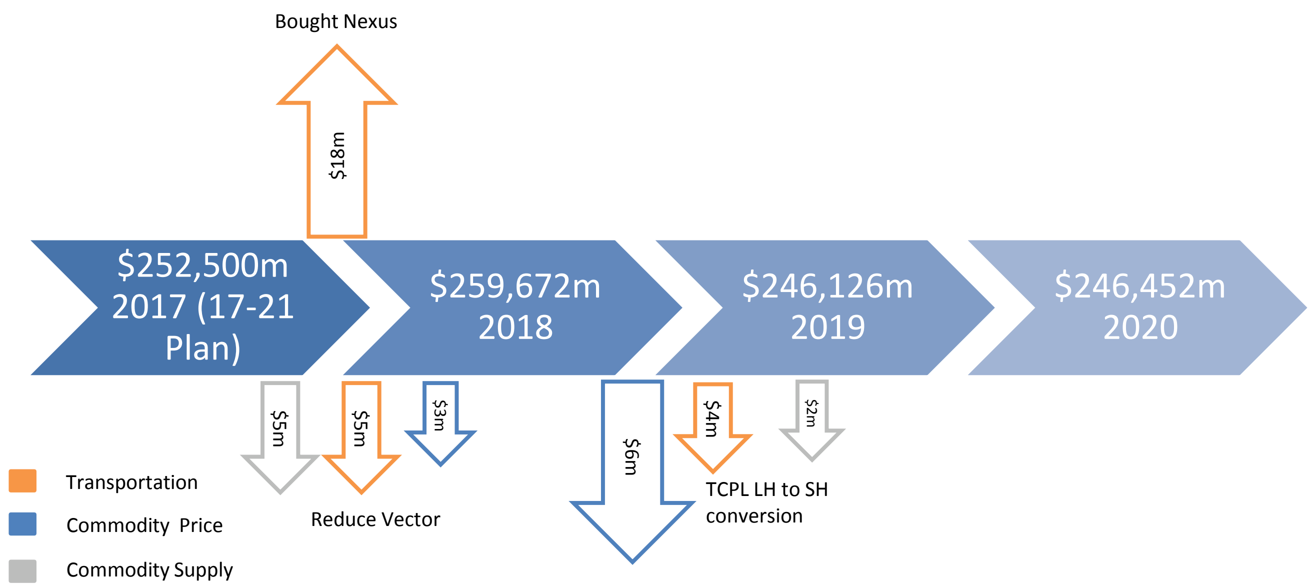

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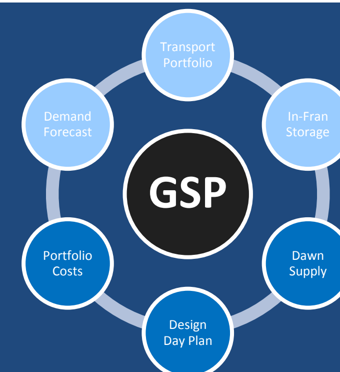
Key Outcomes



Key Outcomes of 2017/18 Gas Supply Plan

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- Total volume of supply required for system sales service is 176 PJ for 2018 (versus 133 PJ in 2013 B.A.) – an increase of 43 PJ over 2013 B.A.
- In addition to supply sourced on current contracted transportation capacity, approximately 102,000 GJ/d of supply is required to be purchased at Dawn in the South and 21,000 GJ/d in the Northeast.
- In-franchise storage allocation at November 2017 is 93.2 PJ. This represents an increase of approximately 4.4 PJ from the 2013 Board Approved plan
- No planned UDC for Union South and 16.3 PJ for Union North
- Increase in Union North design day requirement of 2,420 GJ/d for Union North
- Total portfolio costs for 2018 are $784.1 million – including $524.4 million for Union South and $259.7 million for Union North

Q&A

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Appendix

Portfolio Costs - South

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Union South Gas Supply Portfolio Costs

Particulars ($000s)	2017 (17-21 Plan)	2018 (17-21 Plan)	2018 (18-27 Plan)	2019 (18-27 Plan)	2020 (18-27 Plan)
Transportation Costs					
TCPL F/T	7,210	2,219	2,294	2,288	2,288
TCPL Short Haul	1,809	1,810	1,814	1,809	1,809
NEXUS South	6,738	40,268	41,989	41,829	41,833
DTE MichCon	2,914	-	-	-	-
Market Based Transportation	-	-	-	-	-
Trunkline	2,763	-	-	-	-
Vector	11,217	8,022	8,293	8,202	8,254
Panhandle	10,597	10,201	10,384	11,311	16,721
Dawn to Parkway & CDA Costs (1)	7,978	7,978	7,995	7,995	7,995
Ojibway	267	267	262	218	-
Total Transportation Costs	51,493	70,766	73,030	73,651	78,898
Commodity Costs					
TCPL F/T	9,235	2,955	2,995	2,821	2,826
TCPL Short Haul	21,309	21,675	22,463	19,841	19,947
NEXUS South	17,677	99,392	113,610	106,964	107,115
DTE MichCon	64,497	-	-	-	-
Market Based Transportation	-	-	-	-	-
Trunkline	21,034	-	-	-	-
Vector	127,366	103,895	109,728	100,901	105,214
Panhandle	42,777	41,112	43,723	44,329	66,628
Uncommitted (Dawn Spot)	118,839	128,244	131,919	113,259	110,332
Local Production	1,176	1,198	1,336	1,475	1,487
Ojibway	22,267	22,910	25,443	20,060	-
Total Commodity Costs	446,176	421,381	451,217	409,650	413,549
TOTAL INVOICE COSTS	497,669	492,146	524,248	483,301	492,448

Portfolio Costs - North

Union North Gas Supply Portfolio Costs

Particulars ($000s)	**2017** (17-21 Plan)	**2018** (17-21 Plan)	**2018** (18-27 Plan)	**2019** (18-27 Plan)	**2020** (18-27 Plan)
Transportation Costs					
TCPL F/T Transportation	46,440	44,875	45,820	38,081	38,068
North Dawn Transportation	18,055	18,511	18,912	20,762	20,795
MichCon-SSMDA	-	-	-	-	-
Vector North	5,073	-	-	-	-
NEXUS North	3,369	20,134	20,994	20,914	20,916
Total Transportation Costs	72,937	83,520	85,726	79,758	79,779
Commodity Costs					
TCPL Firm Supply	39,843	40,212	41,471	31,273	30,788
North Dawn Planned Supply	34,943	36,907	29,533	35,561	36,269
MichCon-SSMDA	-	-	-	-	-
Vector North	52,605	-	-	-	-
NEXUS Supply	8,838	49,696	56,805	53,482	53,557
Total Commodity Costs	136,229	126,815	127,808	120,315	120,614
Storage Costs					
3rd Party Storage	478	475	518	484	490
TCPL STS Services	16,355	16,351	16,560	16,531	16,530
North Dawn Redelivery	26,501	26,518	26,712	26,682	26,682
STS Withdrawal Charges	-	489	740	689	826
Total Storage Costs	43,334	43,833	44,530	44,386	44,528
TOTAL INVOICE COSTS	252,500	254,167	258,064	244,459	244,921

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Notwithstanding Union's commitment to file in the spring of 2018, please provide "The analysis for new transportation paths included in Union's 2017/18 GSP" as described on page 9.

a) Please ensure to include the analysis done to decide to contract on Vector and DTE/MichCon to replace deferred Nexus capacity (as described on page 30) as opposed to buying that gas landed at Dawn.

b) Please provide the landed cost at Dawn for each of the pipeline paths as a result of the negotiated price.

c) When did Union contract for the replacement capacity?

d) With Dawn LTFP being proposed to start Nov. 1, 2017, did Union run an RFP with suppliers to determine the cost of landed supply at Dawn as an alternative?

i) If so, please provide the median price received by month from the RFP?
ii) If not, why not?

Response:

a) Union conducted a thorough analysis including, but not limited to, evaluating Union's operational considerations, landed cost comparisons and current diversity of our transport and supply portfolio. As noted, Union will file a detailed analysis as part of our 2017 Deferral Disposition filing however the landed cost analyses have been provided at Exhibit B.TCPL.1, Attachment 1.

b) Please see the response at Exhibit B.TCPL.1, part d).

c) Please see the response at Exhibit B.TCPL.1 part e).

d) No, Union did not conduct an RFP for Dawn supply to get indicative pricing for the decision to backstop the NEXUS delay. Union relies on forward market pricing for indicative pricing in landed costs analysis. Union provided the landed cost analysis prepared for the DTE and Vector upstream contracting decisions as part of Exhibit B.TCPL.1.

UNION GAS LIMITED

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Reference: Exhibit A, Tab 3, pp.9, 12, 30, Appendix B

Preamble: We would like to understand better Union's Gas Supply plan for this coming winter.

Given the description of contingency planning on page 30, why does Appendix B show Nexus flow starting Nov. 17?

a) Please update the table highlighting the changes that reflect the plan at this time.

Response:

The Gas Supply Plan assumed a November 1, 2017 in-service date for the NEXUS Pipeline Project; as a result Appendix B reflects the same assumption.

a) Please see Attachment 1. Appendix B has been updated to include the NEXUS contingency plan and the addition of assets required to meet Union North design day demands.

Appendix B
Union Gas Limited - System Sales Supply Demand Balance - November 2017 to October 2018
Updated to include Nexus Contingency Plan and Additional Design Day Assets

Particulars (TJ)	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	**Total**
South													
Demands													
System Sales	13,103	20,407	23,558	20,849	17,149	11,059	5,807	3,263	3,430	3,393	3,925	7,308	**133,252**
South Co. Use, UFG, Comp. Fuel	1,066	1,527	1,491	1,976	1,287	565	342	342	513	485	553	495	**10,641**
Less: Customer Supplied Fuel	(788)	(1,006)	(1,182)	(1,020)	(775)	(466)	(294)	(291)	(322)	(306)	(273)	(322)	**(7,045)**
Total Demands	13,382	20,928	23,867	21,805	17,661	11,159	5,855	3,314	3,621	3,572	4,205	7,480	**136,847**
Supplies													
TCPL Empress-Union CDA	90	93	93	84	93	90	93	90	93	93	90	93	**1,095**
Vector	2,849	2,944	2,944	2,659	2,944	950	981	950	981	981	2,532	2,617	**24,329**
TCPL Niagara-Kirkwall	633	654	654	591	654	633	654	633	654	654	633	654	**7,702**
Panhandle	1,108	1,145	1,145	1,034	1,145	1,108	1,145	1,108	1,145	1,145	1,108	1,145	**13,478**
Local Production	38	40	40	36	40	38	40	38	40	40	38	40	**465**
DTE	2,849	2,944	2,944	2,659	2,944	2,849	2,944	2,849	2,944	2,944	-	-	**28,866**
South Ojibway	633	654	654	591	654	633	654	633	654	654	633	654	**7,702**
Dawn	3,237	3,238	3,238	2,821	3,238	5,296	3,611	4,391	4,537	4,537	4,391	4,537	**47,070**
Nexus	-	-	-	-	-	-	-	-	-	-	3,165	3,271	**6,436**
Total Supplies	11,436	11,710	11,710	10,474	11,710	11,596	10,121	10,691	11,048	11,048	12,590	13,010	**137,144**
Change in Inventory - wd/(inj)	1,946	9,218	12,157	11,331	5,950	(437)	(4,266)	(7,377)	(7,426)	(7,476)	(8,386)	(5,530)	**(297)**
Total Supplies + Inventory Change	13,382	20,928	23,867	21,805	17,661	11,159	5,855	3,314	3,621	3,572	4,205	7,480	**136,847**
North													
Demands													
System Sales													
Union NCDA	357	515	634	535	452	278	142	85	79	77	92	206	**3,451**
Union EDA	1,309	1,890	2,314	1,949	1,661	1,048	550	328	307	312	348	778	**12,794**
Union MDA	50	74	93	75	63	38	19	11	10	9	12	28	**482**
Union NDA	1,492	2,149	2,622	2,183	1,837	1,129	592	356	332	337	399	853	**14,282**
Union SSMDA	423	729	659	578	498	291	147	94	120	184	95	277	**4,096**
Union WDA	785	1,122	1,414	1,165	990	616	326	209	200	190	202	457	**7,675**
North Comp Fuel	10	3	10	5	3	15	32	31	32	32	31	32	**235**
	4,427	6,481	7,744	6,490	5,505	3,416	1,809	1,114	1,080	1,139	1,179	2,631	**43,015**
Supplies													
TCPL Empress-Union NCDA	181	187	187	169	-	181	187	181	187	187	181	187	**2,013**
TCPL Empress-Union EDA	59	61	61	55	-	59	61	59	61	61	59	61	**662**
TCPL Empress-Union MDA	52	79	99	81	68	38	17	7	5	4	8	26	**483**
TCPL Empress-Union NDA	189	195	195	177	-	189	196	189	196	196	189	196	**2,106**
TCPL Empress-Union SSMDA	440	570	-	-	-	552	570	552	570	570	552	571	**4,948**
TCPL Empress-Union WDA	919	1,221	850	399	85	708	375	220	198	193	224	521	**5,913**
TCPL Parkway-Union EDA	652	703	637	513	-	64	6	562	540	660	543	590	**5,469**
TCPL Parkway-Union NDA	76	50	129	176	-	23	6	180	225	103	205	182	**1,354**
TCPL Parkway-Union NCDA	54	56	44	40	-	46	29	46	50	52	42	44	**503**
North Vector Sale	1,583	1,635	1,635	1,477	1,635	1,583	1,635	1,583	1,635	1,635	-	-	**16,037**
Nexus	-	-	-	-	-	-	-	-	-	-	1,583	1,635	**3,218**
Total Supplies	4,205	4,757	3,837	3,087	1,788	3,443	3,081	3,579	3,667	3,662	3,586	4,013	42,706
Change in Inventory - wd/(inj)	222	1,724	3,907	3,403	3,717	(27)	(1,272)	(2,466)	(2,587)	(2,523)	(2,407)	(1,382)	**309**
Total Supplies + Inventory Change	4,427	6,481	7,744	6,490	5,505	3,416	1,809	1,114	1,080	1,139	1,179	2,631	**43,015**
Total Demands													
South	13,382	20,928	23,867	21,805	17,661	11,159	5,855	3,314	3,621	3,572	4,205	7,480	**136,847**
North	4,427	6,481	7,744	6,490	5,505	3,416	1,809	1,114	1,080	1,139	1,179	2,631	**43,015**
	17,808	**27,409**	**31,611**	**28,295**	**23,165**	**14,575**	**7,664**	**4,428**	**4,701**	**4,711**	**5,383**	**10,111**	**179,862**
Total Supplies													
South	11,436	11,710	11,710	10,474	11,710	11,596	10,121	10,691	11,048	11,048	12,590	13,010	**137,144**
North	4,205	4,757	3,837	3,087	1,788	3,443	3,081	3,579	3,667	3,662	3,586	4,013	**42,706**
	15,641	16,468	15,548	13,561	13,498	15,039	13,202	14,270	14,715	14,710	16,176	17,023	**179,850**
Change in Inventory - wd/(inj)													
South	1,946	9,218	12,157	11,331	5,950	(437)	(4,266)	(7,377)	(7,426)	(7,476)	(8,386)	(5,530)	**(297)**
North	222	1,724	3,907	3,403	3,717	(27)	(1,272)	(2,466)	(2,587)	(2,523)	(2,407)	(1,382)	**309**
	2,167	10,941	16,064	14,735	9,668	(465)	(5,539)	(9,842)	(10,013)	(9,999)	(10,793)	(6,912)	**13**
Total Supplies + Inventory Change	**17,808**	**27,409**	**31,611**	**28,295**	**23,165**	**14,575**	**7,664**	**4,428**	**4,701**	**4,711**	**5,383**	**10,111**	**179,862**

UNION GAS LIMITED

Answer to Interrogatory from
London Property Management Association ("LPMA")

Reference: Exhibit A, Tab 1

Please provide a version of the "Detail Change in Revenue" section of Table 1 that provides the same breakdown of the $61,259 increase as shown in lines 4 through 9, but does so at the rate class level.

Response:

Please see Attachment 1.

UNION GAS LIMITED
Detail Change in 2018 Revenue by Rate Class

Line No.	Particulars ($000's)	Price Cap Index (0.51%) (1)	DSM Budget Change (1)	Capital Pass-throughs (1)	Parkway Delivery Obligation (1)	Gas Supply Plan (1)	Total Change In Revene
		(a)	(b)	(c)	(d)	(e)	(f) = (sum a:e)
	In-franchise						
1	Rate 01	880	1,024	(150)	(0)	179	1,933
2	Rate 10	115	142	192	(0)	37	487
3	Rate 20	70	39	(42)	0	(6)	62
4	Rate 25	23	-	(45)	-	(17)	(39)
5	Rate 100	72	13	(108)	(0)	(0)	(23)
6	Rate M1	1,962	2,825	2,881	(276)	-	7,392
7	Rate M2	237	451	1,824	(106)	-	2,406
8	Rate M4	54	46	1,551	(72)	-	1,578
9	Rate M5A	53	49	(94)	(82)	-	(75)
10	Rate M7	16	24	519	(27)	-	532
11	Rate M9	3	-	38	(17)	-	25
12	Rate M10	0	-	1	0	-	1
13	Rate T1	46	41	1,110	(95)	-	1,101
14	Rate T2	207	49	8,180	(415)	-	8,019
15	Rate T3	23	-	276	(57)	-	242
16	Total In-franchise	3,762	4,702	16,132	(1,147)	193	23,641
	Ex-franchise						
17	Rate M12	831	-	33,557	28	-	34,416
18	Rate M13	2	-	2	-	-	5
19	Rate M16	4	-	451	(1)	-	453
20	Rate C1	40	-	2,748	(10)	-	2,778
21	Total Ex-franchise	877	-	36,758	17	-	37,652
22	Gas Supply Admin Charge	-	-	(35)	-	-	(35)
23	Total (line 16 + line 21 + line 22)	4,639	4,702	52,855	(1,130)	193	61,259

Notes:
(1) Rate Order, Working Papers, Schedule 5.

UNION GAS LIMITED

Answer to Interrogatory from
London Property Management Association ("LPMA")

Reference: Exhibit A, Tab 1, p.7
EB-2016-0245, Exhibit B.Staff.2

In the response to B.Staff.2 in EB-2016-0245, Union indicated that the 2015 audit process was expected to be completed by March, 2017.

a) What is the status of each of the 2015 and 2016 audit process?

b) When does Union now think that each of the 2015 and 2016 audits will be completed?

Response:

a) Please see Exhibit B.Staff.1 for the status of Union's 2015 DSM audit process. The 2016 DSM audit process has been initiated by OEB Staff who have issued RFPs for 2016 audit work and have retained the same auditor as in 2015.

b) Union expects to file 2015 DSM Deferrals evidence in the coming weeks. Union is unable to speculate on the completion date of the 2016 DSM audit.

UNION GAS LIMITED

Answer to Interrogatory from
London Property Management Association ("LPMA")

Reference: Exhibit A, Tab 1, p.9

a) Please confirm that the Panhandle Reinforcement Project has been placed in service. If this cannot be confirmed, please explain fully, including an estimate of when it will be placed in service.

b) Please confirm that the Panhandle Reinforcement Project is complete and that no addition work and/or expenditures are required beyond the $264.5 million noted.

c) Please provide a detailed breakdown of the $264.5 million estimate and update it to reflect actual expenditures to date, along with any further expenditures expected to be made.

Response:

a) The Panhandle Reinforcement Project was placed into service commercially on November 1, 2017 and operationally on November 11, 2017.

b) and c) Please see the response at Exhibit B.BOMA.4.

UNION GAS LIMITED

Answer to Interrogatory from
London Property Management Association ("LPMA")

Reference: Exhibit A, Tab 1, pp.10-11

a) What is the projected 2017 year-end balance in the Panhandle Reinforcement Project Costs Deferral Account?

b) Please explain what changes Union is requesting the deferral account.

Response:

a) Please see the response at Exhibit B.Energy Probe.10, part b).

b) Please see the response at Exhibit B.BOMA.6.

UNION GAS LIMITED

Answer to Interrogatory from
London Property Management Association ("LPMA")

Reference: Exhibit A, Tab 1, p.11
Working Papers, Schedule 12

Union has set out its calculation of the 2018 Normalized Average Consumption (NAC) target percentage change in Schedule 12 of the Working Papers. The NAC target change is -2.6% for Rate 01, -3.3% for Rate 10, -3.1% for Mate M1 and -4.2% for Rate M2.

Please provide (and quantify) the main drivers of the changes in NAC. Please provide specific details for each rate class.

Response:

The factors driving the change in target NAC for 2018 include:

- Estimated pre-audit DSM savings;
- Leap year adjustment;
- Change in weather normal; and
- Change in customer behaviour.

Per Exhibit A, Tab 1, page 11, for 2018, the NAC adjustment is the variance between 2015 Actual NAC and 2016 Actual NAC (2016 is a leap year). Please see Working Papers, Schedule 12, for the calculation of 2018 NAC target percentage change by general service rate class.

Please see Table 1 below for the estimated break down of Rate Order, Working Papers, Schedule 12 by drivers and general service rate class.

The year-over-year consumption change (NAC variance) is driven by continued efficiency-related forces (improved building codes in new home and building construction, furnace replacements, etc.), DSM programs and energy savings initiatives conducted by the customers, and customer behavior.

Table 1: Total 2018 Target Variance Breakdown

Particulars (m3)	**NAC variance**[1] **(a)**[2]	Estimated Pre-audited Average DSM Volume Saving per customer (b)	Adjustment for Leap Year (c)	Variance due to weather Normal Update (d)	NAC Variance due to Customer Behavior (e) = (a - b - c - d)
Total Rate 01	**-73**	-5	-15	2	-56
Total Rate 10	**-5,435**	-559	-776	94	-4,194
Total Rate M1	**-84**	-9	-15	-0	-61
Total Rate M2	**-6,978**	-1,323	-697	-71	-4,886

[1] Rate Order, Working Papers, Schedule 12 column (c)
[2] Footing differences due to rounding

UNION GAS LIMITED

Answer to Interrogatory from
London Property Management Association ("LPMA")

Reference: Exhibit A, Tab 1, p.15

a) What is the 2017 year-end balance in the Energy East Pipeline Consultation Costs?

b) Why is Union requesting closure of this account as part of this proceeding rather than in the next deferral and variance account disposition application?

Response:

a) The 2017 year-end balance in the Energy East Pipeline Consultation Costs deferral account will be zero.

b) Consistent with past practice and Union's response to Exhibit B.VECC.7 in the 2016 Deferrals application (EB-2017-0091), Union is requesting the closure of its Energy East Pipeline Consultation Costs Deferral Account. Historically Union has requested closure of deferral accounts as part of its annual rate setting process, please see similar requests for closure of deferral accounts in Union's 2016 Rates Application (EB-2016-0245 Exhibit A, Tab 1, pp.13-15), Union's 2015 Rates Application (EB-2015-0116 Exhibit A, Tab 1, pp. 23-24), and Union's 2014 Rates Application (EB-2014-0271 Exhibit A, Tab 1, pp. 18-19).

UNION GAS LIMITED

Answer to Interrogatory from
London Property Management Association ("LPMA")

Reference: Exhibit A, Tab 1, p.9 & Appendix G

The evidence indicates that Union is estimating incremental distribution and transmission margin of $3.104 million. Please explain how Union has estimated this level of incremental margin.

Response:

Please see the response at Exhibit B.BOMA.4, part c).

UNION GAS LIMITED

Answer to Interrogatory from
TransCanada Pipelines Limited ("TCPL")

Reference: Exhibit A, Tab 3, p.24
Exhibit A, Tab 3, p.30
Exhibit A, Tab 3, Appendix C
Exhibit A, Tab 3, p.9

Preamble: In Reference 1, Union states that it has contracted for additional firm capacity from the Panhandle Field Zone to Ojibway. In Reference 2, Union discusses contracting arrangements due to the delay in the NEXUS Gas Transmission (NEXUS) in-service date:

"Union has secured alternate upstream contracts to replace the NEXUS transportation capacity. Union has increased its DTE/MichCon capacity by 30,000 Dth/day to hold 90,000 Dth/day of capacity until NEXUS is in-service. […] Union also secured 60,000 Dth/day of capacity on sector Pipeline for November 1, 2017 through March 31, 2018."

In Reference 3, footnote (3), Union states: "A portion of the Vector portfolio is anticipated to be allocated to serve the North portfolio until NEXUS is in service." In Reference 4 Union states its Gas Supply Planning principles; the first listed being: "Ensure secure and reliable gas supply to Union's service territory at a reasonable cost;" TransCanada requests further information on these upstream arrangements.

a) Please state, in GJ/d, the portion of the Vector portfolio expected to be allocated to serve the North portfolio as noted in Reference 3.

b) Please confirm that Union undertook landed cost analyses prior to executing each of the new upstream transportation contracts, or contract changes, as noted in References 1 and 2.

c) If the response to b) is that Union did not undertake landed cost analyses prior to the upstream contracting changes, please explain how Union ensured the contracting changes were made in accordance with Union's Gas Supply Planning principle noted in Reference 4.

d) Please provide the landed cost analyses referred to in b). If not available, please provide the most recent landed cost analyses undertaken by Union that includes an evaluation of paths into Dawn.

e) Please provide the date when Union executed the new contracts and contract changes discussed in References 1 and 2.

Response:

a) The portion of the Vector capacity that is allocated to serve Union North is 52, 753 GJ/d.

b) - d) Union confirms that landed cost analyses were conducted prior to executing each of the new upstream transportation contracts, or contract changes, as noted in References 1 and 2. Please see Attachment 1.

Ensuring secure and reliable gas supply at a reasonable cost is one of five guiding principles that Union utilizes when evaluating upstream transportation alternatives and, as such, landed cost analysis is only one of the means used to evaluate alternatives. Union will file the full justification for all new transportation paths as part of Union's 2017 Disposition of Non-Commodity Deferral Account Balances and Earnings Sharing Amount evidence in the spring of 2018.

e) The dates the contracts in References 1 and 2 were executed are as follows:

i. Panhandle to Ojibway – August 17, 2017
ii. DTE/Michcon – August 25, 2017
iii. Vector – August 25, 2017

Panhandle Landed Cost Analysis

2017-2027 Transportation Contracting Analysis

	Route	Point of Supply	Basis Differential $US/mmBtu	Supply Cost $US/mmBtu	Unitized Demand Charge $US/mmBtu	Commodity Charge $US/mmBtu	Fuel Charge $US/mmBtu	100% LF Transportation Inclusive of Fuel $US/mmBtu	Landed Cost $US/mmBtu	**Landed Cost $Cdn/G**	Point of Delivery
	(A)	(B)	(C)	(D) = Nymex + C	(E)	(F)	(G)	(I) = E + F + G	(J) = D + I	(K)	(L)
(2)	**TCPL Niagara**	Niagara	-0.293	4.2342	0.1801	0.0000	0.0110	0.1911	$4.43	**$5.62**	Dawn
(2)	**NEXUS**	Dominion Sth Point	-0.914	3.6134	0.7991	0.0000	0.0956	0.8947	$4.51	**$5.72**	Dawn
(1)	**Dawn**	Dawn	0.036	4.5633	0.0000	0.0000	0.0000	0.0000	$4.56	**$5.79**	Dawn
	PEPL SH (Max FT Rate)	PEPL (REX - Putnam)	-0.201	4.3262	0.1791	0.0091	0.0592	0.2475	$4.57	**$5.81**	Dawn
(2)	**Vector (2016-2022)**	Chicago	-0.172	4.3551	0.1802	0.0017	0.0456	0.2275	$4.58	**$5.82**	Dawn
	PEPL SH (REX - Audrain Max FT Rate)	PEPL (REX - Audrain)	-0.223	4.3041	0.2385	0.0167	0.1023	0.3575	$4.66	**$5.92**	Dawn
(1)	**Vector (Max Rate)**	Chicago	-0.172	4.3551	0.2704	0.0017	0.0456	0.3177	$4.67	**$5.93**	Dawn
(1)	**GLGT to TCPL (Max Rate)**	Northern Michigan	-0.178	4.3492	0.3096	0.0091	0.0678	0.3865	$4.74	**$6.01**	Dawn
(2) *	**Panhandle Longhaul (Max FT Rate)**	Panhandle Field Zone	-0.325	4.2023	0.4540	0.0438	0.1664	0.6641	$4.87	**$6.18**	Dawn
(2)	**Trunkline / Panhandle (2012-2017)**	Trunkline ELA Zone	0.028	4.5550	0.2195	0.0262	0.1794	0.4251	$4.98	**$6.32**	Dawn
	Trunkline / Panhandle (Max Rate)	Trunkline Field Zone 1A	-0.056	4.4716	0.3591	0.0237	0.1608	0.5436	$5.02	**$6.37**	Dawn
(1)	**TCPL SWDA**	Empress	-1.074	3.4532	1.4147	0.0000	0.1506	1.5653	$5.02	**$6.37**	Dawn
	Trunkline / Panhandle (Max Rate)	Trunkline ELA Zone	0.028	4.5550	0.4828	0.0262	0.1794	0.6884	$5.24	**$6.66**	Dawn

(1) For Reference Only
(2) Existing Union Gas Contract
* indicates path referenced in evidence for this analysis

Assumptions used in Developing Transportation Contracting Analysis:

Annual Gas Supply & Fuel Ratio Forecasts	**Point of Supply Col (B) above**	**Nov 2017 - Oct 2018**	**Nov 2018 - Oct 2019**	**Nov 2019 - Oct 2020**	**Nov 2020 - Oct 2021**	**Nov 2021 - Oct 2022**	**Nov 2022 - Oct 2023**	**Nov 2023 - Oct 2024**	**Nov 2024 - Oct 2025**	**Nov 2025 - Oct 2026**	**Nov 2026 - Oct 2027**	**Average Annual Gas Supply Cost $US/mmBtu Col (D) above**
Henry Hub (NYMEX)	Henry Hub	$4.20	$4.09	$4.03	$4.03	$4.27	$4.42	$4.64	$4.90	$5.26	$5.43	$4.53
TCPL Niagara	Niagara	$4.10	$3.89	$3.88	$3.81	$3.94	$4.05	$3.96	$4.52	$5.09	$5.10	$4.23
NEXUS	Dominion Sth Point	$3.46	$3.28	$3.23	$3.18	$3.29	$3.38	$3.31	$3.85	$4.53	$4.62	$3.61
Dawn	Dawn	$4.34	$4.16	$4.15	$4.09	$4.32	$4.41	$4.46	$4.89	$5.35	$5.47	$4.56
PEPL SH (Max FT Rate)	PEPL (REX - Putnam)	$4.10	$3.92	$3.91	$3.87	$4.07	$4.18	$4.24	$4.67	$5.08	$5.23	$4.33
Vector (2016-2022)	Chicago	$4.11	$3.93	$3.93	$3.89	$4.11	$4.21	$4.27	$4.70	$5.13	$5.27	$4.36
PEPL SH (REX - Audrain Max FT Rate)	PEPL (REX - Audrain)	$4.05	$3.88	$3.88	$3.84	$4.05	$4.16	$4.22	$4.66	$5.07	$5.22	$4.30
Vector (Max Rate)	Chicago	$4.11	$3.93	$3.93	$3.89	$4.11	$4.21	$4.27	$4.70	$5.13	$5.27	$4.36
GLGT to TCPL (Max Rate)	Northern Michigan	$4.13	$3.93	$3.93	$3.88	$4.11	$4.21	$4.26	$4.68	$5.12	$5.25	$4.35
Panhandle Longhaul (Max FT Rate)	Panhandle Field Zone	$3.93	$3.75	$3.79	$3.76	$3.96	$4.06	$4.12	$4.55	$4.97	$5.12	$4.20
Trunkline / Panhandle (2012-2017)	Trunkline ELA Zone	$4.25	$4.14	$4.06	$4.05	$4.29	$4.44	$4.66	$4.92	$5.28	$5.45	$4.55
Trunkline / Panhandle (Max Rate)	Trunkline Field Zone 1A	$4.15	$4.04	$3.98	$3.98	$4.22	$4.36	$4.58	$4.84	$5.19	$5.37	$4.47
TCPL SWDA	Empress	$3.28	$3.03	$3.08	$3.04	$3.24	$3.34	$3.37	$3.75	$4.14	$4.26	$3.45
Trunkline / Panhandle (Max Rate)	Trunkline ELA Zone	$4.25	$4.14	$4.06	$4.05	$4.29	$4.44	$4.66	$4.92	$5.28	$5.45	$4.55

Sources for Assumptions:

Gas Supply Prices (Col D):	ICF Q4 2016 Base Case		
Fuel Ratios (Col G):	Average ratio over the previous 12 months or Pipeline Forecast		
Transportation Tolls (Cols E & F):	Tolls in effect on Alternative Routes at the time of Union's Analysis		
Foreign Exchange (Col K)	$1 US =	$1.339 CDN	From Bank of Canada Closing Rate November 1, 2016
Energy Conversions (Col K)	1 dth = 1 mmBtu =	1.055056	
Union's Analysis Completed:	Nov-16		

Paths included in analysis are those with comparable services available for contracting, as well as relevant benchmarks and currently contracted paths.

DTE Landed Cost Analysis

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Nov 2017 - Oct 2018 Transportation Contracting Analysis

	Route	Point of Supply	Basis Differential $US/mmBtu	Supply Cost $US/mmBtu	Unitized Demand Charge $US/mmBtu	Commodity Charge $US/mmBtu	Fuel Charge $US/mmBtu	100% LF Transportation Inclusive of Fuel $US/mmBtu	Landed Cost $US/mmBtu	Landed Cost $Cdn/G	Point of Delivery
	(A)	(B)	(C)	(D) = Nymex + C	(E)	(F)	(G)	(I) = E + F + G	(J) = D + I	(K)	(L)
(2)	**TCPL Niagara**	Niagara	-0.628	2.3492	0.1939	0.0000	0.0046	0.1985	$2.55	**$3.02**	Kirkwall
	Dawn	Dawn	-0.068	2.9092	0.0000	0.0000	0.0000	0.0000	$2.91	**$3.45**	Dawn
(2)	**DTE (Michcon) (2010-2020)**	SE Michigan	-0.168	2.8096	0.0788	0.0034	0.0347	0.1168	$2.93	**$3.47**	Dawn
*	**DTE (Michcon) 2017 Rate (Current C1 Toll)**	SE Michigan	-0.168	2.8096	0.0988	0.0034	0.0347	0.1369	$2.95	**$3.49**	Dawn
	Panhandle(Max FT Rate)	PEPL (REX - Putnam)	-0.234	2.7440	0.1805	0.0125	0.0411	0.2341	$2.98	**$3.53**	Dawn
*	**DTE (Michcon) 2017 Rate (FCST C1 Toll)**	SE Michigan	-0.168	2.8096	0.1604	0.0034	0.0347	0.1984	$3.01	**$3.57**	Dawn
(2)	**Vector (2016-2022)**	Chicago	-0.167	2.8104	0.1800	0.0017	0.0312	0.2129	$3.02	**$3.59**	Dawn
(2)	**Panhandle Longhaul (2012-2017)**	Panhandle Field Zone	-0.442	2.5354	0.3499	0.0474	0.1105	0.5079	$3.04	**$3.61**	Dawn
	PEPL SH (Max FT Rate)	PEPL (REX - Audrain)	-0.234	2.7440	0.2399	0.0200	0.0715	0.3314	$3.08	**$3.65**	Dawn
	Vector (Max Rate)	Chicago	-0.167	2.8104	0.2714	0.0017	0.0312	0.3043	$3.11	**$3.69**	Dawn
(2)	**Trunkline / Panhandle (2012-2017)**	Trunkline Field Zone 1A	-0.110	2.8673	0.2211	0.0274	0.0964	0.3450	$3.21	**$3.81**	Dawn
(2)	**Trunkline / Panhandle (2012-2017)**	Trunkline ELA Zone	-0.110	2.8673	0.2211	0.0299	0.1102	0.3612	$3.23	**$3.83**	Dawn
	GLGT to TCPL (Max Rate)	Northern Michigan	-0.130	2.8479	0.3462	0.0056	0.0301	0.3819	$3.23	**$3.83**	Dawn
(2)	**NEXUS / St. Clair (Union Neg Rate)**	Dominion Sth Point	-0.555	2.4229	0.8005	0.0034	0.0641	0.8680	$3.29	**$3.90**	Dawn
	Trunkline / Panhandle (Max Rate)	Trunkline Field Zone 1A	-0.110	2.8673	0.3607	0.0271	0.0964	0.4843	$3.35	**$3.97**	Dawn
	ANR-GLGT-TCPL (Max Rate)	ANR - Fayetteville	-0.092	2.8850	0.7045	0.0220	0.0640	0.7905	$3.68	**$4.36**	Dawn
	TCPL SWDA (DAWN)	Empress	-0.877	2.1002	1.5710	0.0000	0.0747	1.6457	$3.75	**$4.44**	Dawn

(1) For Reference Only
(2) Existing Union Gas Contract
* indicates path referenced in evidence for this analysi

Assumptions used in Developing Transportation Contracting Analysis:

	Annual Gas Supply & Fuel Ratio Forecasts	Point of Supply Col (B) above	Nov 2017 - Oct 2018	Average Annual Gas Supply Cost $US/mmBtu Col (D) above	Fuel Ratio Forecasts Col (G) above
	Henry Hub (NYMEX)	Henry Hub	$2.98	$2.98	
	TCPL Niagara	Niagara	$2.35	$2.35	0.20%
	Dawn	Dawn	$2.91	$2.91	0.00%
	DTE (Michcon) (2010-2020)	SE Michigan	$2.81	$2.81	1.23%
	DTE (Michcon) 2017 Rate (Current C1 Toll)	SE Michigan	$2.81	$2.81	1.23%
	Panhandle(Max FT Rate)	PEPL (REX - Putnam)	$2.74	$2.74	1.50%
	DTE (Michcon) 2017 Rate (FCST C1 Toll)	SE Michigan	$2.81	$2.81	1.23%
	Vector (2016-2022)	Chicago	$2.81	$2.81	1.11%
	Panhandle Longhaul (2012-2017)	Panhandle Field Zone	$2.54	$2.54	4.36%
	PEPL SH (Max FT Rate)	PEPL (REX - Audrain)	$2.74	$2.74	2.61%
	Vector (Max Rate)	Chicago	$2.81	$2.81	1.11%
	Trunkline / Panhandle (2012-2017)	Trunkline Field Zone 1A	$2.87	$2.87	3.36%
	Trunkline / Panhandle (2012-2017)	Trunkline ELA Zone	$2.87	$2.87	3.84%
	GLGT to TCPL (Max Rate)	Northern Michigan	$2.85	$2.85	1.06%
	NEXUS / St. Clair (Union Neg Rate)	Dominion Sth Point	$2.42	$2.42	2.65%
	Trunkline / Panhandle (Max Rate)	Trunkline Field Zone 1A	$2.87	$2.87	3.36%
	ANR-GLGT-TCPL (Max Rate)	ANR - Fayetteville	$2.89	$2.89	2.22%
	TCPL SWDA (DAWN)	Empress	$2.10	$2.10	3.56%

Sources for Assumptions:

Gas Supply Prices (Col D):	ICE July 24, 2017		
Fuel Ratios (Col G):	Average ratio over the previous 12 months or Pipeline Forecast		
Transportation Tolls (Cols E & F):	Tolls in effect on Alternative Routes at the time of Union's Analysis		
Foreign Exchange (Col K)	$1 US =	$1.251 CDN	From Bank of Canada Daily Rate July 24, 2017
Energy Conversions (Col K)	1 dth = 1 mmBtu =	1.055056	
Union's Analysis Completed:	Jul-17		

Paths included in analysis are those with comparable services available for contracting, as well as relevant benchmarks and currently contracted paths.

Vector Landed Cost Analysis

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Nov 2017 - Mar 2018 Transportation Contracting Analysis

	Route	Point of Supply	Basis Differential $US/mmBtu	Supply Cost $US/mmBtu	Unitized Demand Charge $US/mmBtu	Commodity Charge $US/mmBtu	Fuel Charge $US/mmBtu	100% LF Transportation Inclusive of Fuel $US/mmBtu	Landed Cost $US/mmBtu	Landed Cost $Cdn/G	Point of Delivery	Comments
	(A)	(B)	(C)	(D) = Nymex + C	(E)	(F)	(G)	(I) = E + F + G	(J) = D + I	(K)	(L)	
(2)	**TCPL Niagara**	Niagara	-0.425	2.7408	0.1910	0.0000	0.0045	0.1955	$2.94	**$3.54**	Kirkwall	
(2)	**DTE (Michcon) (2010-2020)**	SE Michigan	-0.074	3.0918	0.0784	0.0033	0.0381	0.1198	$3.21	**$3.87**	Dawn	
	Panhandle(Max FT Rate)	PEPL (REX - Putnam)	-0.140	3.0263	0.1801	0.0125	0.0463	0.2388	$3.27	**$3.93**	Dawn	
	Dawn	Dawn	0.135	3.3008	0.0000	0.0000	0.0000	0.0000	$3.30	**$3.97**	Dawn	
(2)	**Panhandle Longhaul (2012-2017)**	Panhandle Field Zone	-0.352	2.8138	0.3495	0.0474	0.1259	0.5227	$3.34	**$4.02**	Dawn	
	PEPL SH (REX - Audrain Max FT Rate)	PEPL (REX - Audrain)	-0.140	3.0263	0.2395	0.0200	0.0808	0.3403	$3.37	**$4.05**	Dawn	
(2)	**Vector (2016-2022)**	Chicago	-0.002	3.1633	0.1800	0.0017	0.0337	0.2154	$3.38	**$4.07**	Dawn	Contract Term Apr 16 - Oct 22, Rate effective Dec 1, 2017
*	**Vector Open Season**	Chicago	-0.002	3.1633	0.1850	0.0017	0.0337	0.2204	$3.38	**$4.07**	Dawn	
(2)	**Trunkline / Panhandle (2012-2017)**	Trunkline Field Zone 1A	-0.105	3.0608	0.2207	0.0274	0.1024	0.3505	$3.41	**$4.11**	Dawn	Negotiated Rate
(2)	**Trunkline ELA / Panhandle (2012-2017)**	Trunkline ELA Zone	-0.105	3.0608	0.2207	0.0298	0.1180	0.3685	$3.43	**$4.13**	Dawn	Negotiated Rate
	GLGT to TCPL (Max Rate)	Northern Michigan	-0.044	3.1218	0.3438	0.0056	0.0290	0.3784	$3.50	**$4.21**	Dawn	
	Vector (Max Rate)	Chicago	-0.002	3.1633	0.3023	0.0017	0.0337	0.3377	$3.50	**$4.22**	Dawn	
	Trunkline Z1A to Dawn (Max Rate)	Trunkline Field Zone 1A	-0.105	3.0608	0.3603	0.0271	0.1024	0.4898	$3.55	**$4.28**	Dawn	
(2)	**NEXUS / St. Clair (Union Neg Rate)**	Dominion Sth Point	-0.429	2.7368	0.8000	0.0033	0.0724	0.8758	$3.61	**$4.35**	Dawn	
	TCPL Empress to Union SWDA (DAWN)	Empress	-0.980	2.1858	1.5471	0.0000	0.0733	1.6204	$3.81	**$4.58**	Dawn	
	ANR-GLGT-TCPL (Max Rate)	ANR - Fayetteville	-0.090	3.0763	0.7016	0.0220	0.0638	0.7874	$3.86	**$4.65**	Dawn	

(1) For Reference Only
(2) Existing Union Gas Contract
* indicates path referenced in evidence for this analysis

Assumptions used in Developing Transportation Contracting Analysis:

	Annual Gas Supply & Fuel Ratio Forecasts	Point of Supply Col (B) above	Nov 2017 - Mar 2018	Average Annual Gas Supply Cost $US/mmBtu Col (D) above	Fuel Ratio Forecasts Col (G) above
	Henry Hub (NYMEX)	Henry Hub	$3.17	$3.17	
	TCPL Niagara	Niagara	$2.74	$2.74	0.17%
	DTE (Michcon) (2010-2020)	SE Michigan	$3.09	$3.09	1.23%
	Panhandle(Max FT Rate)	PEPL (REX - Putnam)	$3.03	$3.03	1.53%
	Dawn	Dawn	$3.30	$3.30	0.00%
	Panhandle Longhaul (2012-2017)	Panhandle Field Zone	$2.81	$2.81	4.47%
	PEPL SH (REX - Audrain Max FT Rate)	PEPL (REX - Audrain)	$3.03	$3.03	2.67%
	Vector (2016-2022)	Chicago	$3.16	$3.16	1.07%
	Vector Open Season	Chicago	$3.16	$3.16	1.07%
	Trunkline / Panhandle (2012-2017)	Trunkline Field Zone 1A	$3.06	$3.06	3.34%
	Trunkline ELA / Panhandle (2012-2017)	Trunkline ELA Zone	$3.06	$3.06	3.85%
	GLGT to TCPL (Max Rate)	Northern Michigan	$3.12	$3.12	0.93%
	Vector (Max Rate)	Chicago	$3.16	$3.16	1.07%
	Trunkline Z1A to Dawn (Max Rate)	Trunkline Field Zone 1A	$3.06	$3.06	3.34%
	NEXUS / St. Clair (Union Neg Rate)	Dominion Sth Point	$2.74	$2.74	2.65%
	TCPL Empress to Union SWDA (DAWN)	Empress	$2.19	$2.19	3.35%
	ANR-GLGT-TCPL (Max Rate)	ANR - Fayetteville	$3.08	$3.08	2.07%

Sources for Assumptions:

Gas Supply Prices (Col D):	ICE August 9, 2017		
Fuel Ratios (Col G):	Average ratio over the previous 12 months or Pipeline Forecast		
Transportation Tolls (Cols E & F):	Tolls in effect on Alternative Routes at the time of Union's Analysis		
Foreign Exchange (Col K)	$1 US =	$1.271 CDN	From Bank of Canada Daily Rate August 9, 2017
Energy Conversions (Col K)	1 dth = 1 mmBtu =	1.055056	
Union's Analysis Completed:	Aug-17		

Paths included in analysis are those with comparable services available for contracting, as well as relevant benchmarks and currently contracted paths.

UNION GAS LIMITED

Answer to Interrogatory from
TransCanada Pipelines Limited ("TCPL")

Reference: Exhibit A, Tab 3, p.24
Exhibit A, Tab 3, p.13
Exhibit A, Tab 3, Appendix C

Preamble: In Reference 1, Union states that it has contracted for the following additional firm capacity from the Panhandle Field Zone to Ojibway:

- 35,000 Dth/d November 1, 2017 through October 31, 2025
- 22,000 Dth/d November 1, 2019 through October 31, 2027

In Reference 2, Union describes its Gas Supply Planning process:

"Union uses SENDOUT to ensure that the assets incorporated in the GSP meet annual, seasonal, and design day demands. SENDOUT determines the amount of capacity, supply and associated costs required to meet customer demands."

Union further states: "The GSP received executive approval in July 2017, and reflects the best available information at that time."

In Reference 3, footnote (1), Union states in reference to its Panhandle Eastern Pipe Line contract: "Effective November 1, 2019 Contract Quantity increases to 35,000 DTH/day."

TransCanada seeks to better understand Union's Gas Supply Planning process.

a) Please reconcile the date in Reference 1 with that in Reference 3. When is the 35,000 Dth/d contract effective?

b) Please provide the date when Union executed the contracts in Reference 1.

c) Please provide the date when Union began discussions with Panhandle Eastern Pipe Line regarding the contracting changes in Reference 1.

d) As per Reference 2, Union appears to utilize an annual model to determine capacity required for the upcoming gas year. Is it Union's practice to wait for the results of each years' SENDOUT model prior to entering into new firm contract arrangements? For example, would a contract effective November 1, 2017 be entered into after executive approval of the 2017/18 Gas Supply Plan in July 2017? Please explain your response.

e) For a transportation contract to Dawn expiring without renewal rights on October 31, 2018, during what approximate timeframe would Union begin examining alternatives for replacement?

f) Please describe Union's longer-term gas supply and upstream transportation planning process. Does Union conduct formal - even if not determinative - analysis of upstream transportation options greater than one year in advance?

g) Please explain why Union executed its 22,000 Dth/d Panhandle Eastern contract over two years in advance of the start date. Please discuss and provide the analysis Union undertook to inform this decision.

h) Please explain why Union entered into 8-year contract terms for the arrangements noted in Reference 1.

Response:

a) Please see Attachment 1 for a contract continuity summary, filed in the Panhandle Reinforcement Project proceeding (EB-2016-0186).

b) and c) Union began working on securing 57,000 Dth/day of capacity to Ojibway with Panhandle Eastern/Energy Transfer Partners (ETP) in the summer of 2015. Union resumed contracting discussions with ETP in late 2016. Union filed an agreement with ETP in an OEB proceeding (EB-2016-0186) on November 22, 2016 that outlined the contracting details between Union and ETP (Further Correspondence Request Response, November 22, 2016, Attachment 1, page 25 of 37). Union executed the Panhandle Eastern contracts in Reference 1 on August 17, 2017. Please see Attachment 2 for a copy of the Panhandle agreement.

d) - f) Union evaluates its transportation and gas supply requirements on continuous basis throughout the year, in addition, each year Union prepares its Gas Supply Plan which determines requirements for annual, seasonal and design day demands. That review on a continuous basis can be for long term or short term requirements. Exhibit A, Tab 3, pages 12-13 outlines in more detail Union's Gas Supply Planning Process, including the key inputs and assumptions being made.

Union utilizes an overall portfolio approach when analysing all contracting alternatives, including renewals, adhering to our Gas Supply planning principles. The amount of time required to evaluate alternatives varies and is dependent on several different factors;

- Overall long and short term gas supply needs

- Availability of pipeline capacity
- Utilization of existing facilities or requirement for new infrastructure
- Landed costs analysis
- Renewal terms and rights
- Supply and demand market fundamentals
- Specific operational requirements on Union's system

Union will evaluate transportation needs greater than one year in advance of requiring that capacity. For instance, Union completed analysis greater than one year in advance of requiring its NEXUS pipeline capacity as well as when securing its recent TransCanada Mainline capacity from Parkway to the Union NDA and Union EDA (EB-2015-0166 and EB-2017-0091). These examples are in addition to the Panhandle Eastern contracts included in Reference 1. There are circumstances when Union evaluates its annual portfolio and transportation capacity is contracted less than one year prior to the contract start date. For instance, NEXUS contingency capacity was contracted for less than a year in advance.

g) Union has an operational requirement to deliver a minimum of 60,000 GJ/day of supply at the Ojibway interconnect to serve its sales service customers on a Design Day along the Panhandle Transmission System (area between Windsor and Dawn). Union secured 20,000 Dth/day of firm delivered supply to Ojibway effective for the period of November 1, 2016 to October 31, 2019 and therefore did not require the Panhandle Eastern contract to start until November 1, 2019. Given the critical nature of this supply, Union worked to secure contracts with an Ojibway delivery point as early as possible. Union provided the landed cost analysis in Exhibit B.TCPL.1, Attachment 1.

h) A minimum of 60,000 GJ/day of supply delivered at Ojibway is required to meet long term Design Day demand on Union's system. The 8-year contract term was negotiated with Panhandle Eastern to secure long term capacity into Ojibway. This capacity can also be re-contracted through a Right of First Refusal clause.

Summary of Contracted Ojibway Deliveries

#	Evidentiary Reference	Capacity (TJ/day)	Description/Parties	Start	Expiry	Union/ Obligated Delivery	Renewable
1	Exhibit B.FRPO.3, part b)	26	PEPL FZ Contract (19605): Union capacity on PEPL	Existing	October 2017	Yes	Yes[1]
2	Exhibit B.FRPO.3, part b)	11	PEPL FZ Contract (43059): Union capacity on PEPL	Existing	October 2017	Yes	Yes
3	Exhibit B.FRPO.3, part b)	2	PEPL FZ Contract (36203): Union capacity on PEPL	Existing	October 2017	Yes	No
4	Exhibit B.FRPO.3, part b)	21	PEPL/Trunkline Contract; Union capacity on PEPL	Existing	October 2017	Yes	No
5	Exhibit B.LPMA.11, part a) Exhibit K1.4, page 3	21	Existing 3rd party delivered service	Existing (November 2016)	October 2019	Yes	No[2]
6	Exhibit K1.4, page 3 Exhibit K2.1, Attachment 1, Page 25, Bullet 3	23	PEPL FZ Contract: Union capacity on PEPL	November 2019	October 2027	Yes	Yes[3]
7	Exhibit K1.4, page 3 Exhibit K2.1, Attachment 1, Page 25, Bullet 1	26	PEPL FZ Contract: Union capacity on PEPL	November 2017	October 2025	Yes	Yes
8	Exhibit K1.4, page 3 Exhibit K2.1, Attachment 1, Page 25, Bullet 2	11	PEPL FZ Contract: Union capacity on PEPL	November 2017	October 2025	Yes	Yes
9	Exhibit K1.4, page 3 Exhibit K2.1, Attachment 1, Page 25, Bullet 4	35	Rover C1 Ojibway to Dawn Contract: Rover capacity on Union	November 2017	October 2025	No	Yes

[1] Renewed through new agreements on Lines 7 and 8
[2] The delivered service on line 5 will replace the expiring contracts on Lines 3 and 4 for the period November 2017 to October 2019
[3] Replaces delivered service on Line 5

uniongas
A Spectra Energy Company

Beth Hickey
Senior Vice President Interstate
Energy Transfer Partners, LP

November 21, 2016

Beth,
Based on our recent telephone conversations, Union Gas Limited ("Union") and Energy Transfer Partners, LP ("ETP") agree to commit to the following terms subject to each parties respective management approval and pursuant to the PEPL FERC gas tariff.

Under the proposal below, Union and ETP would commit to the following:

Proposal Detail

To ensure Union can retain full Right of First Refusal (ROFR) on its entire Panhandle Eastern Pipe Line Company, LP ("PEPL") Firm Transportation portfolio, Union commits to contract the following from PEPL:

- Renew 25,000 Dth/d of current renewable firm transportation capacity from PEPL FZ to Ojibway effective November 1, 2017 for a term of 8 years at a max tariff rate
- Renew 10,000 Dth/d of current renewable firm transportation capacity from PEPL FZ to Ojibway effective November 1, 2017 for a term of 8 years at max tariff rate.
- Contract 22,000 Dth/d of new firm renewable transportation capacity from PEPL FZ to Ojibway effective November 1, 2019 for a term of 8 years at max tariff rate.

To ensure ETP and more specifically Rover Pipeline, LLC ("Rover") can secure the necessary firm transportation capacity on Union from Ojibway to Dawn, Rover commits to the following:

- Contract 35,000 GJ/d of new firm renewable transportation capacity from Ojibway to Dawn effective November 1, 2017 for a term of 8 years at posted C1 tolls,

Sincerely,

____
Jim Redford
Vice President, Business Development Storage and Transmission
Union Gas Limited

Acknowledged and Agreed to this 22 day of Nov, 2016

____
Energy Transfer Partners, LP

UNION GAS LIMITED

Answer to Interrogatory from
TransCanada Pipeline Limited ("TCPL")

Reference: 1) Attachment 1: "Enbridge Inc. Reports Third Quarter 2017 Results" – Enbridge.com News Release (excerpt), November 2, 2017, Page 4
2) EB-2015-0166/EB-2015-0175, Decision and Order (December 17, 2015), Page 2, Footnote 5

Preamble: In Reference 1, Enbridge Inc. states that the "[t]otal capital cost for the [NEXUS] project has been updated to US$1.3 billion with an expected inservice date in the third quarter of 2018."

In Reference 2, the OEB states:

> "Union's cost estimate is based on the upper end of the NEXUS toll, which reflects potential capital cost overruns related to the greenfield portion of the pipeline. The actual cost for the transportation capacity on NEXUS could be less depending on the actual costs to build the NEXUS pipeline."

a) Based on Union's understanding:
  i. Please confirm that NEXUS is a 50-50 joint venture, with Enbridge Inc. either directly or indirectly holding a 50% stake in the project. If not confirmed, please describe the joint venture structure, or other structure by which Enbridge Inc. is invested in NEXUS, and in either event include Enbridge Inc.'s share.
  ii. Please provide Enbridge Inc.'s approximate share of the total estimated capital cost of the NEXUS project at the time of Union's application to the OEB for pre-approval of the cost consequences of the NEXUS contract. If unknown, please provide the total estimated capital cost at the time of Union's application for pre-approval of cost consequences.

b) Please confirm that the Union-NEXUS Precedent Agreement contains a capital cost tracking adjustment mechanism. If confirmed, please set out and explain the mechanism.

c) Based on the new capital cost estimate:
  i. Does Union expect that its NEXUS rate will be set at the "upper end" as noted in Reference 2? If yes, please provide the toll. If no or unknown, please provide Union's estimate of the NEXUS transportation toll considering the new estimated project cost in Reference 1.
  ii. Please provide the total incremental impact to ratepayers over the term of Union's NEXUS commitment given the toll provided in i), compared to the toll Union would have paid absent any cost overruns.

Response:

a)

i. Confirmed.

ii. The final capital cost estimate of the NEXUS project was estimated to be $2.019B ($1.009B @ Enbridge 50% share) at the time of Union’s application for pre-approval (EB 2015–0166).

b) Confirmed. The Union-NEXUS precedent agreement includes a capital cost tracking adjustment mechanism. The mechanism was put in place to limit the impact of project costs to a threshold of +/- 15%. Union’s negotiated rate of US$0.77/Dth/day consists of two portions, a greenfield portion at a rate of US$0.635/Dth/day and a US$0.135/Dth/day rate for transportation using existing facilities. As outlined in Union’s negotiated rate agreement, a maximum adjustment of +/- 15% will be applied to the greenfield portion only.

c)

i) The estimated reservation rate will be adjusted to the actual updated capital cost at least 30 days but no more than 60 days prior to the project in-service date, at which time Union will be in a position to calculate and understand the updated recourse rate. Union will not speculate as to the actual capital costs of NEXUS pipeline project. However, a calculation is provided below utilizing the estimate provided by Enbridge Inc. in Reference 1 of $2.6B.

Captial Cost Estimate	Increase to Final Capital Cost Estimate ($2.019B)	Captial Cost Tracking Adjustment Mechanism Limit	Union Negotiated NEXUS Toll: Resulting High End Calculation
$2.6B	+1.29	+/-1.15	+1.15 x US$0.635/Dth/day = US$0.73/Dth/day + US$0.135/Dth/day = US$0.87/Dth/day

ii) The cost difference between the NEXUS toll calculated above compared to the NEXUS toll based on the Final Capital Cost Estimate of US$2.019B is US$5.4M/year.

150,000 Dth/day * 365 * US$0.77 /Dth = US$42.2M
150,000 Dth/day * 365 * US$0.87 /Dth = US$47.6M

UNION GAS LIMITED

Answer to Interrogatory from
TransCanada Pipelines Limited ("TCPL")

Reference: Exhibit A, Tab 3, p.30
Attachment 1: "Enbridge Inc. Reports Third Quarter 2017 Results" – Enbridge.com News Release (excerpt), November 2, 2017, p.4

Preamble: In Reference 1, Union states that NEXUS is anticipated to be in-service late third quarter 2018.

In Reference 2, Enbridge Inc. states that the "[t]otal capital cost for the [NEXUS] project has been updated to US$1.3 billion with an expected inservice date in the third quarter of 2018."

a) Please provide the most recent version of the Union-NEXUS Precedent Agreement. Has the agreement been amended since December 17, 2015? If so, please provide a summary of the changes as well as a blackline version of the current Precedent Agreement to the version filed with the OEB in EB-2015- 0166/EB-2015-0175.

b) Does the Precedent Agreement contain a clause or clauses allowing the Customer (Union) to cancel its commitment to NEXUS without liability, including with respect to pre-service costs, should the pipeline be delayed beyond a certain date? If so:

   i. Please reference the clause(s), state the threshold date(s), and describe any provisions regarding notification to Union of such a delay.

c) Please state whether Union agrees with the following statement: Although the OEB has pre-approved the costs associated with the NEXUS pipeline, this pre-approval does not preclude Union from acting in the best interests of its ratepayers by reconsidering its commitment to the NEXUS project should it have the opportunity to do so. If Union disagrees, please explain.

d) Should at any point the Phase II NEXUS facilities not be expected to be in-service by a date provided in b), and should Union have the ability to terminate the Precedent agreement without cost liability as per b):

   i. Will Union commit to undertaking a new upstream contracting analysis, including a landed cost analysis, prior to any extension of the estimated commencement date, to determine if more suitable alternatives exist at the time? If not, please explain why not.

ii. Will Union commit to publicly filing any such analysis with the Ontario Energy Board?

e) Since December 17, 2015, has Union had any discussions with NEXUS regarding the provision in b) or regarding the possibility of an in-service date occurring after the date provided in b)? If yes, please provide a summary of the discussion and any correspondence that can be shared.

f) Please provide Union's Landed Cost Analysis as filed in response to TransCanada information request 1.1(f) in the NEB Dawn Long Term Fixed Price Service proceeding (RH-003-2017)

g) Please update the Landed Cost Analysis from f) with the expected NEXUS toll changes as provided in TransCanada IR 3 c).

Response:

a) The Restated Precedent Agreement has been amended three times since December 17, 2015. In lieu of a blacklined version Union has provided the amendments in Attachments 2 to 5.

   Union amended the following clauses to allow NEXUS an extension to receive all governmental approvals:

   On May 1, 2017, the first amendment was to extend Sections 7(b)(ii) and 7(b)(iv) from May 1, 2017 to August 1, 2017 for the pipeline to receive and accept all necessary Governmental Authorizations.

   On July 31, 2017, the second amendment added a sentence to Section 6 changing the Service Commencement Date to the later of April 1, 2018 or as notified by Pipeline. As well, the amendment extended Sections 7(b)(ii) and 7(b)(iv) from August 1, 2017 to September 1, 2017 for the pipeline to receive and accept all necessary Governmental Authorizations.

   On August 29, 2017, the third amendment was executed to amend Sections 7(b)(ii) and 7(b)(iv) by extending the date from September 1, 2017 to December 1, 2017 for the pipeline to receive and accept all necessary Governmental Authorizations.

b) Below are the Sections in the Precedent Agreement that could allow Union to cancel its commitment to NEXUS;
   - Section 3(c) required NEXUS to provide an estimated in-service date no later than November 1, 2018 or Union could have terminated the agreement without liability,

including any pre-service costs. This condition was satisfied as NEXUS provided Union with an in-service date estimate of November 1, 2017 within the timeline permitted.

- The agreement also includes a number of conditions precedent in Section 7 that must be satisfied (or waived) by the applicable party otherwise the agreement will terminate. In addition, if the project is not in-service by October 31, 2018, Union may terminate the agreement without liability. However, under Section 9(a), Union and NEXUS must have first tried to continue the agreement in good faith.
- Section 10 of the Restated Precedent Agreement allows either party to terminate the agreement due to the occurrence and continuation of a material breach by the other party. NEXUS has numerous contractual obligations (e.g. re design, permitting and construction of pipeline facilities) which, if not fulfilled, could lead to delays in project schedule beyond November 1, 2018. Upon such material breach, Union can terminate the agreement.

c) Union is acting in the best interest of its ratepayers through its continued support of the NEXUS Pipeline Project. The NEXUS project is expected to be in-service in Q3 2018 which will provide Ontario customers further access to growing and cost competitive Appalachian supply. Natural gas sourced through NEXUS provides sales service customers increased security of supply through diversification at competitive energy prices. The NEXUS pipeline will also create further supply competition and opportunities at Dawn when completed. NEXUS pipeline capacity remains a prudent natural gas supply solution for Ontario sales service customers.

d) Union will not commit to undertaking a new upstream contracting analysis, including a landed cost analysis, prior to any extension of the estimated commencement date. Union will evaluate each situation as it arises including the circumstances and expected length of the delay. At this time, Union does not anticipate a significant delay in the NEXUS in-service date. Union will continue to monitor the expected in-service date and, if required, will evaluate alternatives to ensure that the gas supply needs of sales service customers are met.

e) Union has had ongoing discussions with NEXUS pipeline. Discussions on the project in-service timing have all related to the delay in NEXUS receiving their FERC approval and the amount of time it will take NEXUS to construct the pipeline given the delay in regulatory approvals. In all discussions, a delay post November 1, 2018 has not been contemplated.

f) and g) The landed cost analysis filed in RH-003-2017 included the toll at the expected rate and also the toll inflated to include the maximum 15% capital cost tracking adjustment. Please see Attachment 6 for a copy of the landed cost analysis.

Enbridge Inc. Reports Third Quarter 2017 Results

November 2, 2017

CALGARY, ALBERTA–(Marketwired - Nov. 2, 2017) -

Q3 HIGHLIGHTS

(all financial figures are unaudited and in Canadian dollars unless otherwise noted)

- Earnings were $765 million or $0.47 per common share for the third quarter and $2,322 million or $1.57 per common share for the nine-month period, both including the impact of a number of unusual, non-recurring or non-operating factors
- Adjusted earnings were $632 million or $0.39 per common share for the third quarter and $1,969 million or $1.33 per common share for the nine-month period
- Adjusted earnings before interest and income taxes (EBIT) were $1,738 million for the third quarter and $4,966 million for the nine-month period
- Available cash flow from operations (ACFFO) was $1,334 million or $0.82 per common share for the third quarter and $3,873 million or $2.61 per common share for the nine-month period
- Management re-affirms 2017 ACFFO per share guidance range of $3.60-$3.90 per common share
- Line 3 Replacement Program progressing well with construction in Canada and in Wisconsin; Minnesota regulatory hearings under way
- Enbridge brought an additional $3 billion of growth projects into service since the end of the second quarter of 2017
- Enbridge received an amended Presidential Permit for the expansion of the Alberta Clipper liquids pipeline

- Enbridge continues to execute on its funding plan, further strengthening its financial position with the issuance of nearly $3 billion of hybrid debt securities for which credit rating agencies assign 50% equity treatment

- Enbridge today announces that it intends to file with the Ontario Energy Board an application for amalgamation of Enbridge Gas Distribution Inc. and Union Gas Limited

Enbridge Inc. (Enbridge or the Company) (TSX:ENB)(NYSE:ENB) today reported third quarter 2017 adjusted EBIT of $1,738 million. Third quarter ACFFO was $1,334 million, or $0.82 per common share. This was the second full quarter of operations subsequent to the merger transaction with Spectra Energy Corp that closed on February 27, 2017 (the Merger Transaction).

The largest driver of EBIT growth for the third quarter of 2017 relative to the third quarter of 2016 was the contribution from Enbridge's new natural gas, liquids and utility assets acquired in the Merger Transaction.

Also contributing to year-over-year EBIT growth was stronger crude oil throughput on the Mainline system, new projects coming into service in both the Liquids Pipelines and Gas Pipelines and Processing segments, and stronger realized foreign exchange hedge rates. These positive contributors were partially offset by lower natural gas gathering and processing volumes and margins related to lower natural gas prices and drilling activity in certain areas, as well as slightly weaker results in the Green Power Transmission and Energy Services segments. Financial impacts from the hurricanes in the Gulf Coast region and Florida were not material to the quarterly results.

ACFFO for the third quarter was $1,334 million, an increase of $482 million over the comparable prior period in 2016, driven largely by the same factors noted above. ACFFO of $0.82 per share was lower year-over-year primarily as a result of the issuance of additional shares as consideration under the Merger Transaction.

"Overall, third quarter performance was in-line with our expectations," said Al Monaco, Enbridge's President and Chief Executive Officer. "Looking ahead to the fourth quarter, we anticipate a further acceleration of financial performance driven by increased liquids volumes, a full quarter of new projects in service, ongoing incremental synergy capture and momentum from the seasonal nature of our business which typically strengthens in the winter months.

"Given these factors, along with the stable and reliable nature of the base business, we remain on track to deliver full year 2017 financial results within the previously disclosed guidance range of $3.60/share to $3.90/share."

Commenting on the continued execution of the business plan, Mr. Monaco noted: "We've had a very productive year so far. It's now been only eight months since the Spectra transaction closed and we're pleased with our progress on integrating operations of these two large companies. We've also made good strides in strengthening and streamlining the organization with the restructuring of Enbridge Energy Partners, L.P. and the buy-in of Midcoast Energy Partners, L.P. earlier this year. In addition, we've raised over $10 billion in the capital markets, of which $3 billion is equity or equity equivalent, and we've increased total non-core asset sales since the announcement of the Merger Transaction to $2.6 billion.

"As we move forward, we'll continue to evaluate ways to further strengthen and streamline both our business operations and sponsored vehicle structures, reduce costs and enhance our financial position," he added. "We look forward to our upcoming investment community conferences on December 12th and 13th to provide a full strategic and financial update."

Line 3 Replacement Program

The Line 3 Replacement is a critical energy infrastructure program that will support the economy and assure a reliable and cost-effective supply of energy. It will comprise the newest and most advanced pipeline technology and will enhance safety, reliability and throughput capacity on the Mainline system.

All required regulatory permitting is in place in Canada and construction began this summer on certain segments of the pipeline and is progressing well. Regulatory permitting is also in place in North Dakota as well as in Wisconsin where construction is under way.

The most significant remaining permitting process for the Line 3 Replacement Program is in Minnesota. The Final Environmental Impact Statement was issued in August and its adequacy determination is expected from the Minnesota Public Utilities Commission (MPUC) in December. In the parallel Certificate of Need and Route Permit dockets, progress continues according to schedule with public hearings currently under way. The MPUC is expected to issue a decision on the Certificate of Need and Route Permit in the second quarter of 2018. Based on this regulatory process and timeline, Management continues to anticipate an in-service date for the project in the second half of 2019.

Project Execution

Enbridge continues to make good progress executing on its $31 billion secured growth capital program. These projects are supported by low-risk long-term take-or-pay contracts, cost-of-service frameworks or similar commercial arrangements and cover a wide range of business platforms, regulatory jurisdictions and project sizes.

Since the second quarter of 2017, $3 billion of these projects were brought into service. This includes the JACOS Hangingstone crude oil pipeline lateral in Alberta, a suite of natural gas pipeline expansions and extensions on the Texas Eastern and Algonquin gas pipeline systems, the Chapman Ranch wind power generation project in Texas, as well as various utility growth initiatives in Ontario. This now brings the total year-to-date project completions to over $9 billion, generally all on time and on budget.

Enbridge is also advancing the execution of projects scheduled for 2018 and 2019 in-service dates. The NEXUS gas pipeline has now received its notice to proceed from the Federal Energy Regulatory Commission (FERC) and began construction work in October. Total capital cost for the project has been updated to US$1.3 billion with an expected in-service date in the third quarter of 2018. In the renewable power business, the $0.8 billion Rampion offshore wind power generation project in the United Kingdom has now installed its final turbine with first power expected later this quarter and full operations in the second quarter of 2018.

In addition, subsequent to quarter-end, Enbridge received an amended Presidential Permit for the Alberta Clipper (Line 67) expansion project.

"We're very pleased with the execution progress our Major Projects team is making on the secured project inventory," said Mr. Monaco. "This progress highlights the fact that critical energy infrastructure projects are getting permitted and built in the current environment."

Funding Progress

Enbridge continues to be pro-active with capital markets activities, making significant progress on the execution of its funding plan and improving its financial position. In particular, Enbridge has recently raised almost $3 billion of hybrid debt securities in the Canadian and United States markets on attractive terms. These instruments serve to further strengthen Enbridge's balance sheet, as 50% of the principal is treated as equity capital by the credit rating agencies.

During the quarter Enbridge also announced the sale of the St. Lawrence Gas utility in New York State for $0.1 billion, which is expected to close in 2018. This brings total non-core asset sales to $2.6 billion since last September, well above the Company's target of $2.0 billion.

"We've made good progress strengthening the balance sheet, in line with the prudent financing plan that we've shared with the credit ratings agencies," added Mr. Monaco. "We continue to have broad access to capital, as demonstrated by the attractive financings we've completed in both the Canadian and U.S. markets, and we're committed to maintaining strong investment grade credit ratings."

Other Business

Later today Enbridge plans to file an application with the Ontario Energy Board (OEB) to amalgamate Enbridge Gas Distribution Inc. and Union Gas Limited. Given the complimentary nature of these franchises, the amalgamation is expected to provide benefits to both the rate payers and the shareholders. This filing will initiate the regulatory review process which is expected to continue into 2018. Assuming an acceptable regulatory outcome, the amalgamation would be expected to take effect in 2019.

Mr. Monaco concluded his third quarter remarks by acknowledging the Company's response to the recent hurricanes. "I'd like to highlight how proud I am of the way our people responded to the difficult conditions caused by the hurricanes this past quarter. Not just through the great efforts by our teams to maintain the safe and reliable operations of our assets, but how they reached out and supported each other and our communities during this time of crisis. This demonstrates the quality of our people and how we've really come together as one company."

THIRD QUARTER 2017 PERFORMANCE OVERVIEW

For more information on Enbridge's growth projects and operating results, please see Management's Discussion and Analysis (MD&A) which is filed on SEDAR and EDGAR and also available on the Company's website at www.enbridge.com/InvestorRelations.aspx.

HIGHLIGHTS

	Three months ended September 30,		Nine months ended September 30,	
	2017	2016	**2017**	2016
(unaudited, millions of Canadian dollars, except per share amounts)				
Earnings attributable to common shareholders				
Liquids Pipelines	**1,326**	(87)	**3,722**	2,168
Gas Pipelines and Processing	**615**	67	**1,636**	147
Gas Distribution	**83**	20	**511**	342
Green Power and Transmission	**20**	34	**121**	124
Energy Services	**(150)**	(25)	**(12)**	(38)
Eliminations and Other	**101**	(102)	**(255)**	71
Earnings/(loss) before interest and income taxes	**1,995**	(93)	**5,723**	2,814
Interest expense	**(653)**	(397)	**(1,704)**	(1,178)
Income tax recovery/(expense)	**(327)**	253	**(818)**	(174)
(Earnings)/loss attributable to noncontrolling interests and redeemable noncontrolling interests	**(168)**	207	**(633)**	166
Preference share dividends	**(82)**	(73)	**(246)**	(217)
Earnings/(loss) attributable to common shareholders	**765**	(103)	**2,322**	1,411

RESTATED PRECEDENT AGREEMENT

This RESTATED PRECEDENT AGREEMENT ("Restated Precedent Agreement") is made and entered into this 28th day of May, 2015 ("Effective Date"), by and between DTE Pipeline Company, a Michigan corporation ("DTE"), and Spectra Energy Transmission, LLC, a Delaware limited liability company ("Spectra") (DTE and Spectra are collectively referred to herein as "Pipeline"), and Union Gas Limited, an Ontario corporation ("Customer"). Pipeline and Customer are sometimes referred to individually as a "Party" and collectively as the "Parties."

W I T N E S S E T H:

WHEREAS, Pipeline is proposing a project that will ultimately provide up to approximately one and one half (1.5) billion cubic feet per day of firm transportation service for natural gas production from the Appalachian production areas, including but not limited to the Utica Shale and Marcellus Shale production areas in Ohio and Pennsylvania, to the international border between the United States and Canada near St. Clair, Michigan (the "International Border") and continuing from the International Border to Dawn, Ontario ("Dawn"). Pipeline will construct an approximately 250-mile greenfield pipeline extending from points expected to be located at or near Kensington, Ohio to various interconnections in the State of Michigan, utilizing subscriptions of firm pipeline capacity on existing U.S. pipeline systems to transport to the International Border, and thereafter from the International Border to point(s) of delivery in or near Dawn, utilizing one or more of: subscriptions of firm pipeline capacity on existing Canadian pipeline systems, an expansion of the existing Vector Canada and/or Customer's Canadian pipeline systems, and/or construction of greenfield pipeline facilities (the services and subscriptions contemplated herein and the facilities that Pipeline intends to construct (or use reasonable efforts to cause others to construct) and/or subscribe to provide such services are collectively referred to herein as the "Project");

WHEREAS, Pipeline is proposing to commence service for the Project on or about November 1, 2017;

WHEREAS Customer, based on its qualifying bid submitted in the Open Season conducted by Pipeline from October 15, 2012 through November 30, 2012 ("Open Season"), entered into a Precedent Agreement with Pipeline dated August 11, 2014 ("the Original Precedent Agreement");

WHEREAS, in lieu of the service contemplated in the Original Precedent Agreement, Customer now desires firm natural gas transportation service in respect of the Project from a point expected to be located at or near Kensington, OH, to a point at or near the International Border;

WHEREAS, Pipeline has secured commercial support for the Project evidenced by executed precedent agreements, including this Restated Precedent Agreement with Customer**;**

WHEREAS, the Parties contemplate that NEXUS Gas Transmission, LLC will take assignment of the rights and obligations of and be novated as the Pipeline for all purposes of this Restated Precedent Agreement;

WHEREAS, subject to the terms and conditions of this Restated Precedent Agreement, Pipeline is willing to undertake the steps necessary to provide the Project service for Customer described herein and other customers subscribing for capacity as part of the Project, to construct the Project facilities or subscribe for firm pipeline capacity that will extend from eastern Ohio to Dawn in order to provide such services, and, if necessary, to construct, or to use reasonable efforts to cause the construction of facilities on existing pipeline systems to provide service on the Project;

WHEREAS, subject to the terms and conditions of this Restated Precedent Agreement, Pipeline is willing to provide the firm transportation service to Customer described herein and Customer is willing to pay Pipeline for such service;

NOW, THEREFORE, in consideration of the mutual covenants herein assumed, and intending to be legally bound, Pipeline and Customer agree as follows:

1) Pipeline Obligations.

a) Subject to the terms and conditions of this Restated Precedent Agreement, Pipeline shall proceed with due diligence to file applications for and to obtain from all governmental and regulatory authorities having competent jurisdiction over the Project, including, but not limited to, the Federal Energy Regulatory Commission ("FERC") and the National Energy Board of Canada ("NEB"), the authorizations, approvals, certificates, permits, notices and/or exemptions (collectively, the "Governmental Authorizations") Pipeline determines are necessary: (i) for Pipeline to construct, own, operate, and maintain (and, if necessary, to use reasonable efforts to cause others to construct, own, operate, and maintain) the Project facilities necessary to provide the firm transportation service contemplated herein commencing on the Service Commencement Date (as determined in accordance with Section 4 of this Restated Precedent Agreement); and (ii) for Pipeline to otherwise perform its obligations as contemplated in this Restated Precedent Agreement, (including, without limitation, to provide firm transportation service contemplated herein and set forth in the applicable Pipeline tariff approved by the FERC). Pipeline retains full control and discretion in the filing and prosecution of any and all applications for such Governmental Authorizations and/or any supplements or amendments thereto, and, if necessary, any court review, provided it does so in a manner that is consistent with the terms of this Restated Precedent Agreement and designed to implement the firm transportation service contemplated herein in a timely manner. Pipeline agrees to promptly notify Customer in writing when each of the Governmental Authorizations are received, obtained, rejected or denied. Pipeline shall also promptly notify Customer in writing as to whether each of the Governmental Authorizations received or obtained are acceptable to Pipeline.

b) During the term of this Restated Precedent Agreement, and provided it would be reasonable and prudent for Pipeline to do so, Pipeline agrees to use reasonable efforts to support and cooperate with the efforts of Customer to obtain all Customer's Authorizations and supplements and amendments thereto, to better understand and analyze the markets for the supply of gas at the proposed initial receipt points for the Project and to otherwise perform its obligations as contemplated by this Restated Precedent Agreement.

c) The reservation rates payable by Customer for transportation service (as set forth in the applicable Pipeline tariffs approved by the FERC, the "Reservation Rates") will be set and applied for on a commercially reasonable basis.

2) Customer Obligations.

a) Prior to the Effective Date, Customer shall have advised Pipeline in writing of: (i) any facilities which Customer must construct, or cause to be constructed, in order for Customer to utilize the firm transportation service contemplated in this Restated Precedent Agreement; and (ii) any necessary or desirable contractual and/or governmental or regulatory authorizations having jurisdiction over the Customer which

Customer determines are necessary or desirable for Customer in order to execute and deliver the Service Agreement (as defined in Section 3 below) and to fulfill its obligations thereunder and to otherwise perform its obligations under this Restated Precedent Agreement ("Customer's Authorizations").

b) Subject to the terms and conditions of this Restated Precedent Agreement, Customer shall proceed with due diligence to obtain the Customer's Authorizations. Customer retains full control and discretion in the filing and prosecution of any and all applications for such Customer's Authorizations and/or any supplements or amendments thereto, and, if necessary, any court review, provided it does so in a manner that is consistent with the terms of this Restated Precedent Agreement and in a manner designed to implement the firm transportation service contemplated herein in a timely manner. Customer agrees to promptly notify Pipeline in writing when each of the Customer's Authorizations, are received, obtained, rejected or denied. Customer shall also promptly notify Pipeline in writing as to whether each of the Customer's Authorizations received or obtained are acceptable to Customer.

c) During the term of this Restated Precedent Agreement, and provided it would be reasonable and prudent for Customer to do so, Customer agrees to use reasonable efforts to support and cooperate with the efforts of Pipeline to obtain all Governmental Authorizations and supplements and amendments thereto necessary for Pipeline to provide the services contemplated hereunder and to construct, own, operate, and maintain (or, if necessary, to use reasonable efforts to cause others to construct, own, operate and maintain) the Project facilities for transportation service and to otherwise perform its obligations as contemplated by this Restated Precedent Agreement.

3) Service Agreements.

a) [RESERVED].

b) Firm Service Agreement. To effectuate the firm transportation service contemplated herein for transportation service, Customer and Pipeline agree that no later than thirty (30) days following the date on which Pipeline provides written notice to Customer that the FERC, the Michigan Public Service Commission, and any other governmental agencies or authorities having jurisdiction over the U.S. portion of the Project transportation service have all issued the necessary authorizations to Pipeline or other pipelines to construct the greenfield and expansion facilities necessary to provide the Project service, Pipeline and Customer will execute a firm transportation service agreement governing the service (the "Service Agreement"). The Service Agreement and the rights and obligations arising thereunder shall only become effective if, in addition to receipt of the aforementioned authorizations for the U.S. portion of the service, Pipeline has also provided confirmation that the NEB, Ontario Energy Board ("OEB") and any other governmental agencies or authorities having jurisdiction over the Canadian portion of the Project have all issued the necessary authorizations to Pipeline or other pipelines proposing to construct and/or provide the facilities necessary to provide the Canadian portion of the Project. For clarity, the Canadian portion of the Project service shall have no application to the transportation service that Customer is contracting for hereunder, but receipt of the Governmental Authorizations and the Customer's Authorizations for the Canadian portion of the Project are a condition precedent to the Service Agreement between Pipeline and Customer becoming effective as reflected in Section 7(b)(ii), 7(c)(ii) and 7(c)(iii). The Parties agree to consider in good faith executing the Service

Agreement at a time earlier than contemplated in the first sentence above if required to allow Pipeline to obtain the requisite notice to proceed with Project construction from any governmental agency or authority having jurisdiction. The Service Agreement will specify: (i) an MDQ of 150,000 Dth/d ("Customer's MDQ"), exclusive of fuel requirements, effective on the Service Commencement Date; (ii) a primary term of fifteen (15) years commencing on the Service Commencement Date and continuing from year to year thereafter unless terminated in accordance with the provisions thereof; (iii) a Primary Point of Receipt (as such term will be defined in the Service Agreement) at the head of the Project facilities in Ohio (such point to be designated by Pipeline at such time as Pipeline provides notice to Customer in accordance with Section 3(c) below) (MDRO of 150,000 Dth/d); (iv) a Primary Point of Delivery (as such term will be defined in the Service Agreement) at the International Border (MDDO of 150,000 Dth/d); and (v) security requirements consistent with the provisions set forth in Section 13 below. To the extent Pipeline is authorized to offer access to secondary receipt and delivery points as part of the Project service, Customer shall have the right under the Service Agreement to access secondary receipt and delivery points in accordance with such authorization(s). Attached hereto as Exhibit A is an illustrative form of transportation service agreement for the Project services. Prior to the Effective Date, the Parties acknowledge that Pipeline has provided to Customer copies of the Rate Agreement and a table of the expected contents of general terms and conditions that will be incorporated by reference into the transportation service agreement to form the applicable FERC gas tariff, as well as any changes to the illustrative form of transportation service agreement in Exhibit A (collectively, the "Forms of Commercial Agreements"). Pipeline will seek Customer's review of the Forms of Commercial Agreements and will consider in good faith any comments provided by Customer. Pipeline shall keep Customer informed of any revisions to the Forms of Commercial Agreements including revisions resulting from comments received from other Customers; provided that, for clarity, the Rate Agreement shall not be revised by Pipeline other than for the sole purpose of conforming the terms of the same with the terms of the NEXUS FERC Gas Tariff (when approved by FERC) and, to the extent not to the substantive detriment of Customer, with the terms agreed to in rate agreements of other anchor shippers for the Project. Pipeline shall apply for and seek the Governmental Authorizations in a manner consistent with the Forms of Commercial Agreements. The Parties acknowledge and agree that these Forms of Commercial Agreements may change, as required, as a result of the terms and conditions of approvals from the FERC.

c) Status of Service Commencement Date. On a quarterly basis, Pipeline will notify Customer regarding Pipeline's progress regarding the Project, and whether the Service Commencement Date (as determined in accordance with Section 4 of this Restated Precedent Agreement) is expected to occur on November 1, 2017, or some later date. No later than November 1, 2015, Pipeline shall in good faith have notified Customer of its *bona fide* estimate of the Service Commencement Date (the "Estimated Commencement Date"). In the event that Pipeline's *bona fide* estimate of the Estimated Commencement Date is a date that is after November 1, 2018, then, unless such deadline(s) are extended by mutual consent: Customer shall have no further obligation in respect of contracting for Project service and Customer shall have the right to terminate this Restated Precedent

Agreement without liability between the Parties including in respect of the Customer being required to pay any Pre-Service Costs.

d) Rates.

i) [RESERVED].

ii) The rates that will apply to the Service Agreement shall be as set forth in the rate agreement to be executed in accordance with this Section 3(d), for service under the Service Agreement. Pipeline and Customer have agreed to the following with regard to the rates for service under the Service Agreement:

(1) Subject to the terms and conditions set forth herein and in the Service Agreement and in the Rate Agreement (as defined below), upon execution of such Service Agreement and Rate Agreement, Customer shall be obligated to pay Pipeline the rates specified for service under the Service Agreement commencing on the Service Commencement Date and continuing to the end of the primary term (as set forth in the Service Agreement) thereof.

(2) The estimated Reservation Rates and fuel rates for service under the Service Agreement shall be set forth in the Rate Agreement provided in accordance with Section 3(d)(ii)(3) below. The estimated capital costs associated with the construction of the facilities necessary for Pipeline to provide Project service for Customer and all other customers subscribing Project service in the U.S. (the “Project Facilities”) will be reflected in an estimate to be provided by Pipeline to Customer in accordance with Section 3(d)(ii)(3) below.

(3) Contemporaneously with the execution of this Restated Precedent Agreement, Pipeline shall deliver to Customer the following: (a) the final rate agreement for

the Service Agreement (the "Rate Agreement"), which shall include the final estimate of the Reservation Rate (the "Final Estimated Reservation Rate") (subject only to the Capital Cost Tracking Adjustment, as defined below) and estimated fuel rate; (b) a final breakdown of how Pipeline derived the Final Estimated Reservation Rate, including a breakdown of such portion of the Final Estimated Reservation Rate that is derived from the Final Capital Cost Estimate (as defined below) ("Rate Breakdown"); and (c) an estimate of the capital costs associated with the construction of the Project Facilities ("Final Capital Cost Estimate"). The Rate Agreement shall provide, consistent with Exhibit C, that the Final Estimated Reservation Rate shall be subject to an aggregate fifteen percent (+ / - 15%) capital cost tracking adjustment (as more particularly described in Exhibit C, the "Capital Cost Tracking Adjustment"). Pipeline and Customer shall hereafter execute the Rate Agreement as expeditiously as is practicable.

e) Most Favored Nations.

i) Except as provided in Section 3(e)(ii) below, in the event that Pipeline enters into firm transportation service and/or recourse, negotiated or discount rate agreements with other similarly situated customers (as to transportation path, quantity and length of term) in respect of this Project containing any rate provisions and other terms of service that are more favorable to such other customers than the negotiated rate provisions set forth in the Rate Agreement, Pipeline shall offer Customer, within ten (10) business days of entering into the rate agreements with such other customer, those same rate provisions and other terms of service. If Customer is willing to accept the offer on the same terms and conditions as such other customer(s), including provisions regarding transportation path, volume and length of term, then Customer will so notify Pipeline within thirty (30) days of its acceptance, and Pipeline will make the necessary amendments to the Rate Agreement and the Service Agreement, if applicable, and the Parties will enter into an amended agreement at the more favorable rate for the remainder of the term of the applicable agreement(s). This section will apply only to contracts Pipeline enters into for service utilizing Project capacity on or before the Service Commencement Date.

ii) *Exclusions.* Pipeline is not required to offer to Customer and Customer is not entitled to, any rate provisions provided to other customers if such rate provisions are contained in long-term firm service agreements for capacity that becomes available as a result of the breach, default or unauthorized termination of a precedent agreement or associated service agreement by a Project customer or the bankruptcy, insolvency, liquidation or other similar action affecting a Project customer. In addition, the most favored nation right set forth in this Section 3(e) will not be available to Customer in respect of any short term (i.e., less than one year) service. Further, the most favored nation right set forth in this section 3 will not apply to credit provisions.

(f) Right of First Refusal. Customer will, in respect of the Service Agreement, be granted a contractual Right of First Refusal (“ROFR”) in accordance with the applicable Pipeline tariff approved by the FERC. Further, the Service Agreement will be considered a ROFR Agreement in accordance with, and as that term is used in, the applicable tariff.

4) Commencement of Service.

(a) [RESERVED].

(b) Pipeline shall provide at least ninety (90) days' prior notice (the "In-Service Date Notice") to Customer of the projected service commencement date for service under the Service Agreement, which date shall be the beginning of a calendar month and cannot be earlier than the date upon which all of the conditions precedent set out in Section 7 have been satisfied, or waived by the Party having such waiver right, provided that the actual service commencement date for purposes of the Service Agreement (the "Service Commencement Date") shall be the date that is the later of: (i) November 1, 2017; (ii) the date provided in the In-Service Date Notice; (iii) the date that is the first day of the first calendar month following the date on which the Pipeline places the Project Facilities into service; or (iv) if, pursuant to Section 7(f), the Pipeline has filed an appeal or is pursuing a rehearing, reconsideration or clarification by the applicable regulatory authority of the Governmental Authorization, then 90 days from the date of receipt of a positive decision addressing Customer's concerns unless such period is waived by Customer. On and after the Service Commencement Date, Pipeline shall provide firm transportation service for Customer pursuant to the terms of the Service Agreement and Customer will pay Pipeline for all applicable charges required by the Service Agreement and the Rate Agreement.

5) Design and Permitting of Project Facilities. Pipeline will undertake with due diligence, or use reasonable efforts to cause others to undertake, the design of the Project Facilities and any other preparatory actions necessary for Pipeline, or Pipeline's designee(s), to complete and file application(s) related to the Project Facilities with the FERC and/or other governmental authorities as appropriate. Prior to satisfaction of the conditions precedent set forth in Section 7(b)(i) through 7(b)(vii) of this Restated Precedent Agreement, Pipeline, or Pipeline's designee(s), shall have the right, but not the obligation, to proceed with the

necessary design of facilities, acquisition of materials, supplies, properties, rights-of-way and any other necessary preparations to implement the firm transportation service under the Service Agreement as contemplated in this Restated Precedent Agreement. Additionally, Pipeline will use commercially reasonable efforts to keep Customer informed on a regular basis and respond to any of Customer's requests for information concerning Project schedule changes, status of Governmental Authorizations, service commencement dates, and/or changes to any of the rates described herein.

6) Construction of Project. Upon satisfaction of the conditions precedent set forth in Sections 7(a), 7(b)(i) through 7(b)(vii), inclusive and 7(c) of this Restated Precedent Agreement, or waiver of the same by Pipeline or Customer, as applicable, Pipeline shall proceed with due diligence to construct, or to use reasonable efforts to cause others to construct, the authorized Project Facilities and to implement the firm transportation service contemplated in this Restated Precedent Agreement for Project service on or about November 1, 2017, or such later date as may be designated by Pipeline in accordance with Section 3(c) above. If, notwithstanding Pipeline's due diligence, Pipeline, or Pipeline's designee(s), is unable to commence the Project service for Customer on November 1, 2017, or such later date as may be designated by Pipeline in accordance with Section 3(c) above, Pipeline will continue to proceed with due diligence to complete arrangements for such firm transportation service, and commence such service for Customer at the earliest practicable date thereafter. Subject to Section 9(a), Pipeline will neither be liable nor will this Restated Precedent Agreement or the Service Agreement be subject to cancellation if Pipeline, or Pipeline's designee(s), is unable to complete the construction of such authorized Project facilities and commence the

Project service for Customer by November 1, 2017 or such later date as may be designated by Pipeline in accordance with Section 3(c) above.

7) Conditions Precedent. Commencement of service under the Service Agreement, and Pipeline's and Customer's rights and obligations thereunder are expressly made subject to satisfaction or waiver, as applicable, of the following conditions precedent in Sections 7(b) and 7(c); only Pipeline shall have the right to waive the conditions precedent set forth in Section 7(b) and only Customer shall have the right to waive the conditions precedent in Section 7(c):

a) [RESERVED].

b) Pipeline's Conditions Precedent for Project Service.

i) Pipeline filing by April 1, 2016 the necessary requests with the FERC for approval to provide service as contemplated herein and in the Service Agreement;

ii) Subject to Section 7(d), Pipeline's receipt and acceptance in accordance with Section 7(f) by May 1, 2017, of all necessary Governmental Authorizations to construct, own, operate and maintain the Project facilities, all as described in Pipeline's applications as they may be amended from time to time, necessary to provide the service contemplated herein and in the Service Agreement;

iii) Pipeline (or Pipeline's owners or their respective affiliates) having received on or before May 1, 2017, a binding commitment from a financial institution(s) to provide the necessary financing of the construction of the Project Facilities;

iv) Other pipelines having received and accepted in accordance with Section 7(f) by May 1, 2017, all necessary Governmental Authorizations to construct, own, operate and maintain the Project facilities, all as described in their applications as they may be amended from time to time, necessary to provide the service contemplated herein and in the Service Agreement;

v) Pipeline receiving approval, no later than thirty (30) days after its acceptance of the certificates and authorizations specified in Section 7(b)(i), from its Management Committee, or similar governing body, to expend the capital necessary to construct the Project facilities and to proceed with the Project-related firm pipeline transportation arrangements with other pipelines for service on the Project facilities;

vi) Pipeline's receipt no later than four (4) months prior to the Service Commencement Date of all necessary authorizations required to construct the Project facilities necessary to provide the firm transportation service contemplated herein and in the Service Agreement, other than those specified in Section 7(b)(ii);

vii) Pipeline's procurement, no later than four (4) months prior to the Service Commencement Date, of all rights-of-way, easements or permits (in form and substance acceptable to Pipeline, acting reasonably) necessary for the construction and operation of the Project facilities;

viii) Pipeline's completion of construction of the Project facilities and all other facilities required to render the Project service for Customer and for other customers subscribing Project service pursuant to the Service Agreement and Pipeline being ready, able and authorized to place such facilities into gas service; and

ix) The completion of the construction of the facilities necessary to create the pipeline capacity subscribed to Pipeline as part of the Project by other pipelines, as applicable, and each such Party being ready, able and authorized to place such facilities into service.

c) Customer's Conditions Precedent.

i) Customer's confirmation to Pipeline, no later than 90 days following receipt of the Estimated Commencement Date, that it has completed its review and approval of regional supply necessary to support natural gas supply arrangements associated with Customer's service under the Service Agreement;

ii) Subject to Section 7(d), Customer's receipt and acceptance of the approvals from the OEB for its application related to the Project no later than October 1, 2015; and

iii) Subject to Section 7(d), Customer's receipt and acceptance no later than 30 days following satisfaction of the condition in Section 7(c)(ii), of any necessary Customer's Authorizations identified in accordance with Section 2 of this Restated Precedent Agreement.

iv) Customer acknowledges that it has received, prior to the Effective Date, the requisite internal corporate approvals for the performance of Customer's obligations under this Restated Precedent Agreement and other agreements related to the service contemplated hereunder.

d) Temporary Waiver of Conditions Precedent – Governmental Authorizations. Notwithstanding Sections 7(b)(ii), 7(b)(iv), and 7(c)(ii) and subject to Section 21, either Party may, in its sole discretion, temporarily waive satisfaction of its conditions precedent listed above for a period of 90 days. During such a delay, upon reasonable request by the other Party, the Party waiving its condition precedent shall use commercially reasonable efforts to provide timely notices to the other Party in writing regarding the filing of any applications for such Governmental Authorizations or Customer's Authorizations, as the context requires, and will provide periodic updates regarding the status of such applications, including notice when each of the authorizations are received, obtained, rejected or denied. The Party temporarily waiving its condition precedent shall also promptly notify the other Party in writing as to whether each of the Governmental Authorizations or Customer Authorizations, as the context requires, received or obtained are acceptable to such Party. If the Party temporarily waiving its condition precedent has not satisfied the conditions precedent associated with the receipt of all Governmental Authorizations or Customer Authorizations, as the context requires, within ninety (90) days' time, either Party may terminate this Restated Precedent Agreement on thirty (30) days' written notice and no Pre-Service Costs will be payable by Customer.

e) With respect to each condition precedent set forth in Section 7(b) of this Restated Precedent Agreement, with the exception of the conditions precedent set forth in clauses (vii) and (viii) of Section 7(b), Pipeline shall provide notice to Customer within five (5) days of the satisfaction of such condition precedent that the condition precedent has been satisfied. With respect to each condition precedent set forth in Section 7(c) of this Restated Precedent Agreement, Customer shall provide notice to Pipeline within five (5) days of the satisfaction of each such condition precedent that the condition precedent has been satisfied.

f) Unless otherwise provided for herein, the Governmental Authorization(s) contemplated in Section 1 of this Restated Precedent Agreement must be issued in form and substance satisfactory to both Parties, acting reasonably. For purposes of this Restated Precedent Agreement, such Governmental Authorization(s) shall be deemed satisfactory if issued or granted with terms and conditions which are: (i) consistent with this Restated Precedent

Agreement and all ancillary agreements and documents to be delivered pursuant to this Restated Precedent Agreement for the applicable service; and (ii) to the extent not contemplated by this Restated Precedent Agreement or any of the ancillary agreements and documents, not materially onerous on Pipeline, as determined by Pipeline, acting reasonably, and will not otherwise have a material adverse effect on Customer. Customer shall notify Pipeline in writing not later than fifteen (15) days after Pipeline notifies Customer of the issuance of the FERC certificate(s), authorization(s) and approval(s), including any order issued as a preliminary determination on non-environmental issues, contemplated in Section 1 of this Restated Precedent Agreement if Customer determines, acting reasonably, that such certificate(s), authorization(s) and approval(s) will have a material adverse effect on Customer. Customer cannot assert that any authorization will have a material adverse effect on Customer unless: (i) the governing provisions of such authorization differ materially and adversely from the provisions requested by Pipeline in its application, unless the provisions requested by Pipeline were inconsistent with the terms of this Restated Precedent Agreement; and (ii) such differences materially and adversely affect the rate to be charged pursuant to the rate agreement contemplated herein, or the terms and conditions of service pursuant to the service agreement contemplated herein, and the Parties cannot mutually agree upon a modification or alternative to such provision which preserves the relative economic positions of the Parties under the operative agreement(s). All other Governmental Authorizations that Pipeline must obtain must be issued in form and substance acceptable to Pipeline, acting reasonably. All Governmental Authorizations that Pipeline is required by this Restated Precedent Agreement to obtain must be duly granted by the FERC or other governmental agency or authority having jurisdiction, and must be final and no longer subject to rehearing or appeal; provided, however, Pipeline may waive the requirement that such Governmental Authorizations be final and no longer subject to rehearing or appeal. If any of the Governmental Authorizations are issued on material terms not acceptable to either Party, subject to the foregoing provisions of this Section 7(f), then the non-accepting Party, acting reasonably, shall give notice to the other Party, and the Parties shall promptly meet and work in good faith in an attempt to agree upon a commercially acceptable resolution for both Parties, each Party in its sole discretion, to continue forward with respect to the Project. If, after thirty (30) days, the Parties are unable to agree upon a mutually acceptable resolution, either Party shall have the right to terminate this Restated Precedent Agreement and, if executed, the applicable service agreement and rate agreement. Any termination of this Restated Precedent Agreement by a Party pursuant to this Section will be without liability between the Parties including in respect of the Customer being required to pay any Pre-Service Costs. Notwithstanding the foregoing, if the Parties cannot agree on a modification or alternate provision, Pipeline may, in its sole discretion, appeal or otherwise pursue rehearing, reconsideration or clarification by the applicable regulatory authority of any such provision(s) which Customer alleges will have a material adverse effect on it, and Customer may not terminate this Restated Precedent Agreement until a final order or decision is rendered by such regulatory authority which does not grant relief that is satisfactory to Customer, acting reasonably, to address such material adverse effect, or 180 days from the date that Pipeline makes its application for rehearing, reconsideration or clarification, whichever occurs first.

g) The Customer's Authorization(s) contemplated in Section 2 of this Restated Precedent Agreement shall be deemed satisfactory if issued or granted in form and substance substantially as requested, or if issued in a manner acceptable to Customer and such Customer's Authorization(s), as issued, will not otherwise have a material adverse effect on Pipeline. Pipeline cannot assert that any authorization will have a material adverse effect on Pipeline unless: (i) the governing provisions of such authorization differ materially and adversely from the provisions requested by Customer in its application, unless the provisions requested by Customer were inconsistent with the terms of this Restated Precedent Agreement; and (ii) such differences materially and adversely affect the rate to be charged pursuant to the rate agreement contemplated herein, or the terms and conditions of service pursuant to the service agreement contemplated herein, and the Parties cannot mutually agree upon a modification or alternative to such provision which preserves the relative economic positions of the Parties under the operative agreement(s). If any of the Customer's Authorizations are issued on terms not acceptable to either Party, subject to the foregoing provisions of this Section 7(g), then the non-accepting Party shall give notice to the other Party, and the Parties shall promptly meet and work in good faith in an attempt to agree upon a commercially acceptable resolution for both Parties, each Party in its sole discretion, to continue forward with respect to the Project. If, after thirty (30) days, the Parties are unable to agree upon a mutually acceptable resolution, either Party shall have the right to terminate this Restated Precedent Agreement and, if executed, the applicable service agreement and rate agreement. Any termination of this Restated Precedent Agreement by a Party pursuant to this Section will be without liability between the Parties including in respect of the Customer being required to pay any Pre-Service Costs.

h) In the event the Estimated Commencement Date is changed to a date later than November 1, 2017 in accordance with Section 3(c), the Parties agree that each of the dates in Sections 3(d)(ii), 7(b)(i) through 7(b)(iii), Sections 7(c)(ii) through 7(c)(iii), and Section 10 will be changed to a later date by the same amount of time as such change to the Estimated Commencement Date.

8) Pre-Service Costs. If: (a) Customer is in material breach of any of its material obligations arising pursuant to this Restated Precedent Agreement; and (b) such material breach is not cured within 30 days of notice to Customer by Pipeline of such material breach, or if such material breach is not capable of being cured within 30 days; and (c) Customer is not continuing thereafter in good faith and with diligence to cure such breach; and (d) as a direct result of the occurrence and continuation of Sections 8(a), 8(b) and (8c) taken collectively, the Service Commencement Date does not occur; then Customer shall, at the option and election of Pipeline, reimburse Pipeline within thirty (30) days of Pipeline's invoice, for its pro-rata share, based on Customer's MDQ for transportation service to total contracted MDQ for transportation service by all customers with executed Precedent Agreements, for the Pre-Service Costs incurred or otherwise committed to by Pipeline up to the date of the occurrence of the material breach which resulted in the Service Commencement Date to not occur. In no event shall Customer's exposure to Pre-Service Costs exceed $219 million U.S. dollars. Customer's liability for its share of the Pre-Service Costs in accordance with this Section 8 constitutes a genuine pre-estimation of Pipeline's liquidated damages and not as a penalty, and the payment by Customer of such amount, if such payment is required to be made in

accordance with this Section 8 shall constitute Pipeline's sole remedy in such instance, with no right to claim further damages or other remedies from Customer. Customer shall make reasonable efforts to minimize and if possible eliminate the withholding tax related to the Pre-Service Costs paid to Pipeline, including but not limited to requesting from Pipeline the relevant documentation necessary to determine the appropriate withholding amount, if any, for tax purposes. In the event that taxes are withheld from the Pre-Service Costs paid by Customer, then Customer shall deduct or withhold such amount from the Pre-Service Costs and remit such withheld taxes to the applicable taxing authority and Customer will provide to Pipeline, after the applicable calendar year end, Pipeline's U.S. Federal Form 1099, a comparable state form or Canadian Revenue Authority equivalent, if applicable, within the applicable statutory time frame. If this Restated Precedent Agreement is terminated for any reason other than a material breach by Customer, then such termination shall be without any liability on the part of Customer to Pipeline, including in respect of the Customer being required to pay any Pre-Service Costs. The term, "Pre-Service Costs" for all purposes in this Restated Precedent Agreement means only those expenditures and/or costs reasonably and prudently incurred, accrued, allocated to, or for which Pipeline is contractually obligated to pay in furtherance of Pipeline's efforts to develop and construct the Project and to satisfy its obligations under this Restated Precedent Agreement and all other precedent agreements for service on the Project facilities, including such expenditures associated with design, testing, engineering, construction, commissioning, materials and equipment, environmental, regulatory, and/or legal activities, allowance for funds used during construction, negative salvage, internal overhead and administration and any other costs reasonably incurred in furtherance of Pipeline's efforts to develop and construct the Project and to satisfy its obligations under this Restated Precedent Agreement and all other precedent agreements for service on the Project facilities. In the event Customer incurs liability for Pre-Service Costs, Pipeline shall use commercially reasonable efforts to mitigate the amount of Pre-Service Costs. NOTWITHSTANDING THE FOREGOING, THE PARTIES HERETO AGREE THAT NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR ANY PUNITIVE, SPECIAL, EXEMPLARY, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING, WITHOUT LIMITATION, LOSS OF PROFITS OR FOR BUSINESS INTERRUPTIONS) ARISING OUT OF OR IN ANY MANNER RELATED TO THIS RESTATED PRECEDENT AGREEMENT, AND WITHOUT REGARD TO THE CAUSE OR CAUSES THEREOF OR THE SOLE, CONCURRENT OR CONTRIBUTORY NEGLIGENCE (WHETHER ACTIVE OR PASSIVE), STRICT LIABILITY (INCLUDING, WITHOUT LIMITATION, STRICT STATUTORY LIABILITY AND STRICT LIABILITY IN TORT) OR OTHER FAULT OF EITHER PARTY. THE IMMEDIATELY PRECEDING SENTENCE SPECIFICALLY PROTECTS EACH PARTY AGAINST SUCH PUNITIVE, EXEMPLARY, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES EVEN IF WITH RESPECT TO THE NEGLIGENCE, GROSS NEGLIGENCE, WILLFUL MISCONDUCT, STRICT LIABILITY OR OTHER FAULT OR RESPONSIBILITY OF SUCH PARTY; AND ALL RIGHTS TO RECOVER SUCH DAMAGES OR PROFITS ARE HEREBY WAIVED AND RELEASED.

9) <u>Termination of Restated Precedent Agreement for Failure of Conditions Precedent.</u>

a) If the conditions precedent set forth in Section 7 of this Restated Precedent Agreement have not been fully satisfied or waived by Pipeline or Customer, as applicable, by the earlier of the applicable dates specified therein, or within one year after the Estimated Service Commencement Date, and this Restated Precedent Agreement has not otherwise been terminated pursuant to the other terms of this Restated Precedent Agreement, including in respect of Sections 10 or 11 hereof, then this Restated Precedent Agreement (and the Service Agreement, as applicable) shall terminate effective 30 days after the date such condition precedent was to be satisfied or waived by the applicable Party and such termination shall be without liability including in respect of Customer being required to pay any Pre-Service Costs, except to the extent the failure is as a direct result of a material breach by a Party of its other obligations set forth in this Restated Precedent Agreement.

b) For any termination in accordance with Section 9(a) above, the Parties agree to promptly meet and work diligently and in good faith for a period of 30 days following the date such condition precedent was to be satisfied or waived to attempt to agree upon changes to this Restated Precedent Agreement that would allow the Restated Precedent Agreement to continue, which may include a waiver of and/or change in the deadline for any of the conditions precedent that are the subject of such termination notice, provided that if the Parties are unable to come to an agreement upon changes that would allow the Restated Precedent Agreement to continue, then this Restated Precedent Agreement (and the Service Agreement, as applicable) shall nonetheless terminate effective on the expiry of such 30 day period.

c) Any delay or failure in the performance by either Party hereunder shall be excused if and to the extent caused by the occurrence of a Force Majeure, provided that such Party claiming Force Majeure shall give written notice of the suspension of such performance for this reason as soon as reasonably possible to the other Party and stating the date and extent of such suspension and the cause thereof. The Party whose obligations have been suspended as aforesaid shall resume the performance of such obligations as soon as reasonably possible after the removal of the cause and shall so notify, in writing, the other Party that the suspension has terminated. Notwithstanding the foregoing, if any condition precedent set forth in Section 7 hereof has not been satisfied as a result of an occurrence of Force Majeure, the deadline for satisfying the condition precedent shall be extended for each day that the occurrence of Force Majeure continues up to a maximum of ninety (90) days or as mutually agreed to by the Parties. For purposes of this Precedent Agreement, "Force Majeure" as employed herein shall mean any cause, whether of the kind enumerated herein or otherwise, not within the reasonable control of the Party claiming suspension, and which by the exercise of due diligence, such Party has been unable to prevent or overcome, including without limitations acts of God, the government, or a public enemy; strikes, lockouts, or other industrial disturbances; wars, terrorism, blockades, or civil disturbances of any kind; epidemics, landslides, hurricanes, washouts, tornadoes, storms, fires, explosions, arrests, and restraints of governments or people, freezing of, breakage or accident to, or the necessity for making repairs to machinery or lines of pipe, and the inability of either the claiming Party to acquire, or the delays on the part of either of the claiming Party in acquiring, at reasonable cost and after the exercise of reasonable diligence: (a) any servitudes, rights of way, grants, permits or licenses; (b) any materials or supplies for the construction or maintenance of facilities; or (c) any Governmental Authorizations, permits or permissions form any governmental agency; if such are required to enable the claiming Party to fulfill its obligations hereunder.

10) Termination for Default. The occurrence and continuation of a material breach by a Party of any of its obligations under this Restated Precedent Agreement, unless caused by a breach by the other Party of its obligations under this Restated Precedent Agreement is referred to herein as a “Default". Upon the occurrence of a Default by a Party hereto, the non-defaulting Party may provide written notice to the defaulting Party, describing the Default in reasonable detail and requiring the defaulting Party to remedy the Default (the "Default Notice"). If the Default is not cured within 30 days of receipt by the defaulting Party of the Default Notice, or if such breach is not capable of being cured within 30 days, and the defaulting Party is not continuing thereafter in good faith and with diligence to cure such Default, the non-defaulting Party may, by termination notice to the defaulting Party, terminate this Restated Precedent Agreement effective on the tenth (10th) day following receipt of the termination notice by the defaulting Party; provided, however, that if during such ten (10) day period the defaulting Party has commenced to remedy the Default and is continuing in good faith its efforts to remedy such Default, the entitlement of the non-defaulting Party to terminate this Restated Precedent Agreement will be suspended until the earlier of the cessation by the defaulting Party of such efforts and the date which is ninety (90) days after the date of the Default Notice.

11) Other Pipeline Termination Rights. In addition to the provisions of Section 9 hereof, Pipeline may terminate this Restated Precedent Agreement at any time upon fifteen (15) days’ prior written notice to Customer, if: (i) Pipeline, in its sole and reasonable discretion, determines for any reason on or before October 1, 2016, that the Project contemplated herein

is no longer economically viable, (ii) Pipeline incurs or will incur costs which are twenty-five percent (25%) or more than the cost estimate submitted as part of Pipeline's application to the FERC for the certificate of public convenience and necessity for the Project related to the Project construction, or (iii) on or before October 1, 2016, substantially all of the other precedent agreements, service agreements or other contractual arrangements for the firm transportation service to be made available by the Project are terminated, other than by reason of commencement of service. In the event Pipeline terminates this Restated Precedent Agreement in accordance with this Section 11, Customer shall not be liable pursuant to Section 8 above for Pre-Service Costs.

12) Termination Upon Service Commencement Date; Survival. If this Restated Precedent Agreement is not terminated pursuant to Sections 9, 10 or 11 hereof, or otherwise in accordance with the terms of this Restated Precedent Agreement, then, except for those provisions herein that are stated to survive any termination of this Restated Precedent Agreement, this Restated Precedent Agreement will terminate by its express terms on the Service Commencement Date, and thereafter Pipeline's and Customer's rights and obligations related to the transportation service contemplated herein shall be determined pursuant to the terms and conditions of the Service Agreement and Rate Agreement, as applicable, and Pipeline's FERC gas tariff, as effective from time to time. Notwithstanding any termination of this Restated Precedent Agreement, each Party shall remain liable to the other Party for all losses or damages suffered, sustained or incurred by the other Party as a result of a breach of any obligations of a Party which breach arose prior to termination of this Restated Precedent Agreement, provided that Customer's liability shall only apply if and to the extent it is to be liable in accordance with Section 8 and, such liability, if any, shall not

exceed its share of Pre-Service Costs determined in accordance with Section 8. Notwithstanding any termination of this Restated Precedent Agreement pursuant to terms of this Restated Precedent Agreement, to the extent that a provision of this Restated Precedent Agreement contemplates that one or both Parties may have further rights and/or obligations hereunder following such termination, the provision shall survive such termination as necessary to give full effect to such rights and/or obligations.

13) Creditworthiness. At all times during the effectiveness of this Restated Precedent Agreement and the related Service Agreement(s), Customer, pursuant to the criteria and terms set forth in this Section 13, shall either maintain a Creditworthy status, as defined below, or furnish sufficient credit support to Pipeline.

a) Creditworthiness Standard. Customer shall at all times during the effectiveness of this Restated Precedent Agreement and the Service Agreement(s) be Creditworthy or provide the Guaranty or the Letter of Credit contemplated herein. For purposes herein, "Creditworthy" means, in respect of the applicable entity, such entity has and maintains: (i) a long-term senior unsecured debt rating from (a) Moody's Investors Service, Inc. ("Moody's") of Baa3 or higher, and (b) Standard & Poor's ("S&P") of BBB- or higher and, with respect to each rating, not on negative credit watch or outlook, and (ii) a sufficient open line of credit as of the Effective Date. Pipeline acknowledges and agrees that, as of the effective date of this Restated Precedent Agreement, Customer has a sufficient open line of credit with Pipeline and Customer shall not at any time hereafter be required to establish any line of credit in connection with this Restated Precedent Agreement. If Customer is rated by only one of the foregoing credit rating agencies, Customer shall be creditworthy if it has the rating described in the foregoing sentence from the agency by which it is rated. If Customer is rated by both of the rating agencies described above but one such agency's rating is lower than the other agency's rating, then Customer's creditworthiness shall be determined based on the lower of the Moody's or S&P rating. Alternatively, Customer may be accepted as Creditworthy by Pipeline if Pipeline determines that, notwithstanding the absence of the rating requirements in this Section 13(a), the financial position of Customer (or an entity that guarantees all of Customer's payment obligations) is and remains acceptable to Pipeline during the term of the Restated Precedent Agreement, and the Service Agreement.

b) Failure to Meet Creditworthiness Standard. In the event Customer fails at any time or from time to time during the term of this Restated Precedent Agreement or the applicable service agreement to meet the Creditworthy standard set forth in Section 13(a) (including if its Guarantor, if applicable is no longer Creditworthy), Customer shall provide credit support to Pipeline in the form of one of the following methods set forth in this Section 13(b):

   i) Guaranty. Customer will provide, or cause to be provided, a guaranty (a "Guaranty") from Customer's parent company or from an affiliate (a "Guarantor"), provided the Guaranty shall serve to satisfy Customer's obligations under this Section 13 only if such Guarantor is Creditworthy, and only for so long as the Guarantor remains Creditworthy and for so long as it guarantees Customer's payment obligations and the Guaranty otherwise satisfies the requirements of this clause (i). The Guaranty shall: (a) guarantee all payment obligations of Customer under this Restated Precedent Agreement and the Service Agreement, (b) remain in effect until all payment obligations under this Restated Precedent Agreement, and the Service Agreement have been satisfied in full, and (c) be in a form and content substantially similar to Exhibit D hereto. Pipeline may require, at any time and from time to time, Customer to provide, or cause to be provided, an additional guaranty from a Creditworthy guarantor if the original Guarantor is, at any time, no longer Creditworthy. If Customer becomes Creditworthy after providing a Guaranty, Customer may request a discharge and return of such Guaranty, and following such request Pipeline shall promptly provide such discharge and return.

ii) Letter of Credit. If, at any time and from time to time, during the effectiveness of this Restated Precedent Agreement or the Service Agreement Customer fails to meet the requirements of Sections 13(a) and 13(b)(i) above, Customer shall provide, or cause to be provided, at its sole cost, a standby irrevocable letter of credit (a "Letter of Credit") from a Qualified Institution. For purposes herein, a "Qualified Institution" shall mean a major U.S. or Canadian commercial bank, or the U.S. branch offices of a foreign bank, which is not the Customer or Customer's Guarantor (or a subsidiary or affiliate of the Customer or Customer's Guarantor) and which has assets of at least $10 billion dollars and a credit rating of at least "A-" by S&P, or "A3" by Moody's. Pipeline may require Customer at Customer's cost to substitute a Qualified Institution if the Letter of Credit provided is, at any time, from a financial institution which is no longer a Qualified Institution. The Letter of Credit shall: (i) remain in effect until all payment obligations under this Restated Precedent Agreement and the Service Agreement have been satisfied in full, (ii) be in a form acceptable to Pipeline, which for purposes herein shall mean in form and content substantially similar to Exhibit E hereto, and (iii) be in the amount equal to twenty-four (24) months of reservation charges based on the MDQ and reservation rates under the Service Agreement(s). If Customer becomes Creditworthy after providing a Letter of Credit, Customer may request a discharge and return of such Letter of Credit, and following such request Pipeline shall promptly provide such discharge and return.

c) Demand for Assurances. At any time and from time to time, Pipeline shall have the right to require that Customer demonstrate Customer's, or its Guarantor's, continuing satisfaction of the creditworthiness and credit support requirements in this Section 13. Customer will have a period of five (5) business days to make such demonstration or to furnish credit support acceptable to Pipeline in accordance with this Section 13.

d) Failure to Comply. The failure of Customer to timely satisfy or maintain the requirements set forth in this Section 13 shall in no way relieve Customer of its other obligations under this Restated Precedent Agreement and/or the Service Agreement, nor shall it affect Pipeline's right to seek damages or performance under this Restated Precedent Agreement and/or the Service Agreement(s). Further, if, prior to the Service Commencement Date, Customer fails to timely satisfy or maintain the requirements set forth in this Section 13, then Pipeline may give written notice to Customer of such failure, and, if such failure has not been cured within five (5) business days following the receipt by Customer of such notice, then Pipeline may elect to suspend or terminate performance under this Restated Precedent Agreement, or to terminate this Restated Precedent Agreement and, if applicable, the Service Agreement.

e) Term of Credit Provisions and Survival. This Section 13 shall survive the termination of this Restated Precedent Agreement and shall remain in effect until all payment obligations under this Restated Precedent Agreement, and the Service Agreement, if applicable, have been satisfied in full.

f) Replacement Customer Creditworthiness. In the event Customer assigns this Restated Precedent Agreement and/or the Service Agreement in accordance with the applicable assignment provision(s), or in the event Customer permanently releases all or a portion of Customer's capacity under the Service Agreement in accordance with Pipeline's FERC Gas tariff, then the assignee and/or the permanent replacement customer, as applicable, shall be required to satisfy the requirements of this Section 13 with respect to all such assigned or replacement agreements, and upon satisfaction of the requirements of this Section 13, Pipeline shall return to Customer any Guaranty or Letter of Credit which had been furnished by Customer pursuant to this Section 13.

14) Amendments. This Restated Precedent Agreement may not be modified or amended unless the Parties execute written agreements to that effect.

15) Successors; Assignments. Any company which succeeds by purchase, merger, or consolidation of title to all or substantially all of the assets of a Party will be entitled to the rights and will be subject to the obligations of such Party in title under this Restated Precedent Agreement, and in such respect, no consent to such an assignment shall be required from the other Party. In addition, this Restated Precedent Agreement is assignable in whole or in part without the prior written consent of the Customer: (a) by Pipeline or either DTE or Spectra to NEXUS Gas Transmission, LLC;; (b) by Pipeline to any joint venture or similar collaborative entity created between DTE and Spectra, provided such entity is created for the sole purpose of advancing the Project; or (c) between DTE and Spectra, in respect of each Party's interests in the Project. Otherwise, neither Customer nor Pipeline may assign

any of its rights or obligations under this Restated Precedent Agreement without the prior written consent of the other Party hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, Pipeline shall have the right, without obtaining Customer's consent, to pledge or assign its rights under this Restated Precedent Agreement, the Service Agreement, and/or the Rate Agreement as collateral security for indebtedness incurred by Pipeline (or by an affiliate of Pipeline) for the Project.

16) No Third-Party Rights. Except as expressly provided for in this Restated Precedent Agreement, nothing herein expressed or implied is intended or shall be construed to confer upon or give to any person not a Party hereto any rights, remedies or obligations under or by reason of this Restated Precedent Agreement.

17) Joint Efforts: No Presumptions. Each and every provision of this Restated Precedent Agreement shall be considered as prepared through the joint efforts of the Parties and shall not be construed against either Party as a result of the preparation or drafting thereof. It is expressly agreed that no consideration shall be given or presumption made on the basis of who drafted this Restated Precedent Agreement or any specific provision hereof.

18) Recitals and Representations. The recitals and representations appearing first above are hereby incorporated in and made a part of this Restated Precedent Agreement.

19) Choice of Law. This Restated Precedent Agreement shall be governed by, construed, interpreted, and performed in accordance with the laws of the State of Ohio, without recourse to any laws governing the conflict of laws.

20) Notices. Except as herein otherwise provided, any notice, request, demand, statement, or bill provided for in this Restated Precedent Agreement, or any notice which either Party desires to give to the other, must be in writing and will be considered duly delivered when mailed by

registered or certified mail or overnight courier or when provided by personal delivery or electronic mail to the other Party's address set forth below:

Pipeline: Vice President, Business Development
5400 Westheimer Court
Houston, TX 77056
brmckerlie@spectraenergy.com
Phone – (713) 627-4582
Fax – (713) 627-4727

Customer: Manager Transportation Acquisition
50 Keil Dr N, Chatham, Ontario, Canada
thodgson@uniongas.com
Phone - (519) 436-4606
Fax - (519) 436-4643

or at such other address as either Party designates by written notice. Routine communications, including monthly statements, will be considered duly delivered when mailed by registered mail, certified mail, ordinary mail, or overnight courier or when provided by electronic mail to the person and at the addresses noted above or as otherwise designated pursuant to this Section 20.

21) Waivers. The waiver by either Party of a breach or violation of any provision of this Restated Precedent Agreement will not operate as or be construed to be a waiver of any subsequent breach or violation hereof.

22) Counterparts. This Restated Precedent Agreement may be executed in any number of counterparts, each of which will be an original, but such counterparts together will constitute one and the same instrument.

23) Headings. The headings contained in this Restated Precedent Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Restated Precedent Agreement.

24) Governmental Authorizations. Notwithstanding any provision to the contrary, each provision of this Restated Precedent Agreement shall be subject to all applicable laws, statutes, ordinances, regulations, rules, court decisions and Governmental Authorizations.

25) Definitions. Capitalized terms used herein have the meanings ascribed to them in the body of this Restated Precedent Agreement, and for the purposes of reference only are listed in Exhibit F attached hereto

26) Entire Agreement. This Restated Precedent Agreement embodies the complete agreement and understanding among the Parties with respect to the subject matter hereof and supersedes and pre-empts any prior understandings, agreements (including, without limitation, the Original Precedent Agreement) or representations by or among the Parties, written or oral, which may have related to the subject matter hereof in any way.

[signature page follows]

IN WITNESS WHEREOF, the Parties hereto have caused this Restated Precedent Agreement to be duly executed by their duly authorized officers as of the day and year first above written.

DTE PIPELINE COMPANY

By: ______________________

Title: President

UNION GAS LIMITED

By: ______________________

Title: Mark J. Isherwood
Vice-President, Business Development, Storage & Transmission

By: ______________________

Title: ______________________

SPECTRA ENERGY TRANSMISSION, LLC

By: Bill Yardley

Title: President

EXHIBIT A

Form of Service Agreement

See Attached.

FORM OF FIRM TRANSPORTATION AGREEMENT
TRANSPORTATION AGREEMENT
FOR FIRM TRANSPORTATION (FT-1) OF NATURAL GAS

Firm Transportation Agreement No. ____________

This TRANSPORTATION AGREEMENT FOR FIRM TRANSPORTATION OF NATURAL GAS ("**Firm Transportation Agreement**" or "**Agreement**") is made and entered into this ____ day of ___________, ______, between:

("**Transporter**"),

and

_____________, ("**Shipper**")

WITNESSETH: That in consideration of the mutual covenants contained herein the parties agree as follows:

Section 1. Service to be Rendered

Transporter shall perform and Shipper shall receive service in accordance with the provisions of Transporter's effective Rate Schedule FT-1 and the applicable General Terms and Conditions of Transporter's FERC Gas Tariff on file with the Federal Energy Regulatory Commission ("Commission") as the same may be amended or superseded in accordance with the Rules and Regulations of the Commission.

Section 2. Representations and Warranties

2.1 Representations and Warranties of Transporter: Transporter represents and warrants that: (i) it is duly organized and validly existing under the laws of the State of Delaware and has all requisite legal power and authority to execute this Agreement and carry out the terms, conditions and provisions thereof; (ii) this Agreement constitutes the valid, legal and binding obligation of Transporter, enforceable in accordance with the terms hereof; (iii) there are no actions, suits or proceedings pending or, to Transporter's knowledge, threatened against or affecting Transporter before any court of authorities that might materially adversely affect the ability of Transporter to meet and carry out its obligations under this Agreement; and (iv) the execution and delivery by Transporter of this Agreement has been duly authorized by all requisite partnership action.

2.2 Representations and Warranties of Shipper: Shipper represents and warrants that: (i) it is duly organized and validly existing under the laws of the State/Province of ______________ and has all requisite legal power and authority to execute this Agreement and carry out the terms, conditions and provisions hereof; (ii) there are no actions, suits or proceedings pending, or to Shipper's knowledge, threatened against or affecting Shipper before any court or authorities that might materially adversely affect the ability of Shipper to meet and carry out its obligations under this Agreement; and (iii) the execution and delivery by Shipper of this Agreement has been duly authorized by all requisite corporate action.

Section 3. Term

3.1 This Agreement shall be effective from the date hereof (the "Effective Date"). Transporter's obligation to provide Transportation Services and Shipper's obligation to accept and pay for such services, shall commence on ______________ for a term of ______________, unless otherwise agreed to by mutual agreement of the parties.

3.2 Shippers paying Negotiated Rates may extend the term of this Agreement under terms acceptable to Transporter.

Section 4. Rates

4.1 [Shipper shall pay the Recourse Rates in accordance with Transporter's currently effective Rate Schedule FT-1.]

OR

[Shipper shall pay Negotiated Rates in accordance with Transporter's currently effective Rate Schedule FT-1.]

Section 5. Notices

Unless herein provided to the contrary, any notice called for in this Agreement shall be in writing and shall be considered as having been given if delivered by certified mail or fax with all postage or charges prepaid, to either Transporter or Shipper, at the location designated herein. Written communications shall be considered as duly delivered when received by ordinary mail. Unless otherwise notified in writing, the addresses of the parties are as set forth herein.

Notices to Transporter under this Agreement shall be addressed to

Notices to Shipper under this Agreement shall be addressed to:

____
____
____
____
____

Wire transfer payments to Transporter shall be accompanied with the instructions "to credit the account of " " and shall be sent to the following bank and account number:

c/o:___________________________
____
____
____

Remittance detail supporting wire transfer payments to Transporter, and any notice, request or demand regarding statements, bills, or payments shall be mailed to the following address:

Section 6. Superseded Agreements

This Agreement supersedes and cancels as of the effective date hereof the following agreements: _______________, _______________.

Section 7. Miscellaneous

7.1 This Agreement shall be interpreted according to the laws of the State of

7.2 Performance of this Agreement shall be subject to all valid laws, orders, decisions, rules and regulations of duly constituted governmental authorities having jurisdiction or control of any matter related hereto. Should either of the parties, by force of any such law, order, decision, rule or regulation, at any time during the term of this Agreement be ordered or required to do any act inconsistent with the provisions hereof, then for the period during which the requirements of such law, order, decision, rule or regulation are applicable, this Agreement shall be deemed modified to conform with the requirement of such law, order, decision, rule or regulation; provided, however, nothing in this section 7.2 shall alter, modify or otherwise affect the respective rights of the parties to cancel or terminate this Agreement under the terms and conditions hereof.

7.3 A waiver by either party of any one or more defaults by the other hereunder shall not operate as a waiver of any future default or defaults, whether of a like or of a different character.

7.4 This Agreement may only be amended by an instrument in writing executed by both parties hereto.

7.5 Nothing in this Agreement shall be deemed to create any rights or obligations between the parties hereto after the expiration of the term set forth herein, except that termination of this Agreement shall not relieve either party of the obligation to correct any quantity imbalances or Shipper of the obligation to pay any amounts due hereunder to Transporter.

7.6 Exhibit A attached hereto is incorporated herein by reference and made a part hereof for all purposes.

7.7 The parties hereby agree, subject to the primary jurisdiction of the Commission, that any dispute arising out of or relating to this Agreement, or any breach thereof shall be submitted to final and binding arbitration in __ , __ , in accordance with the Rules of Commercial Arbitration of the American Arbitration Association (AAA) then in effect. The dispute shall be decided by a panel of three neutral arbitrators, qualified by education, training, and experience to hear the dispute, chosen as follows. The party initiating the arbitration proceeding shall name one arbitrator at the time it notifies the other party of its intention to arbitrate their dispute, and the responding party shall name an arbitrator within fifteen (15) days of receiving the above notification. Within twenty (20) days of the appointment of the second arbitrator, the two arbitrators shall select a third arbitrator to act as chairman of the tribunal. If either party fails to appoint an arbitrator within the allotted time or the two party-appointed, neutral arbitrators fail to appoint a third arbitrator as provided above, the AAA shall appoint the arbitrator(s). Any vacancies will be filled in accordance with the above procedure. The parties expressly agree to the consolidation of separate arbitral proceedings for the resolution in a single proceeding of all disputes that arise from the same factual situation, and the parties further expressly agree that any issue of arbitrability or the existence, validity, and scope of the agreement to arbitrate shall be decided by the arbitrators. The parties further agree that either party may apply to a court of competent jurisdiction, pending arbitration, for injunctive relief to preserve the status quo, to preserve assets, or to protect documents from loss or destruction, and such application will not be deemed inconsistent with or operate as a waiver of the party's right to arbitration. The arbitrators shall apply as the substantive law to the dispute the laws of the State of __ as specified in section 7.1 of this Agreement.

Section 8. <u>Negotiable Terms</u>

Transporter and Shipper mutually agree to the following terms and conditions of service under this Agreement. Where blank spaces are not filled in, the parties have not reached an agreement on that matter and the referenced provision of the General Terms and Conditions (GT&C) applies.

Pursuant to GT&C section , the following rate discount(s) apply:
____
____.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement in one or more counterparts, which counterparts shall constitute one integrated agreement, by their duly authorized officers effective as of the day first above written.

Date:____________________ By:____________________

Title:____________________

SHIPPER:____________________

Date:____________________ By:____________________

Title:____________________

Exhibit A
To
Firm Transportation Agreement No. ______
Under Rate Schedule FT-1 Between
and __________________

Primary Term:	______________
Contracted Capacity:	______________ Dth/Day
Primary Receipt Points:	______________
Primary Delivery Points:	______________
Rate Election (Recourse or Negotiated):	______________

EXHIBIT B

[RESERVED]

EXHIBIT C

Capital Cost Tracking Adjustment
for
Statement of Negotiated Rates

Project Facilities

Pipeline and Customer acknowledge that the capital costs attributable to the Project Facilities, which capital costs will underlie a portion of the Reservation Rate for firm transportation service for the Project, will be reflected in the Final Capital Cost Estimate to be provided to Customer by Pipeline in accordance with Sections 3(d)(ii)(2) and 3(d)(ii)(3).

Negotiated Reservation Rate Adjustment

The Final Estimated Reservation Rate will be adjusted, pursuant to the provisions set forth herein, to reflect any differences between the Final Capital Cost Estimate and the actual amount of capital costs attributable to the Project Facilities.

Pipeline will adjust the portion of the Final Estimated Reservation Rate attributable to the Project Facilities as set forth in the final Rate Breakdown (the "**Project Facilities Rate Portion**") at least thirty (30) days, but not more than sixty (60) days, prior to the Service Commencement Date. The adjustment to the Project Facilities Rate Portion will be based on a comparison between the Final Capital Cost Estimate and an updated cost report prepared by Pipeline and provided to Customer which updates the estimate of the capital costs for the Project Facilities, substantially in the form of an Exhibit K (the "**Updated Capital Cost**"). Pipeline will file such Updated Capital Cost report with the Federal Energy Regulatory Commission ("Commission") at least thirty (30) days, but not more than sixty (60) days, prior to the Service Commencement Date.

In making the adjustment described above, Pipeline will adjust the Project Facilities Rate Portion to reflect the percentage increase or decrease between the Updated Capital Cost and the Final Capital Cost Estimate. In the event that the Updated Capital Cost exceeds the Final Capital Cost Estimate, the Project Facilities Rate Portion of the Final Estimated Reservation Rate will be adjusted upward by multiplying it to the ratio of the Updated Capital Cost to the Final Capital Cost Estimate; provided that, notwithstanding any other provision contained herein, if the Updated Capital Cost exceeds the Final Capital Cost Estimate by more than 15%, then the multiplier to the Project Facilities Rate Portion will be 1.15. For the avoidance of doubt, in any event, the maximum upward adjustment to the Project Facilities Rate Portion shall be capped at 1.15 of what was set forth in the Rate Breakdown for the Project Facilities Rate Portion provided by Pipeline pursuant to Section 3(d)(ii)(3). In the event that the Updated Capital Cost is less than the Final Capital Cost Estimate, the Project Facilities Rate Portion of the Final Estimated Reservation Rate will be adjusted downward by multiplying it to the ratio of the Updated Capital Cost to the Final Capital Cost Estimate; provided that, notwithstanding any other provision contained herein, if the Updated Capital Cost is less than the Final Capital Cost Estimate by more than 15%, then the multiplier to the Project Facilities Rate Portion will be .85. For the avoidance of doubt, in any event, the maximum downward adjustment to the Project Facilities Rate Portion shall be capped at .85 of what was set forth in the Rate Breakdown for the Project Facilities Rate Portion provided by pursuant to Section 3(d)(ii)(3). The reservation rate resulting from the adjustment provided for in this paragraph shall be the **"Final Reservation Rate"**.

Pipeline will make a final adjustment to the Project Facilities Rate Portion no later than 210 days after the Service Commencement Date. In making the final adjustment, Pipeline shall prepare and provide to Customer a final cost report which sets forth the actual capital costs for the Project Facilities, substantially in the form of an Exhibit K ("**Final Capital Cost**"). In the event the Final Capital Cost exceeds the Final Capital Cost Estimate, then the Project Facilities Rate Portion of the Final Reservation Rate will be adjusted upward by multiplying it to the ratio of the Final Capital Cost to the Final Capital Cost Estimate; provided that, in any event, the maximum upward adjustment to the Project Facilities Rate Portion shall be capped at 1.15 of what was set forth in the Rate Breakdown for the Project Facilities Rate Portion provided by Pipeline pursuant to Section 3(d)(ii)(3). In the event the Final Capital Cost is less than the Final Capital Cost Estimate, then the Project Facilities Rate Portion of the Final Reservation Rate will be adjusted downward by multiplying it to the ratio of the Final Capital Costs to the Final Capital Cost Estimate; provided that, in any event, the maximum downward adjustment to the Project Facilities Rate Portion shall be capped at .85 of what was set forth in the Rate Breakdown for the Project Facilities Rate Portion provided by Pipeline pursuant to Section 3(d)(ii)(3).

In the event that the adjusted Reservation Rate decreases because the Final Capital Cost is less than the Final Capital Cost Estimate, Pipeline will refund Customer an amount (including interest at the Commission's approved interest rate pursuant to 18 C.F.R. §154.501, hereafter the "**FERC Interest Rate**") equal to the difference between the revenue received from Customer for the time period that Customer paid the higher rate and the revenue that Pipeline would receive for such time period had Customer paid the adjusted rate. In the event that the adjusted Reservation Rate increases because the Final Capital Cost is more than the Final Capital Cost Estimate, Customer will pay Pipeline an amount (including interest at the FERC Interest Rate) equal to the difference between the revenue received from Customer for the time period that Customer paid the lower rate and the revenue that Pipeline would have received for the time period had Customer paid the adjusted rate.

Recourse Reservation Rate Adjustment

In the case of an upward adjustment to the Final Estimated Reservation Rate, Pipeline will file the Updated Capital Cost report, together with an adjusted recourse rate applicable to transportation service for the Project, with the Commission at least thirty (30) days, but no more than sixty (60) days, prior to the Service Commencement Date. In the case of a downward adjustment to the Final Estimated Reservation Rate, Pipeline has the right, but not any obligation, to prepare and file such Updated Capital Cost report and/or an adjustment to the recourse rate applicable to transportation service for the Project with the Commission.

Cost Reports

Pipeline will prepare the Updated Capital Cost report in accordance with Section 157.14(a)(13) of Title 18 of the Code of Federal Regulations. Such report will reflect Pipeline's reasonable good faith estimate at the time of the total capital costs attributable to Project Facilities as constructed. Pipeline will prepare the Final Capital Cost report in accordance with Section 157.14(a)(13) of Title 18 of the Code of Federal Regulations. Such report will reflect Pipeline's actual capital costs attributable to the Project Facilities as constructed.

EXHIBIT D

Form of Guarantee

See Attached.

GUARANTY

This Guaranty ("Guaranty"), dated as of ______________, is made by ______________________, a [state and corporate structure] ("Guarantor"), in favor of ____________ a [state & corporate structure] ("Beneficiary").

WHEREAS, from time to time, ________________, a _______________ [state and corporate structure] ("Counterparty"), and Beneficiary may enter into one or more contracts, agreements and commitments for the storage or transportation of natural gas (referred collectively as "Agreement");

WHEREAS, Counterparty is a wholly-owned subsidiary of Guarantor, and Guarantor will directly or indirectly benefit from the Agreement to be entered into between Counterparty and Beneficiary; and

WHEREAS, as an inducement to Beneficiary to enter into the Agreement, Guarantor has agreed to provide this Guaranty; and

WHEREAS, Guarantor has agreed to execute and deliver this Guaranty with respect to Counterparty's payment obligations under the Agreement:

NOW THEREFORE, in consideration of the premises, Guarantor hereby agrees as follows:

1. **Guaranty**. Guarantor hereby absolutely, irrevocably and unconditionally guarantees the timely payment when due of Counterparty's payment obligations arising under any Agreement, as such Agreement may be amended or modified from time to time, together with any interest thereon and fees and costs of collection (including attorney's fees and court costs) in connection therewith ("Obligation"). In the event Counterparty defaults in the payment of any of the Obligation, within ten (10) days after receiving written notice from Beneficiary, Guarantor shall make such payment or otherwise cause same to be paid. This Guaranty may be enforced by Beneficiary at any time without the necessity of first resorting to or exhausting any other security or collateral. All amounts payable by Guarantor hereunder shall be in freely transferable funds.

2. **Effectiveness**. This Guaranty is effective as of the date set forth above and is a continuing guaranty which shall remain in full force and effect throughout the term of the Agreement, including any extensions or renewals thereof, until Guarantor has completely fulfilled the Obligation. If at any time during the effectiveness of this Guaranty, Guarantor no longer qualifies as Creditworthy as defined in Paragraph XX of that certain precedent agreement between Counterparty and Beneficiary dated _____ ("Precedent Agreement"), Guarantor shall, or shall cause Counterparty to, immediately provide the collateral specified in Paragraph XX(X) of the Precedent Agreement.

3. **Waivers.** (a) Guarantor waives any right to require as a condition to its obligations hereunder any of the following should Beneficiary seek to enforce the obligations of Guarantor:

(i) presentment, demand for payment, notice of dishonor or non-payment, protest, notice of protest, or any similar type of notice;

(ii) any suit be brought against, or any other action be brought against, or any notice of default or other similar notice be given to, or any demand be made upon Counterparty or any other person or entity;

(iii) notice of acceptance of this Guaranty, of the creation or existence of the Obligation, and/or any action by Beneficiary in reliance hereon or connection herewith;

(iv) notice of entering into any Agreement between Counterparty and Beneficiary, and/or any amendments, supplements or modifications thereto, or any waiver of consent under any Agreement, including waiver of the payment and performance of the Obligation thereunder; and/or

(v) notice of any increase, reduction or rearrangement of Counterparty's Obligation under any Agreement, or any extension of time for payment of any amounts due Beneficiary under any Agreement.

(b) Guarantor also waives the right to require, substantively or procedurally, that a judgment has been previously rendered against Counterparty or any other person or entity, or that Counterparty or any other person or entity be joined in any action against Guarantor.

4. **Assignment.** Guarantor shall not assign its duties hereunder without the prior written consent of Beneficiary. Beneficiary shall be entitled to assign its rights hereunder in its sole discretion upon prior written notice to Guarantor. Any assignment without such prior written consent or notice, as applicable, shall be null and void and of no force or effect.

5. **Notice.** All demands, notices or other communications to be given by any party to another must be in writing and shall be deemed to have been given when delivered personally or otherwise actually received or on the third (3rd) day after being deposited in the United States mail if registered or certified, postage prepaid, or one (1) day after delivery to a nationally recognized overnight courier service, fee prepaid, return receipt requested, and addressed as follows:

Guarantor's Name & Address	Beneficiary's Name & Address
____________	____________
____________	____________
____________	____________
____________	____________
____________	____________
	____________

or such other addresses as they may change from time to time by giving prior written notice to the other party.

6. **Applicable Law.** THIS GUARANTY SHALL IN ALL RESPECTS BE GOVERNED BY, ENFORCED UNDER AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF ____________.

7. **Effect of Certain Events.** Guarantor agrees that its liability hereunder will not be released, reduced, impaired or affected by the occurrence of any one or more of the following events:
(i) the insolvency, bankruptcy, reorganization, or disability of Counterparty;
(ii) the renewal, consolidation, extension, modification or amendment from time to time of the Agreement;
(iii) the failure, delay, waiver, or refusal by Beneficiary to exercise any right or remedy held by Beneficiary with respect to the Agreement;
(iv) the sale, encumbrance, transfer or other modification of the ownership of Counterparty or the change in the financial condition or management of Counterparty; or
(v) the settlement or compromise of any Obligation.

8. **Representations and Warranties.** Guarantor hereby represents and warrants the following:
(i) Guarantor is duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation and has full corporate power to execute, deliver and perform this Guaranty;
(ii) the execution, delivery and performance of this Guaranty have been and remain duly authorized by all necessary corporate action and do not contravene Guarantor's constitutional documents or any contractual restriction binding on Guarantor or its assets; and

(iii) this Guaranty constitutes the legal, valid and binding obligation of Guarantor enforceable against Guarantor in accordance with its terms, subject, as to enforcement, to bankruptcy, insolvency, reorganization and other similar laws and to general principles of equity.

9. Subrogation. Until all amounts which may be or become payable under the Agreement have been irrevocably and indefeasibly paid in full, Guarantor shall not by virtue of this Guaranty be subrogated to any rights of Counterparty or claim in competition with Beneficiary against Counterparty in connection with any matter relating to or arising from the Obligation or this Guaranty. If any amount shall be paid to Guarantor on account of such subrogation rights at any time before all of the Obligation has been irrevocably paid in full, such amounts shall be held in trust for the benefit of Beneficiary and shall promptly be paid to Beneficiary to be applied to the Obligation.

10. Amendment. No term or provision of this Guaranty shall be amended, modified, altered, waived, supplemented or terminated unless first agreed to by Guarantor and Beneficiary and then set forth in a written amendment to this Guaranty.

11. Counterparts. This Guaranty may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one document.

12. Entire Agreement. This Guaranty embodies the entire agreement and understanding between Guarantor and Beneficiary regarding payment of the Obligation under the Agreement and supersedes all prior agreements and understandings relating to the subject matter hereof.

IN WITNESS WHEREOF, Guarantor has executed this Guaranty effective as of the date first herein written.

GUARANTOR' S NAME

By:______________________________

Name:____________________________

Title:_____________________________

EXHIBIT E

Form of Letter of Credit

See Attached.

IRREVOCABLE STANDBY LETTER OF CREDIT

Letter of Credit No:__________

Date:________________, 20__

Date of Expiry: __________, 20__

Beneficiary:

Account Party:
(Complete Legal Name)
(Address)
(City, State, Zip)

Attn: Credit Director

[Name of Bank] ("Issuing Bank") hereby establishes this Irrevocable and Transferable Standby Letter of Credit No. _________ in favor of [Spectra entity name] ("Beneficiary") for the account of [Account Party Name] ("Account Party") for the aggregate amount of up to (*dollar amount*) available to Beneficiary by presenting sight draft(s) to Issuing Bank when accompanied by a signed and dated statement by an authorized representative of Beneficiary certifying one or more of the following, as applicable:

1. "The amount drawn herein is to satisfy obligations of Account Party between Beneficiary and Account Party. Wherefore, the undersigned Beneficiary does hereby demand payment of $__________. Beneficiary further certifies that supporting documents when required were presented to Account Party and that Account Party has not satisfied its obligations." And / or

2. "This Letter of Credit will expire in less than thirty (30) days and Beneficiary has not received an extension of said Letter of Credit or other acceptable replacement collateral from Account Party. Wherefore, the undersigned Beneficiary does hereby demand payment of $__________. Upon timely receipt of an amendment extending this Letter of Credit, this drawing is to be considered automatically rescinded." And / or

3. "Issuing Bank 's lowest long-term senior unsecured debt rating no longer meets or exceeds "A-" by Standard & Poor's Rating Group and "A3" by Moody's Investor Services, Inc., and Account Party has not caused a replacement Letter of Credit from an alternate financial institution acceptable to Beneficiary to be issued to Beneficiary. Wherefore, the undersigned Beneficiary does hereby demand payment of $_______________."

SPECIAL TERMS AND CONDITIONS

1. Partial and multiple drawings are allowed hereunder. The amount that may be drawn by Beneficiary under this Letter of Credit shall be automatically reduced by the amount of any payments made through Issuing Bank referencing this Letter of Credit.

2. This Letter of Credit shall automatically extend without amendment for periods of one year each from the present or any future expiry date unless Issuing Bank notifies Beneficiary in writing at least sixty (60) days prior to such present or future expiry date, as applicable, that Issuing Bank elects not to further extend this Letter of Credit.

3. This Letter of Credit is transferable without charge any number of times, but only in the amount of the full unutilized balance hereof and not in part and with the approval of Account Party which consent shall not be unreasonably withheld, conditioned or delayed.

4. The term "Beneficiary" includes any successor by operation of law of the named beneficiary to this Letter of Credit, including, without limitation, any liquidator, any rehabilitator, receiver or conservator.

5. Presentations for drawing may be delivered in person, by mail, by express delivery, or by facsimile.

6. All Bank charges are for the account of Account Party.

7. Article 36 under UCP 600 is modified as follows: If the Letter of Credit expires while the place for presentation is closed due to events described in said Article, the expiry date of this Letter of Credit shall be automatically extended without amendment to a date thirty (30) calendar days after the place for presentation reopens for business.

Issuing Bank hereby agrees with Beneficiary that documents presented for drawing in compliance with the terms of this Letter of Credit will be duly honored upon presentation at Issuing Bank's counters if presented on or before the expiry date.

Unless otherwise expressly stated herein, this Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits ("UCP"), 2007 Revision, International Chamber of Commerce Publication No. 600. Matters not covered by the UCP shall be governed and construed in accordance with the laws of the state of New York.

ISSUING BANK SIGNATURE

EXHIBIT F

DEFINITIONS

1) **Definitions**

In the Restated Precedent Agreement:

a) **"Capital Cost Tracking Adjustment"** has the meaning ascribed to that term in Section 3(d)(ii)(3).

b) "**Creditworthy**" has the meaning ascribed to that term in Section 12(a).

c) "**Customer**" has the meaning ascribed to that term in the recitals.

d) "**Customer's Authorizations**" has the meaning ascribed to that term in Section 2(a).

e) "**Customer's MDQ**" has the meaning ascribed to that term in Section 2(d).

f) "**Dawn**" has the meaning ascribed to that term in the recitals.

g) "**Default**" has the meaning ascribed to that term in Section 10.

h) "**Default Notice**" has the meaning ascribed to that term in Section 10.

i) "**DTE**" has the meaning ascribed to that term in the recitals.

j) "**Effective Date**" has the meaning ascribed to that term in the recitals.

k) "**Union**" has the meaning ascribed to that term in the recitals.

l) "**Estimated Commencement Date**" has the meaning ascribed to that term in Section 3(c).

m) "**FERC**" has the meaning ascribed to that term in Section 1(a).

n) "**FERC Interest Rate**" has the meaning ascribed to that term in Exhibit C.

o) "**Final Capital Cost**" has the meaning ascribed to that term in Exhibit C.

p) "**Final Capital Cost Estimate**" has the meaning ascribed to that term in Section 3(d)(ii)(3).

q) "**Final Estimated Reservation Rate**" has the meaning ascribed to that term in Section

3(d)(ii)(3).

r) "**Final Reservation Rate**" has the meaning ascribed to that term in Exhibit C.

s) "**Force Majeure**" has the meaning ascribed to that term in Section 9(c).

t) "**Forms of Commercial Agreements**" has the meaning ascribed to that term in Section 3(b).

u) "**Governmental Authorizations**" has the meaning ascribed to that term in Section 1(a).

v) "**Guarantor**" has the meaning ascribed to that term in Section 13(b)(i).

w) "**Guaranty**" has the meaning ascribed to that term in Section 13(b)(i).

x) "**In-Service Date Notice**" has the meaning ascribed to that term in Section 4(b).

y) "**International Border**" has the meaning ascribed to that term in the recitals.

z) "**Letter of Credit**" has the meaning ascribed to that term in Section 13(b)(ii).

aa) "**MDDO**" means maximum daily delivery obligation.

bb) "**MDRO**" means maximum daily receipt obligation.

cc) "**MDQ**" means maximum daily quantity.

dd) "**Moody's**" has the meaning ascribed to that term in Section 13(a).

ee) "**NEB**" has the meaning ascribed to that term in Section 1(a).

ff) "**Open Season**" has the meaning ascribed to that term in the recitals.

gg) "**Party**" or "**Parties**" has the meaning ascribed to that term in the recitals.

hh) "**Pipeline**" has the meaning ascribed to that term in the recitals.

ii) "**Pre-Service Costs**" has the meaning ascribed to that term in Section 8.

jj) "**Project**" has the meaning ascribed to that term in the recitals.

kk) "**Project Facilities**" has the meaning ascribed to that term in Section 3(d)(ii)(2).

ll) **"Project Facilities Rate Portion**" has the meaning ascribed to that term in Exhibit C.

mm) "**Qualified Institution**" has the meaning ascribed to that term in Section 13(b)(ii).

nn) **"Rate Agreement"** has the meaning ascribed to that term in Section 3(d)(ii)(3).

oo) "**Rate Breakdown**" has the meaning ascribed to that term in Section 3(d)(ii)(3)

pp) "**Reservation Rate**" has the meaning ascribed to that term in Section 1(c).

qq) "**ROFR**" has the meaning ascribed to that term in Section 3(f).

rr) "**S&P**" has the meaning ascribed to that term in Section 13(a).

ss) **"Service Agreement"** has the meaning ascribed to that term in Section 3(b).

tt) **"Service Commencement Date"** has the meaning ascribed to that term in Section 4(b).

uu) "**Spectra**" has the meaning ascribed to that term in the recitals.

vv) "**Updated Capital Cost**" has the meaning ascribed to that term in Exhibit C.

ww) "**Willow Run**" has the meaning ascribed to that term in the recitals.

May 28, 2015

Mark J. Isherwood
Vice President, Business Development
Union Gas Limited
50 Keil Dr. N.
Chatham, Ontario

Re: NEXUS-US Negotiated Rate Letter Agreement for Service Agreement No. 00004

Dear Mark:

DTE Pipeline Company ("DTE") and Spectra Energy Transmission, LLC ("Spectra") (where DTE and Spectra are collectively referred to herein as "Pipeline") and Union Gas Limited ("Customer") have entered into a Restated Precedent Agreement dated May 28, 2015 (the "Precedent Agreement") to contract for firm transportation service as part of the NEXUS Gas Transmission Project. The Precedent Agreement contemplates, *inter alia*, that Pipeline and Customer will enter into a negotiated rate agreement applicable to service provided by Pipeline to Customer pursuant to the terms and conditions contained in the Service Agreement. Customer acknowledges that it is electing negotiated rates as an alternative to the recourse rates that will be available for service under the NEXUS FERC Gas Tariff, as it may be in effect from time to time. The NEXUS FERC Gas Tariff will include appropriate provisions allowing for Pipeline to provide service to customers at negotiated rates in accordance with FERC's negotiated rates policies. In this letter and the attached Pro Forma Statement of Negotiated Rates, capitalized terms not otherwise defined herein and therein which are defined terms in the Precedent Agreement and Service Agreement, or either of them, as applicable, shall have the meanings given to them in such agreements, as applicable.

Pipeline and Customer hereby agree that the provisions of the attached *Pro Forma* Statement of Negotiated Rates reflect the terms of their agreement, including the effectiveness of the negotiated rate. After execution of this letter by both Pipeline and Customer and on or about 30 to 60 days prior to the Service Commencement Date, Pipeline shall file a Statement of Negotiated Rates with the Federal Energy Regulatory Commission ("FERC") containing rate-related provisions identical to those provisions on the attached *Pro Forma* Statement of Negotiated Rates in accordance with the General Terms and Conditions of the NEXUS FERC Gas Tariff. To the extent necessary to conform terms used in the NEXUS FERC Gas Tariff when filed with terms used in this negotiated rate agreement, the attached *Pro Forma* Statement of Negotiated Rates may be revised before Pipeline files it with FERC to conform to the NEXUS FERC Gas Tariff.

If the foregoing accurately sets forth your understanding of the matters contemplated herein, please so indicate by having a duly authorized representative sign in the space provided below and returning an original signed copy to the undersigned.

Sincerely,

NEXUS GAS TRANSMISSION (PIPELINE)

Name: David Slater
~~Executive Vice~~ President
DTE Pipeline Company

Name: Bill Yardley
Title: President
Spectra Energy Transmission, LLC

ACCEPTED AND AGREED TO
THIS 28 DAY OF May, 2015

UNION GAS LIMITED (CUSTOMER)

~~Name:~~
Title: Mark J. Isherwood
Vice-President, Business Development, Storage & Transmission

STATEMENT OF NEGOTIATED RATES 1/ 8/

Customer Name: Union Gas Limited

Service Agreement: Service Agreement No. 00004 2/ 4/

Project: As used in this Negotiated Rate Agreement, the term "Project" shall mean an approximately 250-mile greenfield pipeline and related facilities extending from eastern Ohio to various interconnections in Michigan, along with subscriptions of firm pipeline capacity on existing or expanding pipeline systems in Michigan for ultimate delivery to the international border between the United States and Canada near St. Clair, Michigan.

Term of Negotiated Rate: The term of this negotiated rate commences on the Service Commencement Date and continues for the Primary Term.

Rate Schedule: FT

MDQ: 150,000 Dth/d

Customer shall pay the following Reservation Rate, Commodity Rate, Fuel and Other Charges for service provided pursuant to Service Agreement 00004:

Reservation Rate: During the Primary Term, shall be as follows:

(1) Customer shall pay on a monthly basis a negotiated Reservation Charge per Dth per day of Customer's MDQ under Service Agreement No. 00004, equal to US$0.77, subject to further adjustment as set forth herein and in the Restated Precedent Agreement dated May 28, 2015 (the "Precedent Agreement"). 3/ 5/ 6/ 7/

(2) Customer shall also pay all other FERC approved demand charges and demand surcharges applicable to Customer's Contract No. 00004. 7/

Usage Rate and Fuel Rate: During the Primary Term, shall be as follows:

(1) The Usage-1 Charge shall be zero ($0.00) multiplied by the quantity of gas, in Dekatherms, delivered during the applicable Day. For all purposes hereunder, the "Usage-1 Charge" shall mean the charge at the negotiated commodity rate for volumes up to Customer's MDQ.
(2) The Usage-2 Charge shall be the maximum applicable Rate Schedule FT recourse Usage-2 Charge multiplied by the quantity of gas, in Dekatherms, delivered during the applicable Day that qualifies under NEXUS Pipeline's Rate Schedule FT for the Usage-2 Charge. For all purposes hereunder, the "Usage-2 Charge" shall mean the maximum recourse commodity charge rate applicable to Authorized Overrun quantities delivered by the Pipeline multiplied by the quantity of gas, in Dekatherms,

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delivered during the applicable Day in excess of Customer's MDQ, plus the applicable Fuel Rate and shrinkage and lost and unaccounted for gas charges applicable to Rate Schedule FT, in-kind.

(3) Customer shall also pay the Fuel Rate equal to the applicable Fuel Rate under NEXUS Pipeline's Rate Schedule FT (as calculated based upon the Commission approved ASA methodology and / or application of any Commission approved tracking mechanism), which Fuel Rate is currently anticipated to be 2 - 3%, and all other FERC approved usage charges and usage surcharges applicable to Customer's Contract No. 0004. 7/

Primary Receipt Point: The head of the Project facilities in eastern Ohio, which shall be the most upstream mainline receipt point into the greenfield pipeline portion of the Project, as Pipeline shall notify Customer, and which is currently anticipated to be at or near Kensington, OH.

Primary Delivery Point: Near a meter at an exact location to be determined at the international border between the United States and Canada, near St. Clair, Michigan.

Recourse Rate(s): The Recourse Rate(s) applicable to this service is the applicable maximum rate(s) stated on Pipeline's Statement of Rates for Rate Schedule FT as such rate may be in effect from time to time. Customer acknowledges that the negotiated rate may be lower than or higher than the applicable Recourse Rate as it may be in effect from time to time.

FOOTNOTES:

1/ This negotiated rate transaction does not deviate in any material respect from the form of service agreement to be set forth in Pipeline's FERC Gas Tariff.

2/ This negotiated rate shall apply only to transportation service under Service Agreement No. 00004, up to Customer's MDQ, using the Primary Receipt Point(s) and Primary Delivery Point(s) designated herein, and including at the negotiated rate any secondary receipt and delivery points available under Rate Schedule FT that are within the path of Customer's Primary Receipt Point(s) and Primary Delivery Point(s) ("Customer In Path Nominations", and the total scheduled quantity of Customer In Path Nominations for a given day, the "Customer Daily In Path Quantity"), except as otherwise provided herein.

Customer nominations from or to points outside of the path of Customer's primary point(s) are referred to hereinafter as "Customer Out of Path Nominations", and the total scheduled quantity of Customer Out of Path Nominations for a given day is hereinafter referred to as the "Customer Daily Out of Path Quantity". Related replacement shipper nominations that are outside of the path of Customer's primary points are referred to hereinafter as "Related Replacement Shipper Daily Out of Path Nominations", and the total scheduled quantity of Related Replacement Shipper Daily Out of Path Nominations (across all related replacement contracts) is hereinafter referred to as the "Related Replacement Shipper Daily Out of Path Quantity". The sum of the Customer Daily Out of Path Quantity plus the Related Replacement Shipper Daily Out of Path Quantity for a given day shall hereinafter be referred to as the Total Daily Out of Path Quantity. The Total Daily Out of Path Quantity shall be charged to Customer at the greater of the then effective maximum applicable rates for Rate Schedule FT, or the applicable negotiated rates, as more fully detailed below.

The reservation charges pursuant to this negotiated rate agreement will be calculated daily. When the negotiated Reservation Rate set forth above and applicable to Customer's service hereunder is greater than or equal to the then effective maximum applicable recourse reservation rate (inclusive of all reservation surcharges and other reservation charges) for Rate Schedule FT, the daily equivalent negotiated Reservation Rate shall apply each day to the MDQ. When the negotiated Reservation Rate set forth above is less than the then effective maximum applicable recourse reservation rate for Rate Schedule FT (inclusive of all reservation surcharges and other reservation charges), (1) the negotiated Reservation Rate shall apply each day to the greater of a) zero or b) the MDQ less the Total Daily Out of Path Quantity and (2) the daily equivalent maximum applicable recourse reservation rate (inclusive of all reservation surcharges and other reservation charges) applicable to service under Contract No. 00004 as effective from time to time under Pipeline's Rate Schedule FT-1 shall apply each day to the lesser of a) the MDQ or b) the Total Daily Out of Path Quantity.

The negotiated Usage-1 Rate as set forth above shall apply to the Customer Daily In Path Quantity. When the negotiated Usage-1 Rate set forth above is greater than or equal to the then effective maximum applicable recourse Usage-1 rate (inclusive of all usage surcharges and other usage charges) for Rate Schedule FT, the negotiated Usage-1 Rate shall apply to the Total Daily Out of Path Quantity, less a credit for the total Usage-1 charges assessed for the Related Replacement Shipper Daily Out of Path Quantity. When the negotiated Usage-1 Rate set forth above is less than the then effective maximum applicable recourse Usage-1 rate (inclusive of all usage surcharges and other usage charges) for Rate Schedule FT, the then effective maximum applicable recourse Usage-1 rate (inclusive of all usage surcharges and other usage charges) for Rate Schedule FT shall apply to the Total Daily Out of Path Quantity, less a credit for the total Usage-1 charges assessed for the Related Replacement Shipper Daily Out of Path Quantity.

The negotiated Fuel Rate as set forth above shall apply to the Customer Daily In Path Quantity and to the Customer Daily Out of Path Quantity.

The negotiated Usage-2 rate as set forth above shall apply to the portion of both the Customer Daily In Path Quantity and the Customer Daily Out of Path Quantity that qualifies under NEXUS Pipeline's Rate Schedule FT for the Usage-2 charge.

Provided, if Customer changes its primary point(s) listed above or the related MDROs or MDDOs at any time or from time to time, pursuant to the provisions of Pipeline's FERC Gas Tariff but without the written approval of Pipeline to continue the negotiated rate, Pipeline shall have the option to terminate this negotiated rate by providing Customer with written notice of

Pipeline's intent to do so and, in such case, this negotiated rate shall terminate and Pipeline's maximum applicable Recourse Rates for Rate Schedule FT shall apply for the remaining term of Service Agreement No. 00004, unless and until otherwise mutually agreed in writing between Customer and Pipeline.

3/ Pipeline and Customer acknowledge that the capital costs attributable to the greenfield facilities necessary to be constructed by Pipeline for the provision of service on the Project (the "Project Facilities"), which underlie a portion of the monthly Reservation Charge described in the Reservation Rate section above, is reflected in an estimate provided by Pipeline to Customer in accordance with the Precedent Agreement ("Final Capital Cost Estimate").

4/ Pipeline and Customer agree that Service Agreement No. 00004 is a ROFR Agreement.

5/ The Reservation Charge described in the Reservation Rate section above will be adjusted, pursuant to the provisions of this footnote 5, to reflect any difference between the Final Capital Cost Estimate and the actual amount of capital costs attributable to the Project Facilities, as reflected by Pipeline in an updated cost report for the Project, substantially in the form of an Exhibit K ("Updated Capital Cost"). Pipeline will provide the Updated Capital Cost report to the Customer at least thirty (30) days, but no more than sixty (60) days, prior to the in-service date of the Project, as such in-service date is estimated to occur by Pipeline at the time.

Pipeline will adjust the portion of the Reservation Rate attributable to the Project Facilities (the "Project Facilities Rate Portion") to reflect the percentage increase or decrease between the Updated Capital Cost and the Final Capital Cost Estimate. In the event that the Updated Capital Cost exceeds the Final Capital Cost Estimate, the Project Facilities Rate Portion will be adjusted upward by multiplying it by the ratio of the Updated Capital Cost to the Final Capital Cost Estimate; provided that, notwithstanding any other provisions contained herein, if the Updated Capital Cost exceeds the Final Capital Cost Estimate by more than 15%, then the multiplier to the Project Facilities Rate Portion will be 1.15. For the avoidance of doubt, in any event, the maximum upward adjustment shall be capped at 1.15 of what was set forth as the Project Facilities Rate Portion of the Final Reservation Rate in the Rate Breakdown provided to Customer by Pipeline in accordance with the Precedent Agreement. In the event that the Updated Capital Cost is less than the Final Capital Cost Estimate, the Project Facilities Rate Portion will be adjusted downward by multiplying it by the ratio of the Updated Capital Cost to the Final Capital Cost Estimate; provided that, notwithstanding any other provisions contained herein, if the Updated Capital Cost is less than the Final Capital Cost Estimate by more than 15%, then the multiplier to the Project Facilities Rate Portion will be 0.85. For the avoidance of doubt, in any event, the maximum downward adjustment shall be capped at 0.85 of what was set forth as the Project Facilities Rate Portion of the Final Reservation Rate in the Rate Breakdown provided to Customer by Pipeline in accordance with the Precedent Agreement.

No later than 210 days after the Service Commencement Date, Pipeline will provide to Customer a final cost report, and will file with the Commission an adjustment to Customer's then-effective adjusted Reservation Rate to reflect any increase or decrease between the Final Capital Cost Estimate and the final capital costs ("Final Capital Costs") as set forth in Pipeline's post-construction cost report filed with the Commission pursuant to Part 157.20(c)(3) of Title 18 of the Code of Federal Regulations, prepared in accordance with Section 157.14(a)(13). Such report will reflect Pipeline's final actual capital costs attributable to the Project Facilities. In the event that the Final Capital Costs are less than the Final Capital Cost Estimate, Pipeline will adjust downward the Project Facilities Rate Portion by multiplying it by the ratio of the Final Capital Costs to the Final Capital Cost Estimate; provided however that, notwithstanding any other provisions contained herein, the maximum downward adjustment shall be capped at 0.85 of what was set forth as the Project Facilities Rate Portion of the Final Reservation Rate in the Rate Breakdown provided to Customer by Pipeline in accordance with the Precedent Agreement. In such event, Pipeline will refund via an invoice credit to Customer an amount (including interest at the Commission's approved interest rate pursuant to 18 C.F.R. §154.501, hereafter the "FERC Interest Rate") equal to the difference between such rates for the time period that Customer paid the higher rate. In the event that the Final Capital Costs are more than the Final Capital Cost Estimate, Pipeline will adjust upward the Project Facilities Rate Portion by multiplying it by the ratio of the Final Capital Costs to the Final Capital Cost Estimate; provided however that, notwithstanding any other provisions contained herein, the maximum upward adjustment shall be capped at 1.15 of what was set forth as the Project Facilities Rate Portion of the Final Reservation Rate in the Rate Breakdown provided to Customer by Pipeline in accordance with the Precedent Agreement. In such event, Customer will pay Pipeline an amount (including interest at the FERC Interest Rate) equal to the difference between such rates for the time period that Customer paid such lower rate.

6/ Prior to filing this statement of negotiated rates to reflect the Updated Capital Cost, the negotiated Reservation Rate stated above will be replaced with the adjusted Reservation Rate, which is the applicable rate updated to reflect estimated and actual cost increases or decreases according to the cost sharing rate adjustments set forth in footnotes 3 and 5.

7/ Customer agrees to pay the applicable Annual Charge Adjustment surcharge and any existing and any future surcharge or other charge approved by FERC in a generic proceeding or in a Pipeline-specific proceeding, which mechanism recovers cost components not reflected in Pipeline's initial recourse rates applicable to this FT Service Agreement and which surcharge or other charge is designed to recover costs that are incurred due to a mandate from FERC or any other governmental authority, or otherwise related to pipeline safety or environmental compliance costs associated with Pipeline's operations pursuant to the NEXUS FERC Gas Tariff.

8/ In this Negotiated Rate Agreement, capitalized terms not otherwise defined herein which are defined terms in the Precedent Agreement and Service Agreement, or either of them, as applicable, shall have the meanings given to them in such agreements, as applicable.

May 28, 2015

Mark J. Isherwood
Vice President, Business Development
Union Gas Limited
50 Keil Dr. N.
Chatham, Ontario

Re: Rate Breakdown and Final Capital Cost Estimate Under Restated Precedent Agreement Dated May 28, 2015

Dear Mark:

DTE Pipeline Company ("DTE") and Spectra Energy Transmission, LLC ("Spectra") (where DTE and Spectra are collectively referred to herein as "Pipeline") and Union Gas Limited ("Customer") have entered into a Restated Precedent Agreement dated May 28, 2015 (the "Precedent Agreement") to contract for firm transportation service as part of the NEXUS Gas Transmission Project. All capitalized terms used but not defined in this letter have the meanings given them in the Precedent Agreement.

The Precedent Agreement provides in Section 3(d)(ii)(3) that Pipeline shall deliver to Customer a Rate Breakdown in connection with the Rate Agreement, consisting of a final breakdown of how Pipeline derived the Final Estimated Reservation Rate reflected in the Rate Agreement, including a breakdown of such portion of the Final Estimated Reservation Rate that is derived from the estimated capital costs associated with the construction of the Project Facilities that will be required to be constructed and owned by Pipeline or constructed and owned by a third party on third party owned existing pipeline systems for the provision of transportation service for the Project. Section 3(d)(ii)(3) further provides that Pipeline shall deliver to Customer an estimate of the capital costs associated with the construction of the Project Facilities (defined as the "Final Capital Cost Estimate").

Consistent with Section 3(d)(ii)(3), the Rate Breakdown and the Final Capital Cost Estimate are set forth below. Consistent with Exhibit C to the Precedent Agreement and the Rate Agreement, such Final Capital Cost Estimate will be the base cost for purposes of comparison to the Updated Capital Cost and application of the capital cost tracker and rate adjustment provisions of Exhibit C to the Precedent Agreement and the Rate Agreement.

Rate Breakdown

The Final Estimated Reservation Rate, as set forth in the separately provided Rate Agreement, includes the following portion derived from the estimated capital costs associated with the construction of the Project Facilities for Customer's service under the Service Agreement: $0.635 US/dth. For the avoidance of doubt, such amount is the Project Facilities

Rate Portion as such term is defined and used in the Precedent Agreement and the Rate Agreement.

Final Capital Cost Estimate

The capital costs associated with construction of the Project Facilities are currently estimated to be $2,019,000,000.00. For the avoidance of doubt, such estimate is the Final Capital Cost Estimate as such term is defined and used in the Precedent Agreement and the Rate Agreement.

If the foregoing accurately sets forth your understanding of the matters contemplated herein, please so indicate by having a duly authorized representative sign in the space provided below and returning an original signed copy to the undersigned.

Sincerely,

NEXUS GAS TRANSMISSION
(PIPELINE)

Name: Bill Yardley
Title: President
Spectra Energy Transmission, LLC

ACCEPTED AND AGREED TO
THIS 27 DAY OF May, 2015

UNION GAS LIMITED (CUSTOMER)

Name:
Title: Mark J. Isherwood
Vice-President, Business Development, Storage & Tran...

FIRST AMENDMENT TO RESTATED PRECEDENT AGREEMENT

This First Amendment to Restated Precedent Agreement (this "Amendment") is made and entered into as of May 1, 2017 between NEXUS Gas Transmission, LLC, (successor in interest to DTE Pipeline Company and Spectra Energy Transmission, LLC) ("Pipeline"), and Union Gas Limited ("Customer"). Pipeline and Customer are sometimes referred to individually as a "Party" and collectively as the "Parties". Capitalized terms used but not otherwise defined herein have the meanings given to them in the Precedent Agreement, as defined below.

RECITALS

WHEREAS, the Parties entered into that certain Restated Precedent Agreement dated May 28, 2015 (the "Precedent Agreement"), for the purpose of setting forth the terms according to which Customer would commit to, and Pipeline would provide to Customer, firm natural gas transportation service on the Project; and

WHEREAS, the Parties wish to amend the Precedent Agreement with respect to certain conditions precedent.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged by the Parties as sufficient and received, the Parties hereby agree that the Precedent Agreement shall be amended as follows, effective as of the date indicated above, with the Precedent Agreement remaining otherwise in full force and effect in accordance with its terms:

1. Section 7(b)(ii) is amended by deleting the phrase "May 1, 2017" in the second line thereof and replacing it with the phrase "August 1, 2017".

2. Section 7(b)(iv) is amended by deleting the phrase "May 1, 2017" in the first and second lines thereof and replacing it with the phrase "August 1, 2017".

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused their duly authorized representatives to execute this Amendment as of the date first written above.

NEXUS Gas Transmission, LLC
By: Spectra Energy NEXUS Management, LLC, in its capacity as operator

By:
Name: Brian R McKerlie
Title: V.P.

Union Gas Limited

By:
Name:
Title:
CHERYL NEWBURY
DIRECTOR, GAS SUPPLY AND CUSTOMER SUPPORT

SECOND AMENDMENT TO RESTATED PRECEDENT AGREEMENT

This Second Amendment to Restated Precedent Agreement (this "Amendment") is made and entered into as of July 31, 2017 between NEXUS Gas Transmission, LLC, (successor in interest to DTE Pipeline Company and Spectra Energy Transmission, LLC) ("Pipeline"), and Union Gas Limited ("Customer"). Pipeline and Customer are sometimes referred to individually as a "Party" and collectively as the "Parties". Capitalized terms used but not otherwise defined herein have the meaning given to them in the Precedent Agreement, as defined below.

RECITALS

WHEREAS, the Parties entered into a Restated Precedent Agreement dated May 28, 2015 (as the same has been amended from time to time, the "Precedent Agreement"), for the purpose of setting forth the terms according to which Customer would commit to, and Pipeline would provide to Customer, firm Transportation Service on the Project; and

WHEREAS, the Parties wish to amend the Precedent Agreement as specified herein.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged by the Parties as sufficient and received, the Parties hereby agree that the Precedent Agreement shall be amended as follows, effective as of the date indicated above, with the Precedent Agreement remaining otherwise in full force and effect in accordance with its terms:

1. Section 6 is amended by adding the following sentence immediately prior to the last sentence of the section that begins with "Subject to Section 9(a)": "Notwithstanding anything to the contrary in the forgoing, the Parties agree that in the event that the Service Commencement Date does not occur on or prior to the Estimated Service Commencement Date, then the Service Commencement Date shall be a date that is the later of April 1, 2018 or such other date as notified by Pipeline to Customer in accordance with Section 4 in the In-Service Date Notice; provided however that if the Project Facilities are completed and ready for the provision of the firm transportation service provided for herein and in the Service Agreement prior to April 1, 2018 (such date the "**Early Service Date**"), then Union may, at its option, have its Service Commencement Date be the same as the Early Service Date.."

2. Section 7(b)(ii) is amended by deleting the phrase "August 1, 2017" and replacing it with the phrase "September 1, 2017".

3. Section 7(b)(iv) is amended by deleting the phrase "August 1, 2017" and replacing it with the phrase "September 1, 2017".

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused their duly authorized representatives to execute this Amendment as of the date first written above.

NEXUS Gas Transmission, LLC
By: Spectra Energy NEXUS Management, LLC, in its capacity as operator

By: [signature]
Name: Brian R McKerlie
Title: V.P.

Union Gas Limited

By: [signature]
Name: Cheryl Newbury
Title: Director, Gas Supply and Customer Support

THIRD AMENDMENT TO RESTATED PRECEDENT AGREEMENT

This Third Amendment to Restated Precedent Agreement (this "Amendment") is made and entered into as of August 29, 2017 between NEXUS Gas Transmission, LLC, (successor in interest to DTE Pipeline Company and Spectra Energy Transmission, LLC) ("Pipeline"), and Union Gas Limited ("Customer"). Pipeline and Customer are sometimes referred to individually as a "Party" and collectively as the "Parties". Capitalized terms used but not otherwise defined herein have the meaning given to them in the Precedent Agreement, as defined below.

RECITALS

WHEREAS, the Parties entered into a Restated Precedent Agreement dated May 28, 2015 (as the same has been amended from time to time, the "Precedent Agreement"), for the purpose of setting forth the terms according to which Customer would commit to, and Pipeline would provide to Customer, firm Transportation Service on the Project; and

WHEREAS, the Parties wish to amend the Precedent Agreement as specified herein.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged by the Parties as sufficient and received, the Parties hereby agree that the Precedent Agreement shall be amended as follows, effective as of the date indicated above, with the Precedent Agreement remaining otherwise in full force and effect in accordance with its terms:

1. Section 7(b)(ii) is amended by deleting the phrase "September 1, 2017" and replacing it with the phrase "December 1, 2017".

2. Section 7(b)(iv) is amended by deleting the phrase "September 1, 2017" and replacing it with the phrase "December 1, 2017".

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused their duly authorized representatives to execute this Amendment as of the date first written above.

NEXUS Gas Transmission, LLC
By: Spectra Energy NEXUS Management, LLC,
in its capacity as operator

By: ______________________
Name: Brian Rockenfie
Title: V.P.

Union Gas Limited

By: ______________________
Name: Cheryl Newbury
Title: Director, Gas Supply and Customer Support

Dawn LTFP Landed Cost Analysis

Nov 2017 - Oct 2032 Transportation Contracting Analysis

	Route	Point of Supply	Basis Differential $US/mmBtu	Supply Cost $US/mmBtu	Unitized Demand Charge $US/mmBtu	Commodity Charge $US/mmBtu	Fuel Charge $US/mmBtu	100% LF Transportation Inclusive of Fuel $US/mmBtu	Landed Cost $US/mmBtu	Landed Cost $Cdn/G	Point of Delivery	Comments
	(A)	(B)	(C)	(D) = Nymex + C	(E)	(F)	(G)	(I) = E + F + G	(J) = D + I	(K)	(L)	
(6)	**TCPL Niagara to Kirkwall**	Niagara	-0.403	3.8617	0.1943	0.0000	0.0076	0.2019	$4.06	**$4.81**	Kirkwall	
(3)	**Rover**	Southwest PA	-1.061	3.2035	0.8000	0.0000	0.0772	0.8772	$4.08	**$4.83**	Dawn	
*	**NEXUS / St. Clair**	Southwest PA	-1.061	3.2035	0.8005	0.0034	0.0848	0.8887	$4.09	**$4.84**	Dawn	Includes St. Clair to Dawn costs
(2)	**TCPL LTFP Open Season**	Empress	-0.939	3.3249	0.6507	0.0000	0.1182	0.7689	$4.09	**$4.84**	Dawn	Assumes $0.77 CAD/GJ toll
(5)	**NEXUS/St. Clair (Increase Upper end of toll by 15%)**	Southwest PA	-1.061	3.2035	0.8960	0.0034	0.0848	0.9842	$4.19	**$4.96**	Dawn	Toll is $ 0.77 USD/Dth + $ 0.635*15%. Includes St. Clair to Dawn rate
(2)	**Dawn**	Dawn	-0.038	4.2258	0.0000	0.0000	0.0000	0.0000	$4.23	**$5.00**	Dawn	
(6)	**DTE (Michcon)**	Michcon Generic	-0.150	4.1147	0.0788	0.0034	0.0508	0.1330	$4.25	**$5.03**	Dawn	Includes St. Clair to Dawn rate
(6)	**Vector (Contract #5649/5571)**	Chicago	-0.199	4.0656	0.1682	0.0017	0.0451	0.2150	$4.28	**$5.07**	Dawn	Blended Negotiated Rate, Combinded term Nov 16 - Oct 17
(6)	**Vector (Contract #5577)**	Chicago	-0.199	4.0656	0.1800	0.0017	0.0451	0.2268	$4.29	**$5.08**	Dawn	Negotiated Rate Effective Dec 1, 2017. Contract Term Apr 16 - Oct 22
(6)	**Vector (2014 - 2017)**	Chicago	-0.199	4.0656	0.1888	0.0017	0.0451	0.2356	$4.30	**$5.09**	Dawn	Negotiated Rate, Contract term Nov 14 - Oct 17
(6)	**Panhandle (2012-2017)**	Panhandle Field Zone	-0.338	3.9258	0.3500	0.0475	0.1711	0.5686	$4.49	**$5.32**	Dawn	Negotiated Rate
(6)	**Panhandle (2010-2017)**	Panhandle Field Zone	-0.338	3.9258	0.4555	0.0471	0.1711	0.6738	$4.60	**$5.44**	Dawn	Existing Contracts, Max Rate
(6)	**Trunkline / Panhandle**	Trunkline Field Zone 1A	-0.054	4.2106	0.2212	0.0275	0.1416	0.3902	$4.60	**$5.44**	Dawn	Negotiated Rate, Includes St. Clair to Dawn rate
(2)	**TCPL Empress to Union SWDA (DAWN)**	Empress	-0.939	3.3249	1.5744	0.0000	0.1182	1.6926	$5.02	**$5.94**	Dawn	
(6)	**TCPL Empress to Union ECDA**	Empress	-0.939	3.3249	1.6817	0.0000	0.1221	1.8038	$5.13	**$6.07**	Dawn	

(1) Unitized Demand Charges, Commodity Charges and Fuel Charges per Maximum Applicable Tariff and include capacity required to flow fuel for downstream pipeline segments
(2) For Reference Only
(3) Toll Estimates used in lieu of official toll for portion of path
(5) Sensitivity Analysis
(6) Existing Union Contract
* indicates path referenced in evidence for this analysis

Assumptions used in Developing Transportation Contracting Analysis:

	Annual Gas Supply & Fuel Ratio Forecasts	Point of Supply Col (B) above	Nov 2017 - Oct 2018	Nov 2018 - Oct 2019	Nov 2019 - Oct 2020	Nov 2020 - Oct 2021	Nov 2021 - Oct 2022	Nov 2022 - Oct 2023	Nov 2023 - Oct 2024	Nov 2024 - Oct 2025	Nov 2025 - Oct 2026	Nov 2026 - Oct 2027	Nov 2027 - Oct 2028	Nov 2028 - Oct 2029	Nov 2029 - Oct 2030	Nov 2030 - Oct 2031	Nov 2031 - Oct 2032	Average Annual Gas Supply Cost $US/mmBtu Col (D) above	Fuel Ratio Forecasts Col (G) above
	Henry Hub (NYMEX)	Henry Hub	$3.67	$3.56	$3.31	$3.44	$3.81	$4.08	$4.18	$4.25	$4.43	$4.53	$4.49	$4.55	$4.87	$5.22	$5.59	$4.26	
	TCPL Niagara to Kirkwall	Niagara	$3.47	$3.23	$3.04	$3.13	$3.35	$3.68	$3.66	$3.96	$4.08	$4.17	$4.07	$4.09	$4.34	$4.64	$5.02	$3.86	0.20%
	Rover	Southwest PA	$2.62	$2.40	$2.21	$2.40	$2.68	$2.98	$3.03	$3.36	$3.52	$3.61	$3.53	$3.54	$3.75	$4.03	$4.38	$3.20	2.41%
	NEXUS / St. Clair	Southwest PA	$2.62	$2.40	$2.21	$2.40	$2.68	$2.98	$3.03	$3.36	$3.52	$3.61	$3.53	$3.54	$3.75	$4.03	$4.38	$3.20	2.65%
	TCPL LTFP Open Season	Empress	$2.77	$2.64	$2.44	$2.60	$2.97	$3.17	$3.21	$3.38	$3.49	$3.63	$3.53	$3.55	$3.80	$4.14	$4.56	$3.32	3.56%
	NEXUS/St. Clair (Increase Upper end of toll by 15%)	Southwest PA	$2.62	$2.40	$2.21	$2.40	$2.68	$2.98	$3.03	$3.36	$3.52	$3.61	$3.53	$3.54	$3.75	$4.03	$4.38	$3.20	2.65%
	Dawn	Dawn	$3.73	$3.56	$3.33	$3.46	$3.79	$4.00	$4.04	$4.22	$4.38	$4.52	$4.43	$4.49	$4.78	$5.11	$5.54	$4.23	0.00%
	DTE (Michcon)	Michcon Generic	$3.62	$3.44	$3.22	$3.35	$3.68	$3.89	$3.93	$4.11	$4.27	$4.41	$4.32	$4.38	$4.67	$5.00	$5.43	$4.11	1.23%
	Vector (Contract #5649/5571)	Chicago	$3.53	$3.36	$3.16	$3.29	$3.63	$3.84	$3.89	$4.07	$4.22	$4.37	$4.28	$4.34	$4.64	$4.97	$5.40	$4.07	1.11%
	Vector (Contract #5577)	Chicago	$3.53	$3.36	$3.16	$3.29	$3.63	$3.84	$3.89	$4.07	$4.22	$4.37	$4.28	$4.34	$4.64	$4.97	$5.40	$4.07	1.11%
	Vector (2014 - 2017)	Chicago	$3.53	$3.36	$3.16	$3.29	$3.63	$3.84	$3.89	$4.07	$4.22	$4.37	$4.28	$4.34	$4.64	$4.97	$5.40	$4.07	1.11%
	Panhandle (2012-2017)	Panhandle Field Zone	$3.33	$3.16	$3.02	$3.16	$3.52	$3.68	$3.75	$3.95	$4.08	$4.23	$4.15	$4.22	$4.53	$4.86	$5.26	$3.93	4.36%
	Panhandle (2010-2017)	Panhandle Field Zone	$3.33	$3.16	$3.02	$3.16	$3.52	$3.68	$3.75	$3.95	$4.08	$4.23	$4.15	$4.22	$4.53	$4.86	$5.26	$3.93	4.36%
	Trunkline / Panhandle	Trunkline Field Zone 1A	$3.63	$3.51	$3.26	$3.39	$3.76	$4.02	$4.13	$4.20	$4.37	$4.47	$4.43	$4.49	$4.81	$5.16	$5.52	$4.21	3.36%
	TCPL Empress to Union SWDA (DAWN)	Empress	$2.77	$2.64	$2.44	$2.60	$2.97	$3.17	$3.21	$3.38	$3.49	$3.63	$3.53	$3.55	$3.80	$4.14	$4.56	$3.32	3.56%
	TCPL Empress to Union ECDA	Empress	$2.77	$2.64	$2.44	$2.60	$2.97	$3.17	$3.21	$3.38	$3.49	$3.63	$3.53	$3.55	$3.80	$4.14	$4.56	$3.32	3.67%

Sources for Assumptions:

Gas Supply Prices (Col D):	ICF Q2 2017 Base Case		
Fuel Ratios (Col G):	Average ratio over the previous 12 months or Pipeline Forecast		
Transportation Tolls (Cols E & F):	Tolls in effect on Alternative Routes at the time of Union's Analysis		
Foreign Exchange (Col K)	$1 US =	$1.249 CDN	From Bank of Canada Daily Rate July 31, 2017
Energy Conversions (Col K)	1 dth = 1 mmBtu =	1.055056	
Union's Analysis Completed:	July 2017		

Paths included in analysis are those with comparable services available for contracting, as well as relevant benchmarks and currently contracted paths.

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 1, p.8

Preamble: In the Decision EB-2016-0186 the Board required that:

5. Union shall file, in the proceeding where the actual capital costs of the project are proposed to be included in rate base, a Post Construction Financial Report, which shall indicate the actual capital costs of the project and shall provide an explanation for any significant variances from the cost estimates filed in this proceeding. (EB-2016-0186 Schedule C, Conditions of Approval)

a) Has Union filed with this Application the referenced Post Construction Report? If yes, please provide the reference. If not, please explain when this report is intended to be filed.

Response:

a) The Post Construction Report for the 2017 Panhandle Reinforcement Project has not been filed. The report is intended to be filed in early 2019 when the project close out has been completed and all expenditures are accounted for.

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 1, p.15

a) Union explains that it "is proposing to update the Rate M12 Schedule "C" to include the fuel ratio and fuel rate for westerly transportation from Kirkwall to Dawn available under the M12-X service, effective January 1, 2018." What is Union updating from – that is, what is the current fuel ratio and fuel rate for this rate schedule?

b) How was the C1 Kirkwall to Dawn fuel ratio of 0.158% derived?

c) How was the authorized overrun fuel ratio of 0.778% derived?

Response:

a) Please see the response at Exhibit B.Staff.5.

b) and c) Please see Table 1 for the derivation of the Rate C1 Kirkwall to Dawn transportation service and proposed authorized overrun fuel ratios.

Table 1
Derivation of Proposed 2018 Kirkwall to Dawn
Transportation Service and Authorized Overrun Fuel Ratios

Line No.	Particulars	Transportation Service	Authorized Overrun
		(a)	(b)
	2013 Approved		
1	Throughput Volumes (10^3m^3) (1)	41,575,027	41,575,027
2	UFG Volumes (10^3m^3) (1)	63,573	63,573
3	UFG Factor (Line 2 / Line 1)	0.153%	0.153%
4	Authorized Overrun Factor	-	0.600%
5	2014-2018 PCI Adjustments (2)	0.005%	0.025%
6	Proposed 2018 M12-X/C1 Fuel Ratio	0.158%	0.778%

Notes:

(1) Excludes throughput and UFG volumes associated with unregulated and excess utility storage space.

(2) Applied PCI adjustments of 0.510%, 0.820%, 0.800%, 0.660% and 0.510% for 2014 to 2018 Rates, respectively.