uniongas
An Enbridge Company

August 24, 2018

BY EMAIL, COURIER & RESS

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

Dear Ms. Walli:

Re: EB-2018-0105 - Union Gas Limited - 2017 Disposition of Deferral Account Balances and 2017 Utility Earnings – Interrogatory Responses

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

As requested, Union has sent a live electronic copy of Exhibit B.FRPO.8, Attachment 1 and Exhibit B.FRPO.9, Attachment 1 directly to FRPO, copying the Board. Other parties who wish to receive a live electronic copy of the documents can contact Union directly.

If you have any questions concerning this submission please contact me at (519) 436-5334.

Yours truly,

[Original Signed by]

Vanessa Innis
Manager, Regulatory Applications

c.c.: Crawford Smith *(Torys)*
Lawrie Gluck *(OEB)*
Michael Millar *(OEB)*
EB-2018-0105 Intervenors

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Deferral and Variance Account Balance Summary
Exhibit A, Tab 1, Appendix A, Schedule 1

Preamble:

Union requested disposition of gas supply, storage and other deferral accounts. The net balance in the deferral accounts requested for disposition is a $2.2 million debit from ratepayers as at December 31, 2017.

Question:

a) Please provide a statement confirming whether the balances proposed for disposition are consistent with the account balances reported in the applicant's 2017 RRR filing (2.7.1) and its 2017 audited financial statements.

b) For each account requested for disposition, please provide a continuity schedule for the period commencing from the establishment of the account or from the last approved disposition of the account, whichever is more recent, to the date of the most recent audited actuals. This continuity should show separate itemization of opening balances, new amounts recorded during the period, approved dispositions, other adjustments, interest, and closing balances.

c) Are there any deferral and variance accounts with balances that are not being brought forward for disposition as part of this application and which are not cleared through the Quarterly Rate Adjustment Mechanism proceeding, the Demand Side Management deferral account proceeding, or the Cap-and-Trade compliance plan proceeding? If so, please provide details including the account name, balances and reasons for not seeking disposition.

d) Were there any adjustments made to deferral and variance account balances that were previously approved by the OEB on a final basis? If so, please provide an explanation of the nature and amount of any adjustment and include any supporting documentation.

Response:

a) The balances proposed for disposition are consistent with the account balances reported in Union's 2017 RRR filing and the 2017 audited financial statements with the following exceptions:

- Certain deferral accounts had true-ups recorded in 2018. For details, please refer to Attachment 1, Column (h).

b) Please see Attachment 1.

c) No.

d) Yes. Please see the responses at Exhibit B.Staff.10 a) and Exhibit B.Staff.11. The impact of the adjustments are included in the filed 2017 deferral balances.

Deferrals Continuity Schedule ($000's)

No.	Account Number	Account Name	Balance at Dec. 31, 2016	2017 True-up to 2016 Balance	Interest on 2016 Balance	2016 Deferrals Disposition	2017 Activity	Interest on 2017 Balance	Balance at Dec. 31, 2017	2018 True-up to 2017 Balance	2017 Total	2017 Filed	Difference
			(a)	(b)	(c)	(d)	(e)	(f)	(g) = (a)+(b)+...+(f)	(h)	(i) = (g) + (h)	(j)	(k) = (i) - (j)
1	179-70	Short-Term Storage and Other Balancing Services	(2,226)	-	(18)	2,244	1,183	-	1,183	-	1,183	1,183	-
2	179-108	Unabsorbed Demand Costs (UDC) Variance Account	3,006	(4)	25	(3,027)	(4,133)	(26)	(4,159)	-	(4,159)	(4,159)	-
3	179-112	Gas Distribution Access Rule (GDAR) Costs	502	-	-	(443)	17	-	76	-	76	76	-
4	179-123	Conservation Demand Management [2]	-	-	-	-	(245)	-	(245)	-	(245)	(245)	-
5	179-131	Upstream Transportation Optimization	11,646	-	96	(11,742)	11,057	-	11,057	-	11,057	11,057	-
6	179-132	Deferral Clearing Variance Account	237	-	2	(239)	2,566	24	2,590	-	2,590	2,590	-
7	179-133	Normalized Average Consumption	23,631	-	193	(23,824)	(2,926)	12	(2,914)	-	(2,914)	(2,914)	-
8	179-134	Tax Variance	(113)	(85)	(2)	199	(292)	(1)	(294)	(38)	(332)	(331)	(1) [1]
9	179-135	Unaccounted for Gas (UFG) Volume Variance Account	5,664	(475)	44	(5,232)	-	-	1	-	1	-	1 [1]
10	179-136	Parkway West Project Costs	(1,217)	(198)	(11)	1,426	(599)	(2)	(601)	73	(528)	(528)	-
11	179-137	Brantford-Kirkwall/Parkway D Project Costs	(1,804)	206	(13)	1,612	(756)	(4)	(759)	(108)	(867)	(868)	1 [1]
12	179-138	Parkway Obligation Rate Variance	2,862	(40)	23	(2,846)	(121)	-	(122)	-	(122)	(121)	(1) [1]
13	179-141	Unaccounted for Gas (UFG) Price Variance Account	(1,205)	5	(10)	1,209	163	1	163	(61)	102	103	(1) [1]
14	179-142	Lobo C Compressor/Hamilton-Milton Pipeline Project Costs	2,067	(368)	15	(1,714)	(5,704)	(31)	(5,735)	(592)	(6,327)	(6,327)	-
15	179-143	Unauthorized Overrun Non-Compliance Account	(107)	-	(1)	107	(8)	-	(9)	-	(9)	(8)	(1) [1]
16	179-144	Lobo D/Bright C/Dawn H Compressor Project Costs	522	1	4	(527)	4,124	6	4,130	788	4,918	4,918	-
17	179-149	Burlington-Oakville Project Costs	262	(5)	2	(259)	(3,354)	(17)	(3,371)	(106)	(3,477)	(3,477)	-
18	179-151	OEB Cost Assessment Variance Account	833	(829)	(3)	-	1,159	8	1,168	-	1,168	1,167	1 [1]
19	179-156	Panhandle Reinforcement Project Costs	-	-	-	-	59	-	59	24	83	83	-

Notes:

1 Rounding.

2 For Line No. 4 (Conservation Demand Management), the last approved disposition of the account was in 2015. The 2015 RRR had a credit balance of $350,000. The only activity in 2016 ($138,000 less $3,000 of interest) was related to 2015. The final credit balance of $214,000 was disposed of in the 2015 Deferral Filing EB-2016-0118. There was no 2016 activity that related to 2016.

3 Amounts in the 'Balance at Dec. 31, 2017' column (g) agree with balances reported in the 2017 RRR filing and the 2017 audited financial statements, with the exception of $1 for rounding.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Unabsorbed Demand Costs (UDC) Variance Account
Exhibit A, Tab 1, pages 2-5

Preamble:

Union noted that its 2017 approved rates included planned unutilized pipeline capacity of 9.5 PJ in Union North West, 3.1 PJ in Union North East and 0 PJ in Union South. Union cited schedules from both the Dawn Reference Price proceeding and the 2017 rates proceeding where these volumes can be found.

Question:

a) Can you please advise where, in the cited schedules (footnotes found at Exhibit A / Tab 1 / p. 2), these volumes can be found or how they can be derived?

b) Please provide the detailed calculation for the actual UDC collected in rates amount of $11.9 million.

Response:

a) The cited schedules show the capacities and costs for Union's entire transportation portfolio. The UDC figures are not shown separately within the tables referenced.

Table 1 below details the UDC by delivery area.

Table 1
2017 Unabsorbed Demand Charge (UDC) in Rates (PJ)

Delivery Area	**Long-haul**	**Short-haul**	**Total**
North West			
MDA	1.4		1.4
WDA	7.9		7.9
SSMDA	0.2		0.2
Total North West			**9.5**
North East			
NDA	0.2	1.1	1.3
NCDA	0.4	0.1	0.5
EDA	0.0	1.3	1.3
Total North East			**3.1**
Union Total	**10.1**	**2.5**	**12.6**

b) Please see Table 2 below for the calculation of the actual UDC collected in rates:

Table 2
UDC Collected in Rates

Rate Class	**Volumes excluding T-service 10^3m^3**	**Rate per m^3**	**Total UDC Rate Recovery ($000's)**
Rate_01	963,968	9.636	9,289
Rate_10	352,561	6.212	2,190
Rate_20 GS Demand	5,909	31.691	187
Rate_20 Trans Comm	63,327	2.153	136
Rate_25	39,902	2.506	100
	1,425,667		11,903

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Upstream Transportation Optimization Variance Account
Exhibit A, Tab 1, page 6

Preamble:

Union noted that, on an actual basis, it credited $15.57 million in rates in 2017 related to optimization revenues. This is $2.15 million greater than the OEB-approved amount of $13.43 million.

Question:

a) Please provide the detailed calculation supporting the actual $15.57 million amount credited in rates.

Response:

a) Please see Table 1 below.

Table 1
2017 Gas Supply Optimization Margin

					2017 Actuals	
Line No	**Rate Class**	**Total Margin (1)**	**Billing Units (2)**	**2017 Unit Rate**	**Act Volume**	**Act Margin**
		(000's)	**10^3m^3**	**(cents/m3)**	**10^3m^3**	**(000's)**
1	Rate 01	(3,920)	926,963	(0.4229)	963,968	(4,077)
2	Rate 10	(1,342)	343,530	(0.3906)	352,561	(1,377)
3	Rate 20 (Gas Supply Demand)	(286)	6,873	(4.1642)	5,909	(246)
4	Rate 20 (Comm Transportation)	(191)	73,456	(0.2597)	63,327	(164)
5	Rate 25	(117)	42,913	(0.2720)	39,902	(109)
6	**Total Union North**	**(5,856)**				**(5,973)**
7	**Total Union South**	**(7,571)**	2,680,616	(0.2824)	3,398,373	**(9,597)**
8	**Total Exchanges Revenue**	**(13,427)**				**(15,570)**

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 43, Line 3, column e.
(2) Union North transportation billing units per Rate Order, Working Papers, Schedule 4, column (t).
Union South billing units are 2013 Board-approved Sales Volumes per EB-2011-0210.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Short-Term Storage and Other Balancing Services Variance Account
Exhibit A, Tab 1, Appendix A, Schedule 3

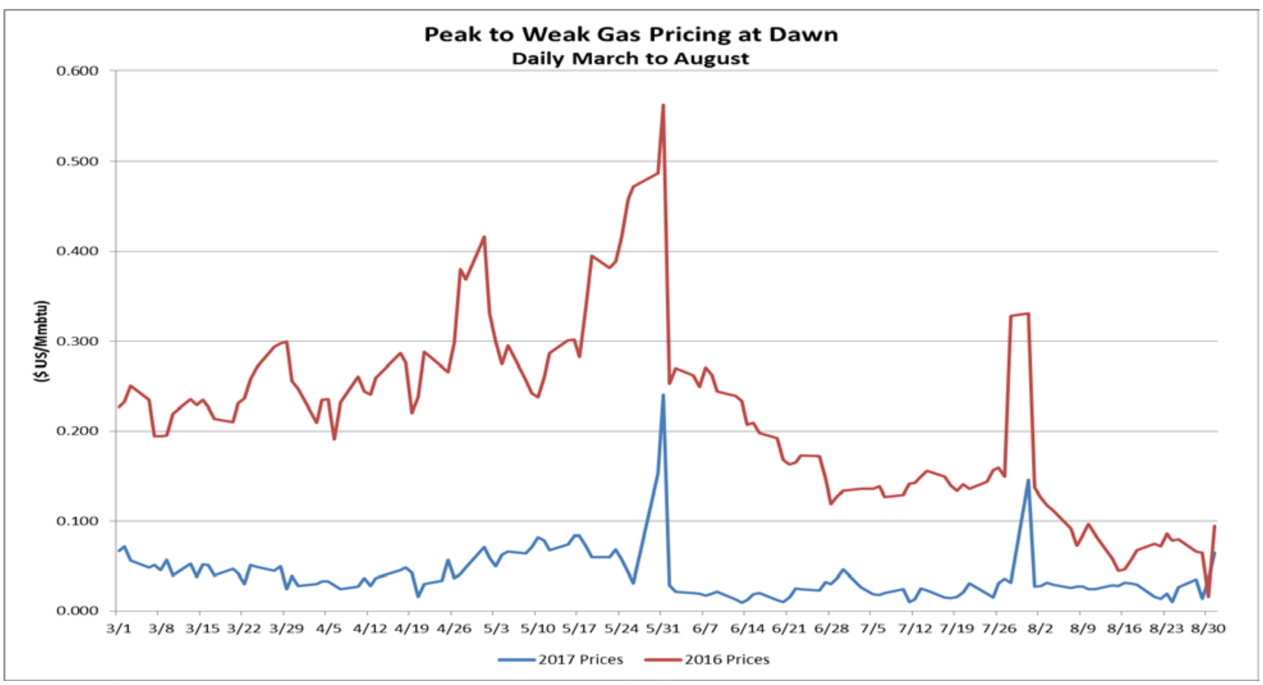
Question:

a) Please explain the year-over-year reduction from $2.7 million (actual 2016) to $0.7 million (actual 2017) in C1 off-peak storage revenues.

Response:

a) The primary reason for the year-over-year reduction in off-peak storage revenue is a flattening of the price of gas at Dawn during the March 1 to August 31 period of 2017 compared to the same period in 2016.

The chart below shows the price differential between the highest priced summer month (Peak) and the lowest priced summer month (Weak) (i.e. representative of the value of off-peak storage) for the past 2 years as observed each day between March 1 and August 31. The value of off-peak storage was significantly higher during 2016 (red line) which resulted in higher realized revenues compared to 2017 (blue line).



UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Gas Distribution Access Rule (GDAR) Costs Deferral Account
Exhibit A, Tab 1, pages 12-14

Preamble:

Union noted that 2017 is the final year that the capital costs associated with the three prior GDAR-related Notices of Amendments to a Rule are expected to have a revenue requirement impact.

Question:

a) Please advise whether it is Union's intent to seek closure of the GDAR costs account in a future rate case or maintain the account to address potential future changes to the GDAR.

Response:

a) Union intends to maintain the GDAR deferral account, since it is used to record the difference between the actual costs required to implement the appropriate process and system changes to achieve compliance with GDAR and the costs included in rates as approved by the Board. While no changes to GDAR are currently known, changes could occur in the future that would require use of this account.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Conservation Demand Management (CDM) Deferral Account
Exhibit A, Tab 1, pages 15-16
EB-2016-0245, Rate Order, Appendix F, page 13

Preamble:

Union noted that the balance in the CDM deferral account is a credit to ratepayers of $0.25 million, which reflects 50% of the net revenue associated with the "Whole Home Pilot Delivery" program.

Question:

a) For each year 2011-2017, please provide a table showing the balance in the CDM deferral account (including a detailed breakdown of the costs and revenues).

b) For previous years (2011-2016), please advise whether the balance disposed in the account has been based on the net revenues (revenues minus costs) generated from CDM activities.

c) Please provide rationale supporting the disposition of net revenues as opposed to gross revenues in the context of the description set out in the CDM deferral account (Account No. 179-123) accounting order.

Response:

a) Please see Table 1 below:

Table 1
CDM Deferral Account Balance 2011 - 2017

Particulars ($000s)	**2011**	**2012***	**2013**	**2014**	**2015**	**2016**	**2017**
Revenues	767	1,001	2,345	2,581	2,133	-	3,110
Costs	343	1,013	2,208	2,076	1,711	-	2,620
Net Revenues	424	(12)	137	505	422	-	490
Filed Deferral Balance (50% of Net Revenue)	212	-	68	253	211	-	245

*2012 net revenue was negative; therefore, no net revenue was shared through the CDM Deferral Account.

b) For the years 2011-2016, the balance disposed of in the account has been based on net revenues.

c) In the Board's EB-2010-0148 Decision and Rate Order approving the establishment of the CDM Deferral Account (No. 179-123), the Board ordered Union to *"…establish a deferral account to track the revenues and costs associated with Union participating in Conservation and Demand Side Management initiatives"*.[1] As noted in part b) above, Union has followed this direction in accounting for CDM activities in each year since the account was established.

This treatment ensures that the net benefits (revenues less costs) of CDM activities are shared equally between ratepayers and Union. It would not be equitable to only share gross revenues, as Union would only benefit from 50% of the revenue while absorbing 100% of the related costs.

[1] EB-2010-0148, Decision and Rate Order, p.4

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Tax Variance Deferral Account
Exhibit A, Tab 1, pages 25-26

Preamble:

Union noted that the purpose of the tax variance deferral account is to record 50% of the variance in costs resulting from differences between the actual tax rates and the approved tax rates included in rates as approved by the OEB. For 2017, there is no impact related to income tax, however, there is a credit balance of $0.33 million included in the account related to Harmonized Sales Tax (HST) changes. The relevant tax changes are being phased in over time.

Question:

a) In the context of the scheduled timing of the noted HST changes, please advise whether it is reasonable to expect that the credit balance in the account will continue to grow in each of 2018 and 2019.

b) Please confirm that it is Union's proposal to close this account effective January 1, 2019 as discussed in the EB-2017-0307 application.

Response:

a) Yes, it is reasonable to expect that the credit balance in the account would increase in 2018 and 2019, as compared to 2017. Overall, it would be expected that the account balance in each year would continue to be immaterial.

b) Confirmed.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Unaccounted for Gas (UFG) Volume Variance Account
Exhibit A, Tab 1, pages 27-28

Preamble:

Union noted that the actual 2017 UFG costs are $13.83 million and the UFG costs recovered in 2017 rates are $11.12 million.

Question:

a) Please provide the detailed calculation supporting the 2017 actual and recovered in rates UFG amounts.

b) Please provide actual and approved UFG percentages for each year 2007-2017.

Response:

a) Please see Table 1 below for the calculation of the actual and recovered in rates UFG amounts:

Table 1
2017 Unaccounted for Gas

	2017 Board Approved Rates	**2017 Actual Cost Recovery**	**2017 Actual**
UFG %	0.219%	0.219%	0.342%
Throughput (10^3m^3)	32,009,650	31,800,608	31,800,608
UFG Volume (10^3m^3)	70,253	69,794	108,901
Approved Reference Price (WACOG) ($/10^3m^3$)	$183.678	$183.678	$144.233
2017 UFG Expense	$12,903,931	$12,819,658	$15,707,067
Less: L/T Non-Utility Allocation	$908,437	$1,342,218	$1,600,550
S/T Excess Utility Allocation	$318,727	$355,105	$276,444
Net 2017 Utility UFG Expense	**$11,676,767**	**$11,122,335**	**$13,830,072**

b) Please see Table 2 below for the actual and approved UFG percentages for each year 2007-2017:

Table 2
Summary of UFG Activity 2007-2017

Fiscal Year	Actual UFG Volume (10^3m^3)	Actual UFG Percentage	Board Approved UFG Percentage
2007	203,713	0.609%	0.454%
2008	143,880	0.411%	0.492%
2009	201,845	0.637%	0.492%
2010	67,283	0.192%	0.492%
2011	35,668	0.105%	0.492%
2012	68,690	0.210%	0.492%
2013	113,996	0.320%	0.219%
2014	97,108	0.318%	0.219%
2015	54,407	0.174%	0.219%
2016	131,588	0.427%	0.219%
2017	108,901	0.342%	0.219%

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Major Capital Projects – Generic Questions
Exhibit A, Tab 1

Question:

a) For each major capital pass-through project, please confirm that 2018 is the last year for which there are OEB-approved revenue requirement amounts.

b) If Amalco's proposed merger and price cap framework (EB-2017-0306 / EB-2017-0307) is approved:

I. Please confirm that Union intends to include the approved 2018 revenue requirement amounts associated with the major capital pass-through projects in base rates beginning in 2019.

II. Please confirm that the approved 2018 revenue requirements associated with the major capital pass-through projects will not be escalated in 2019 (or in subsequent years) by the proposed price cap index.

III. Please confirm that the variances captured in the major capital project related accounts will be measured against the approved 2018 revenue requirement amounts with no changes.

c) In calculating the actual revenue requirement related to the major capital projects, Union uses the average long-term debt rate from the year in which the asset was brought into service to calculate the debt portion of the utility required return. Please advise whether Union intends to continue this practice post-2018 in the context of the EB-2017-0307 proposals.

d) For each major capital pass-through project, please provide an updated forecast of the total final capital cost of the project and the total capital cost that was approved by the OEB (including a detailed breakdown by asset type). Please also provide the final year in which there are expected to be capital costs incurred.

e) For each major capital pass-through project, please discuss how incremental project-related revenues are reflected in rates and whether the incremental revenues are trued-up through the relevant major capital project cost variance accounts.

Response:

a) Union interprets "major capital pass-through project" to include all projects that have an approved capital pass through deferral account. Union confirms 2018 is the last year each project has an approved revenue requirement to update in rates, as it is the last year of Union's current 2014-2018 IR term.

b) I-II. Union will address the inclusion of the major capital pass-through projects in 2019 rates as part of the 2019 Rates proceeding.

   III. Union will address the variance and disposition of the 2019 deferral account balances associated with the major capital pass-through projects as part of the 2019 Deferrals proceeding.

c) In EB-2017-0306/EB-2017-0307, EGD and Union indicated Amalco will apply for rate adjustments using the OEB's Incremental Capital Module ("ICM") to recover costs associated with qualifying incremental capital investment beyond what is normally funded through approved rates. In addition, EGD and Union proposed to have the cost of capital reflect the incremental long-term debt requirement for the capital project, and to update the revenue requirement annually, trued-up through the ICM deferral/variance account.

   The incremental cost of debt proposed is the average cost of long-term debt issued by Amalco during the year the ICM project is placed in service.

   The Board has not yet rendered its Decision in EB-2017-0306/EB-2017-0307.

d) Please see Attachment 1.

e) Union reflected incremental project revenue in rates for the projects related to Dawn-Parkway by increasing the billing units used to calculate the Rate M12/C1 Dawn-Parkway demand rate by the incremental project demands. The Dawn-Parkway related projects with incremental project revenue include Brantford-Kirkwall/Parkway D Project, Lobo C Compressor/Hamilton-Milton Pipeline Project (2016 Dawn-Parkway) and Lobo D/Bright C/Dawn H Compressor Project (2017 Dawn-Parkway). There is no true-up required for the Brantford-Kirkwall/Parkway D Project and Lobo C Compressor/Hamilton-Milton Pipeline Project as there was no surplus capacity in either of these projects and all of the Project demands were included in rates. In the Lobo D/Bright C/Dawn H Compressor Project, there was forecast surplus capacity of 30,393 GJ/day, of which parties agreed to record any variances in actual revenue generated from the forecast surplus in the variance account, as per the 2017 Dawn Parkway Project Settlement Proposal (EB-2015-0200). No long-term Dawn to Parkway revenue was earned from the forecast surplus capacity in 2017 to apply against the deferral account as part of this proceeding.

Union reflected incremental Panhandle Reinforcement Project revenue by reducing the forecast Project costs included in rates by the forecast Project revenue. Union has proposed to true-up the 2017 incremental revenue for the Panhandle Reinforcement Project in the variance account as part of this proceeding.

There was no incremental project revenue in the Parkway West Project, as this project was related to a Loss of Critical Unit compressor. There also was no incremental project revenue included in Union's Burlington-Oakville Project as the project was needed primarily to replace contracted supply services to satisfy an existing demand.

Line No.	Project	Particulars ($000's)	Total Forecasted Final Cost	Total Board Approved	Final Year Costs Expected
1	Parkway West	Plant Infrastructure	59,831	34,463	
2		LCU Compressor	73,137	80,084	
3		Pipeline Replacement	8,965	10,444	
4		Dawn-Parkway Valve Nest	14,607	12,033	
5		Station Header	16,053	18,909	
6		Enbridge Measurement	12,360	15,882	
7		Interconnect/TransCanada Measurement	19,236	17,666	
8		Lands	29,409	29,949	
9		**TOTAL**	**233,148**	**219,430**	**2019**
10	Brantford-Kirkwall	Pipelines	91,209	84,222	
11		Land Rights	11,842	11,834	
12		Lands			
13	Parkway D	Compressor Equipment	91,054	104,518	
14		Structures	3,298	3,502	
15		Measuring & Regulating			
16		**TOTAL**	**197,403**	**204,076**	**2017**
17	Lobo C	Land	3,274	3,000	
18		Structures	20,616	21,819	
19		Pipelines	11,717	8,224	
20		Compressor Equipment	124,092	126,636	
21	Hamilton-Milton	Land	6,539	5,253	
22		Land Rights	1,889	4,132	
23		Pipelines	179,808	221,651	
24		**TOTAL**	**347,935**	**390,715**	**2018**
25	Dawn H	Structures	34,832	3,644	
26		Compressor Equipment	235,448	230,775	
27		Metering	14,234	15,405	
28	Bright C	Land	1,435		
29		Structures	31,793	16,973	
30		Pipelines	19,953	19,679	
31		Compressor Equipment	155,675	191,100	
32	Lobo D	Land	1,985		
33		Structures	3,237	2,927	
34		Compressor Equipment	123,908	141,997	
35		**TOTAL**	**622,500**	**622,500**	**2019**

Line No.	Project	Particulars ($000's)	Total Forecasted Final Cost	Total Board Approved	Final Year Costs Expected
36	Burlington Oakville	Land Rights	12,958	17,962	
37		Structures	206	520	
38		Pipelines	53,599	81,958	
39		Station Equipment	17,686	19,037	
40		**TOTAL**	**84,449**	**119,477**	**2018**
41	Panhandle	Land	137	1,036	
42		Land Rights	3,162	10,013	
43		Pipelines	196,904	210,827	
44		Measuring & Regulating	40,212	39,564	
45		Metering	698	725	
46		Salvage	1,730	2,303	
47		**TOTAL**	**242,843**	**264,468**	**2019**

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Parkway West Project Costs
Exhibit A, Tab 1, pages 28-35

Preamble:

Union noted that the balance in the account is a credit to ratepayers of $0.53 million (plus interest).

The balance includes a credit of $0.41 million, which represents the difference between the 2017 OEB-approved revenue requirement and the 2017 actual revenue requirement.

The remaining $0.11 million credit represents a true-up regarding property taxes between the 2015 revenue requirement included in the EB-2016-0118 proceeding and the actual 2015 revenue requirement. The true-up is due to the assessment authority not applying an assessment on the Parkway West compressor and buildings, and not reclassifying the land from farm to commercial.

Union proposed that the balance in the account be disposed on an interim basis, consistent with the treatment in the EB-2017-0091 proceeding, and that the prudence review be part of a future proceeding.

Question:

a) Please advise whether the noted true-up was caused by Union including in its calculation of the 2015 actual revenue requirement related to this project a $0.11 million property tax debit that was never actually charged. If so, please explain why that would have been included in the 2015 actual revenue requirement calculation in EB-2016-0118.

b) Please advise whether there are future capital or OM&A costs associated with the "Heritage Houses" issue referenced at Exhibit A / Tab 1 / p. 31. If so, please provide an estimate of these costs and the year(s) in which these costs are expected to be incurred.

c) Please advise when Union intends to file evidence with respect to the prudence review.

Response:

a) The $0.11 million credit adjustment was a result of the assessment authority not reclassifying the Parkway West site from Farmland to Commercial land as anticipated. The property tax component of the revenue requirement that is included in rates assumes a commercial assessed value. The property tax component of the 2015 actual revenue requirement represents the expected amount of property taxes that would be levied for 2015, once the reclassification from Farmland to Commercial land was complete. As of January 2018, the assessment authority had not reclassified the land. As per Section 33 of the Assessment Act, the assessment authority can no longer go back to 2015 for reassessment; therefore, the 2015 taxes are now statute-barred. The $0.11 million credit represents the difference between the forecasted property taxes for Commercial assessed value and the actual property taxes for Farmland assessed value.

b) Future capital expenditures of $1.7 million are forecast for the Heritage Houses:

- $0.2 million in 2018
- $1.5 million in 2019

c) Union expects that the final prudence review will occur in a future proceeding once capital spending on the Parkway West project is complete. As noted in part b) above, capital spending is currently anticipated to be complete in 2019. Based on this timing, Union would expect to file evidence with respect to the prudence review in 2020.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Brantford-Kirkwall / Parkway D Project Costs
Exhibit A, Tab 1, pages 35-36

Question:

a) Please advise whether the 2015 property tax true-up for the Brantford-Kirkwall / Parkway D project is the same issue as the Parkway West ($0.11 million) property tax true-up.

Response:

a) Yes, the 2015 property tax true-up for the Brantford-Kirkwall / Parkway D project is the same issue as the Parkway West property tax true-up.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Unaccounted for Gas (UFG) Price Variance Account
Exhibit A, Tab 1, page 44

Preamble:

Union noted that the actual monthly cost of the Union South gas portfolio in 2017 was $159.596 / 10^3m^3, which is $3.95 / 10^3m^3 higher than the OEB-approved reference prices included in rates.

Question:

a) Please provide a detailed calculation supporting the price variance of $3.95 / 10^3m^3.

Response:

a) Please see Attachment 1.

Calculation of 2017 UFG Price Deferral

	January	February	March	April	May	June	July	August	September	October	November	December	Total	
Actual UFG (GJ)	353,329	353,329	353,329	353,329	353,329	353,329	353,329	353,329	353,329	353,329	353,329	353,329	4,239,944	
less: UFG collected through T1, T2, T3 and exfranchsie CSF (GJ)	(269,637)	(269,637)	(269,637)	(269,637)	(269,637)	(269,637)	(269,637)	(269,637)	(269,637)	(269,637)	(269,637)	(269,637)	(3,235,642)	
UFG - Utility Ratepayer (GJ)	83,692	83,692	83,692	83,692	83,692	83,692	83,692	83,692	83,692	83,692	83,692	83,692	**1,004,301**	(1)
Reference Price ($CDN/GJ)	$ 4.151	$ 4.151	$ 4.151	$ 4.095	$ 4.095	$ 4.095	$ 4.206	$ 4.206	$ 4.206	$ 3.549	$ 3.549	$ 3.549	**$ 4.013**	
Total SPGVA Purchases - (GJ)	11,940,907	10,819,376	10,791,605	8,335,512	10,827,873	11,162,585	11,553,529	10,551,759	9,143,357	8,559,026	11,353,030	11,693,785	**126,732,344**	
UFG Related Spot Purchase			-										-	
SPGVA Purchase (GJ)	11,940,907	10,819,376	10,791,605	8,335,512	10,827,873	11,162,585	11,553,529	10,551,759	9,143,357	8,559,026	11,353,030	11,693,785	126,732,344	(2)
SPGVA Portfolio Cost ($CDN/GJ)	$ 65,278,913	$ 50,828,112	$ 41,252,699	$ 38,078,525	$ 46,563,700	$ 47,809,856	$ 42,573,796	$ 36,512,807	$ 33,556,608	$ 31,386,758	$ 41,219,985	$ 46,396,391	$ 521,458,149	(2)
Average SPGVA Purchase Cost (CDN$/GJ)	$ 5.467	$ 4.698	$ 3.823	$ 4.568	$ 4.300	$ 4.283	$ 3.685	$ 3.460	$ 3.670	$ 3.667	$ 3.631	$ 3.968	**$ 4.115**	(2)
Price Variance ($CDN/GJ)	-$ 1.316	-$ 0.547	$ 0.328	-$ 0.473	-$ 0.205	-$ 0.188	$ 0.521	$ 0.746	$ 0.536	-$ 0.118	-$ 0.082	-$ 0.419	**-$ 0.101**	(3)
Price Variance ($CDN)	-$ 110,124.17	-$ 45,769.21	$ 27,478.87	-$ 39,605.34	-$ 17,186.54	-$ 15,737.84	$ 43,610.35	$ 62,404.54	$ 44,854.32	-$ 9,883.54	-$ 6,841.59	-$ 35,034.30	**-$ 101,834**	

UFG Volumes (10^3m^3)	**25,795**	(4)
Average Price Variance (CDN$/$10^3m^3$)	**-$ 3.948**	(5)

Notes:
(1) Required Utility ratepayer purchase of gas associated with UFG that is not collected through customer supplied fuel.
(2) Total purchase of gas for the South portfolio (as detailed in the 2017 QRAM submissions); includes the purchase for Utility UFG purposes as noted above in (1).
(3) Net price variance for 2017 representing difference between actual purchase cost versus Board-approved reference prices.
(4) UFG total GJ from note 1 multiplied by approved heat values (Jan-Mar @ 38.81; Apr-Dec @ 38.95)
(5) Average price variance in GJ converted to volumetric rate by dividing total price variance of $101,834 over the UFG volumes determined in note 4.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Lobo D / Bright C / Dawn H Compressor Project Costs
Exhibit A, Tab 1, pages 50-58

Preamble:

Union noted that a small portion of the balance in the account is related to two 2016 adjustments (an interest rate true-up and a capital expenditure related true-up).

Union also noted that, as part of the EB-2015-0200 Settlement Agreement, it agreed to record in the deferral account variances in actual revenue generated from forecast surplus capacity (30,393 GJ/d) relative to the maximum annual revenue of $1.34 million that could be realized from the sale of long-term firm surplus capacity effective November 1, 2017. Union stated that its actual Dawn to Parkway surplus for the winter 2017 / 2018 was in excess of 30,393 GJ/d, therefore no long-term Parkway revenue was earned from the forecast surplus to apply against the deferral account.

Question:

a) Please further explain the two 2016-related adjustments and provide the 2016 revenue requirement table (EB-2017-0091 / Exhibit A / Tab 1 / p. 56 / Table 20) with an additional column that shows the revised 2016 actuals reflecting the two noted adjustments.

b) Please explain how Union determines whether there is a credit related to the sale of the surplus capacity (30,393 GJ/d) to apply against the balance in the variance account. Specifically, please discuss why having a Dawn to Parkway surplus in excess of 30,393 GJ/d would mean that there are no revenues (credits) to apply to the account.

Response:

a) As described at Exhibit A, Tab 1, p. 51 the $0.012 million debit is the result of two adjustments related to 2016.

   The interest rate true-up is a $0.080 million credit to adjust the long-term debt rate from the estimate of 4.0% to the actual of 3.29%. The rate of 3.29% is based on the actual average rate of long term debt that was issued in 2017 and is used to calculate the debt portion of the utility required return for projects that went into service in 2017. Please also see the response at Exhibit B.LPMA.8.

The offsetting $0.092 million debit was due to $6.344 million of assets that were incorrectly placed into service for accounting purposes in 2016 instead of 2017. This adjustment resulted in higher income taxes, and a higher total revenue requirement in 2016.

Please see Attachment 1 for the revenue requirement calculation with revised 2016 Actuals.

b) In accordance with the Dawn H/Lobo D/Bright C Compressor Project Settlement Agreement (EB-2015-0200), Union included the net delivery revenue requirement of the project in 2017 Rates, which excluded the revenue associated with the 30,393 GJ/d of surplus capacity. As part of the Settlement, parties agreed that actual revenue associated with the 30,393 GJ/d of surplus capacity would be recorded in this deferral account.

   If Union experiences surplus capacity in excess of 30,393 GJ/d due to expiring contracts or adjustments to total system capacity, revenue obtained by selling that capacity will be part of utility earnings and subject to earnings sharing. Once all surplus capacity in excess of 30,393 GJ/d has been sold on a long-term basis, any further sales will then be applied to the Dawn H/Lobo D/Bright C Compressor Project Costs Deferral Account No.179-144.

   As Union's actual Dawn to Parkway surplus for winter 2017/2018 was in excess of 30,393 GJ/d, there was no long-term Dawn-Parkway revenue to apply to the deferral account.

Attachment 1

2016 Dawn H/Lobo D/Bright C Compressor Project Rate Base and Revenue Requirement - 2017 Revenue Requirement Adjustments

Line No.	Particulars ($000's)	2016 Board-Approved (a)	2016 Actuals (b)	Revised 2016 Actuals (c)	Difference (d) = (c - b)
	Rate Base Investment				
1	Capital Expenditures	107,400	91,342	84,998	(6,344)
2	Average Investment	11,432	18,368	17,790	(578)
	Revenue Requirement Calculation:				
	Operating Expenses:				
3	Operating and Maintenance Expenses	-	2	2	-
4	Depreciation Expense (1)	1,677	1,225	1,169	(56)
5	Property Taxes	-	-	-	-
6	Total Operating Expenses	1,677	1,227	1,171	(56)
7	Required Return (2),(3)	660	1,060	946	(114)
8	Total Operating Expense and Return	2,337	2,287	2,118	(170)
	Income Taxes:				
9	Income Taxes - Equity Return (4)	126	213	206	(7)
10	Income Taxes - Utility Timing Differences (5)	(4,178)	(3,690)	(3,503)	187
11	Total Income Taxes	(4,053)	(3,478)	(3,297)	180
12	Total Revenue Requirement	(1,716)	(1,191)	(1,179)	12

Notes:

(1) Depreciation expense at 2013 Board-approved depreciation rates.

(2) The required return of 5.77% assumes a capital structure of 64% long-term debt at 4.0% and 36% common equity at the 2013 Board-approved return of 8.93% (0.64 * 0.04 + 0.36 * 0.0893)
The 2016 required return calculation is as follows:
$18.368 million * 64% * 4.0% = $0.470 million plus
$18.368 million * 36% * 8.93% = $0.590 million for a total of $1.060 million.

(3) The revised required return of 5.32% assumes a capital structure of 64% long-term debt at 3.29% and 36% common equity at the 2013 Board-approved return of 8.93% (0.64 * 0.0329 + 0.36 * 0.0893)
The 2016 revised required return calculation is as follows:
$17.790 million * 64% * 3.29% = $0.375 million plus
$17.790 million * 36% * 8.93% = $0.572 million for a total of $0.946 million.

(4) Taxes related to the equity component of the return at a tax rate of 26.5%.

(5) Taxes related to utility timing differences are negative as the capital cost allowance deduction in arriving at taxable income exceeds the provision of book depreciation in the year.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Ontario Energy Board (OEB) Cost Assessment Variance Account
Exhibit A, Tab 1, pages 63-64
EB-2017-0091, Settlement Agreement, page 17

Preamble:

Union noted that the 2017 balance in the noted account is a $1.16 million debit (plus interest). In 2016, the balance in the account was a $0.83 million debit.

In 2016, Union and the parties agreed that the balance in the account would be borne by Union and not collected from ratepayers.

Question:

a) Please explain why the 2017 balance in the account would not continue to be borne by Union's shareholder in the same manner as 2016.

Response:

a) Parties agreed Union would not collect the 2016 balance in the OEB Cost Assessment Variance Account from ratepayers in the 2016 Deferrals Settlement Agreement (EB-2017-0091), as part of the overall settlement package. Union's agreement not to collect the 2016 balance as part of a settlement does not preclude Union from seeking recovery of the balance arising in 2017.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Panhandle Reinforcement Project Costs
Exhibit A, Tab 1, pages 64-69

Preamble:

The net revenue requirement for the account is $0.083 million, which reflects a total revenue requirement of $0.368 million net of incremental project revenue of $0.285 million.

Question:

a) Please explain how the incremental project revenue amount is calculated and show the calculation.

Response:

a) The incremental project revenue amount is calculated for both the General Service and Contract markets on a monthly basis.

For the General Service portion of the incremental revenue, the net actual premise additions in the Windsor/Chatham district (representing all customers south of Dawn being served by Panhandle) are multiplied by the average use to derive a total incremental volume. Once total incremental customers and volumes are determined, they are multiplied by the unit rates and the monthly customer charge for their respective rate class.

Please see Table 1 below for the calculation of General Service incremental project revenue:

Table 1
General Service Incremental Project Revenue

Rate Class	Actual Premise Additions to Nov 30 A_1	Actual Premise Additions to Dec 31 A_2	Throughput Volumes (Nov 1 - Dec 31, 2017) B	Monthly Customer Charge C	Unit Rates ($/m³) D	Total Revenue ($MM) $((A_1+A_2)*C)+(B*D)$
M1 Delivery Revenue	604	951	760,755	21	0.04228	0.065
M2 Delivery Revenue	-8	-5	-717,034	70	0.04316	-0.032
Total General Service	**596**	**946**	**43,721**			**0.033**

For the Contract market, the actual incremental revenue is determined at the individual customer level based on the list of customers used to support the project economics in the Panhandle proceeding. The incremental revenue was determined by multiplying the customer's specific Contracted Demand ("CD") rate by their increased demand units. The revenue was then adjusted by the revenue received/ lost from actual throughput volumes and new load.

Please see Table 2 below for the calculation of Contract market incremental project revenue.

Table 2
Contract Market Incremental Project Revenue

				All Revenue Figures in $MM				
CD Rate	CD before Panhandle (m3/day)	CD after Panhandle (m3/day)	Change in CD	Nov Incremental CD Revenue	Dec Incremental CD Revenue	Volume Increase Revenue	New Load Revenue	Total Incremental Revenue
A	B	C	D=C-B	E=A*D	F=A*D	G	H	I=E+F+G+H
0.00	271.61	310.22	38.61	0.000	0.000	0.000	0.001	0.001
77.71	0.20	15.50	15.30	0.001	0.001	-0.009	0.000	-0.007
139.88	140.00	210.00	70.00	0.010	0.010	0.000	0.000	0.020
214.69	35.31	45.51	10.20	0.002	0.002	0.000	0.000	0.004
214.69	448.21	555.45	107.24	0.023	0.023	-0.005	0.003	0.044
214.69	27.79	35.00	7.21	0.002	0.002	0.000	0.003	0.006
255.53	21.36	39.68	18.32	0.005	0.005	0.000	0.000	0.009
255.54	10.75	16.00	5.25	0.001	0.001	-0.005	0.002	0.000
255.54	187.10	248.27	61.17	0.016	0.016	-0.055	0.001	-0.022
255.54	55.90	98.06	42.17	0.011	0.011	-0.030	0.000	-0.009
308.25	239.66	427.27	187.60	0.058	0.058	0.000	0.005	0.120
332.17	0.00	32.40	32.40	0.011	0.011	0.000	0.000	0.022
366.23	0.00	24.00	24.00	0.009	0.009	0.000	0.009	0.027
443.16	0.84	15.00	14.16	0.006	0.006	-0.009	0.000	0.003
487.35	0.00	11.46	11.46	0.006	0.006	0.000	0.004	0.015
533.24	8.50	12.10	3.60	0.002	0.002	0.000	0.000	0.004
569.92	75.96	143.34	67.38	0.038	0.038	-0.063	0.003	0.016
Grand Total	**1,523.19**	**2,239.26**	**716.07**	**0.200**	**0.200**	**-0.177**	**0.030**	**0.253**

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Utility Results and Earnings Sharing Calculation
Exhibit A, Tab 2

Preamble:

Union noted that the increase in O&M expenses of $15.6 million relative to 2016 was mainly driven by salaries and integration-related costs associated with the merger between Enbridge Inc. and Spectra Energy.

Question:

a) Please provide a detailed breakdown of the merger related costs that were incurred in 2017.

b) Please advise whether the merger related costs are included in the earnings sharing calculation. If so, please provide rationale supporting the inclusion. Please also provide a revised version of the earnings sharing calculation that excludes the merger-related costs.

Response:

a) Total merger-related costs are $6.0 million, of which the utility portion is $5.6 million. The $5.6 million is detailed as follows:

Table 1
2017 Merger-Related Costs – Utility Portion ($M)

$4.56	Severances
$0.49	Relocation Cost
$0.39	Incentive/Retention Payments
$0.10	Employee Expenses
$0.10	Outplacement
$5.64	

Total annual cost savings generated by the merger-related costs are $3.8 million, of which the utility portion is $3.7 million.

b) Yes, merger-related costs of $5.6 million are included in utility earnings subject to sharing, as are the savings of $3.7 million.

Please see Attachment 1 for a revised version of the earnings sharing calculation excluding the merger-related costs. For the purposes of this response Union has not grossed up O&M expenses for the ongoing utility savings of $3.7 million associated with these costs.

Please also see the response at Exhibit B.LPMA.13.

UNION GAS LIMITED
Earnings Sharing Calculation
Calendar Year Ending December 31, 2017

Line No.	Particulars ($000s)	2017 (a)	Non-Utility Storage (b)	Adjustments (c)		2017 Utility (d)=(a)-(b)+(c)
	Operating Revenues					
1	Gas Sales	1,872,522		(15,570)	i	1,856,952
2	Transportation	236,498	(439)	-		236,937
3	Storage	126,928	119,133	-		7,796
4	Other	24,252		(6,947)	ii	17,304
5		2,260,200	118,694	(22,517)		2,118,989
	Operating Expenses					
6	Cost of gas	1,070,458	23,924	(15,570)	i	1,030,965
7	Operating and maintenance expenses	421,908	13,256	(831)	iii	407,821
8	Depreciation	265,117	10,236			254,881
9	Other financing			1,013	iv	1,013
10	Property and other taxes	73,690	1,369			72,321
11		1,831,173	48,785	(15,387)		1,767,000
	Other					
12	Gain / (Loss) on sale of assets	(214)	(210)			(3)
13	Other / Huron Tipperary		-			-
14	Gain / (Loss) on foreign exchange	(873)	(47)	(612)	v	(1,438)
15		(1,087)	(257)	(612)		(1,441)
16	Earnings before interest and taxes	427,940	69,651	(7,742)		350,547
17	Income taxes			(5,045)		(3,562)
18	Total utility income subject to earnings sharing					354,109
	Less debt and preference share return components					
19	Long-term debt					165,315
20	Unfunded short-term debt					818
21	Preferred dividend requirements					2,769
22						168,902
	Less shareholder portions of:					
23	Net short-term storage revenue (after tax)					275
24	Net optimization activity (after tax)					369
25						643
26	Earnings subject to sharing					184,564
27	Common equity					1,970,608
28	Return on equity (line 26 / line 27)					9.37%
29	Benchmark return on equity					9.93%
30	50% earnings sharing % (line 28 - line 29, maximum 1%)					0.00%
31	90% earnings sharing % (if line 30=1%, then line 28 - line 29 - line 30)					0.00%
32	50% earnings sharing $ (line 27 x line 30 x 50%)					-
33	90% earnings sharing $ (line 27 x line 31 x 90%)					-
34	Total earnings sharing $ (line 32 + line 33)					-
35	Pre-tax earnings sharing (line 34 / (1 minus tax rate)					-

Notes:

i Reclassification of optimization revenue as cost of gas

ii Demand-side management incentive

iii	Donations	896
	CDM program	(245)
	MAAD application legal costs	180
		831

iv Facility fees and customer deposit interest

v Foreign exchange gain on bank balances

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Service Quality
Exhibit A, Tab 2, Appendix D, page 8

Preamble:

The OEB approved minimum standard for reconnecting customers is 85% of customers reconnected within two business days of bringing their accounts into good standing. This metric is tracked on a monthly basis. Union's performance relative to this metric in January 2017 was 78.4%.

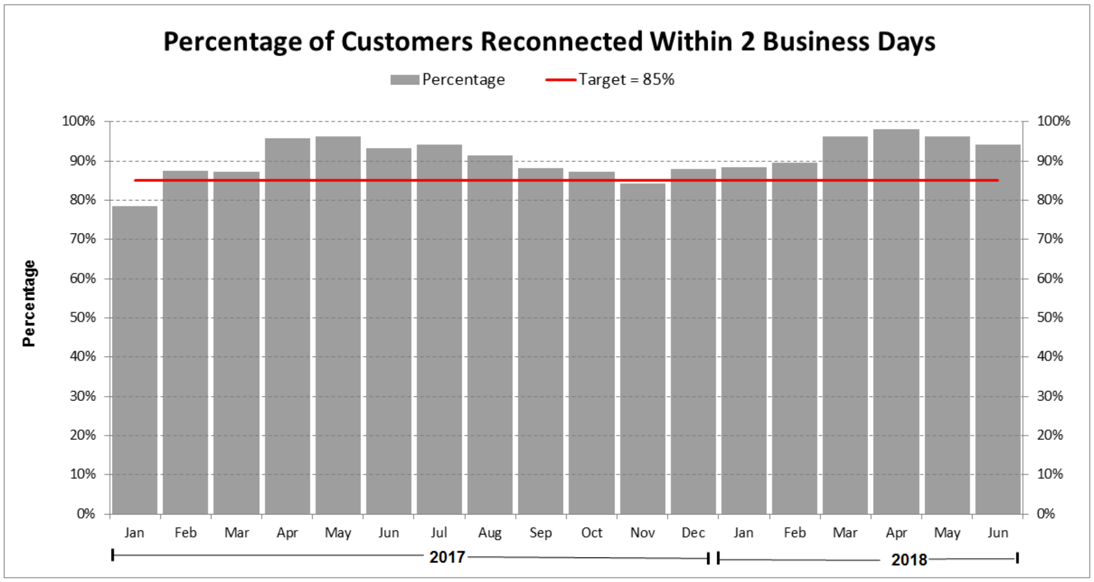
Question:

a) Please explain why Union was unable to meet the minimum standard in January 2017.

Response:

a) In January 2017 it was identified that a work code in the billing system that is used to track this Service Quality Requirement ("SQR") was used in error. Work was created and scheduled more than two days out to investigate a meter that was identified as "on" when it should have been "off". That work should not have been included in the measurement of this SQR as it is unrelated to the reconnection of accounts that have been brought into good standing. The number of reconnections completed in January is small, making the use of the incorrect work code more impactful when calculating the number of days to reconnect a customer percentage.

   As illustrated below, Union's monthly reconnection response time results consistently exceed the minimum standard of 85 percent. 2018 YTD results are 95 percent, with Union exceeding the 85 percent target each month.



Utility	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Union	92.5%	93.0%	91.5%	93.5%	91.7%	92.2%	91.9%	90.1%	86.2%	90.5%
Target	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Page 5

Preamble:

The actual unutilized capacity in 2017 was 26.4 PJ. The level of unutilized capacity experienced in 2017 was largely due to planned unutilized capacity (and resulting UDC) and warmer than normal weather for the winter of 2016/2017.

Question:

a) Please provide a Schedule showing historic 2011-2017 forecast and actual UDC and Design Degree days

b) Comment on the accuracy of UDC forecasts

Response:

a) and b) The amount of supply needed to be transported through upstream transportation capacity to meet the average annual demand requirement is less than the capacity needed to meet design day requirements. As a result, a portion of Union's contracted upstream transportation capacity is planned to be unutilized during the year (i.e. the difference between design day demand requirements and the average annual demand requirement).

Forecasted or planned UDC is an output of the gas supply planning process. The average annual demand forecast included in the gas supply plan is based on the Board-approved forecast and weather normalization methodologies. Design day requirements are calculated using the coldest observed degree day for Union South and for each of the six delivery areas in Union North. Union then uses the SENDOUT model to determine planned asset utilization to serve annual and seasonal demands. In Union North, the upstream transportation portfolio is sized to meet the design day demand requirements which, as outlined above, results in planned UDC. On an actual basis, the amount of UDC (planned versus actual) will vary due to changes in customer demand and weather.

Unutilized upstream transportation capacity is released and sold on the secondary market to minimize UDC costs. The value attained for capacity sold in the secondary market is determined through an RFP process and the value is credited to the UDC Variance Account, mitigating the overall UDC cost impact. Transportation capacity release values fluctuate based on market conditions impacting the actual recovery amount. Due to the variability of weather, customer demand and market conditions, the UDC amounts included in the deferral account are calculated using the actual volume and costs incurred.

As stated in evidence, Union's 2017 approved rates included planned unutilized pipeline capacity of 9.5 PJ in Union North West, 3.1 PJ in Union North East and 0.0 PJ in Union South. The UDC volumes included in rates are based on the Gas Supply Plan filed in Union's Dawn Reference Price proceeding in 2015 and included in Union's 2017 Rates proceeding.

As part of the annual gas supply planning process, subsequent to the Dawn Reference Price proceeding, the upstream transportation capacity planned to be unutilized for 2017 was updated to 15.6 PJ.

The requested schedules are provided below.

Table 1
Forecast (Planned) and Actual UDC (2011-2017)

	2011	2012	2013	2014	2015	2016	2017
Planned UDC (PJ)	8.1	10.3	9.3	10.7	12.1	15.5	15.6
Actual UDC (PJ)	2.0	24.4	0.6	0.0	13.4	31.5	26.4

Table 2
Design Day Heating Degree Days (HDD)

	MDA	WDA	SSMDA	NDA	NCDA	EDA	South
2011/12	54.7	51.6	48.2	51.9	49.0	47.1	44.0
2012/13	54.7	51.6	48.2	51.9	49.0	47.1	44.0
2013/14	54.7	51.6	48.2	51.9	49.0	47.1	43.1
2014/15	54.7	51.6	48.2	51.9	49.0	47.1	43.1
2015/16	54.7	51.6	48.2	51.9	49.0	47.1	43.1
2016/17	54.7	51.6	48.2	51.9	49.3	47.1	43.1
2017/18	54.7	51.6	48.2	51.9	49.3	47.1	43.1

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Page 20, Table 6: Exhibit A, Tab 1, Appendix A, Schedule 7

Preamble:

The 2017 target NAC for each rate class was approved by the Board in Union's 2017 Rates proceeding (EB-2016-0245). The 2015 actual NAC, weather normalized using the 2017 weather normal, was used to determine the 2017 target NAC. Setting the 2017 target NAC based on the 2015 actual NAC recognizes that over the two year span to the current year, any volumes saved and lost revenues due to DSM activities will be captured by the variance between the target and actual consumption.

Question:

a) Please provide a Schedule showing for the Rate Classes in Table 6 the following for 2011-2017
   - Board-approved or Forecast NAC
   - Actual NAC
   - Normalized DD North and South
   - Actual DD North and South
   - Average Normalized DD North and South
   - Average Actual DD North

b) Please provide a 7 year graphical trend analysis of Normalized NAC for the 4 rate classes in Table 6.

c) Please show Average DD on same chart.

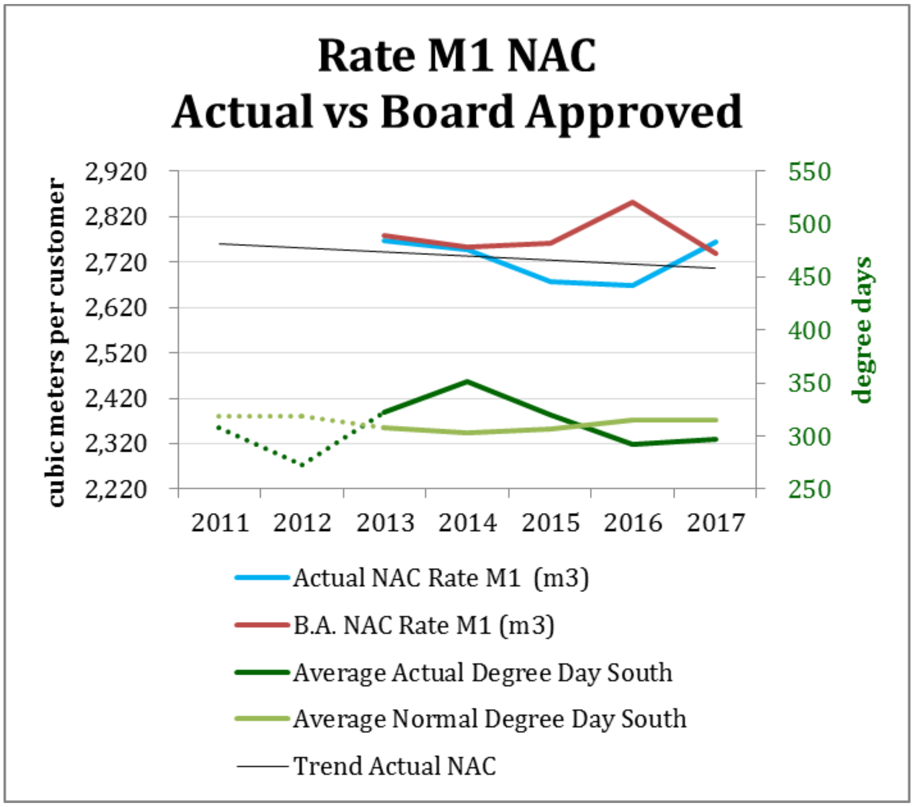
d) Please provide analysis and comments on the factors causing significant trends in consumption and NAC for each class.

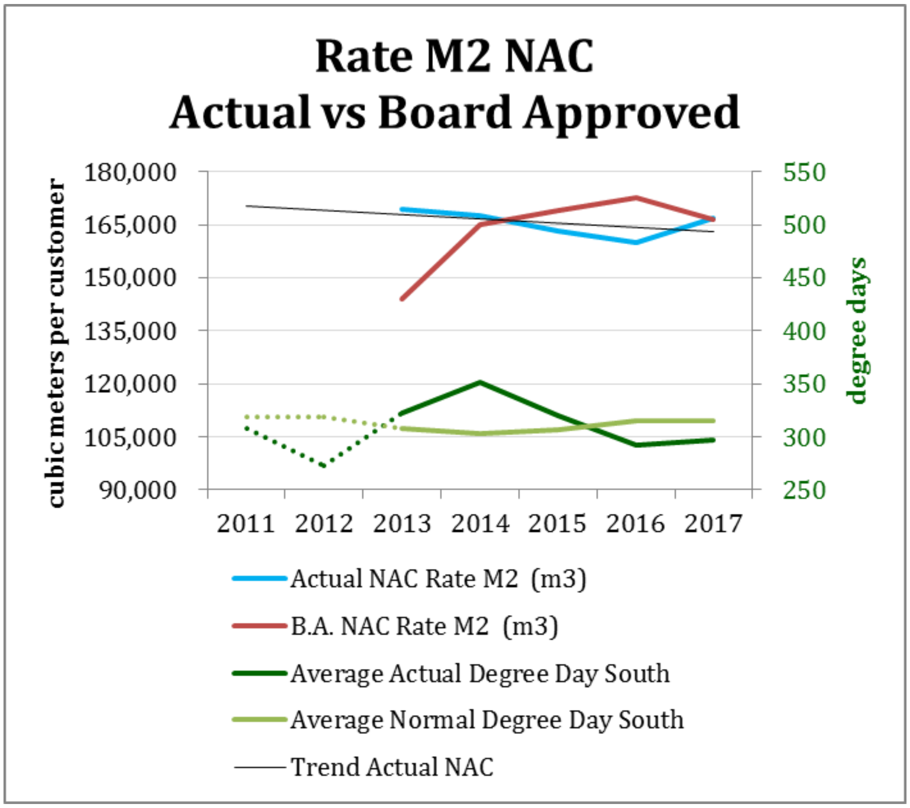
e) Please comment on whether/when there will be a review of forecast models and NAC Best Practices.

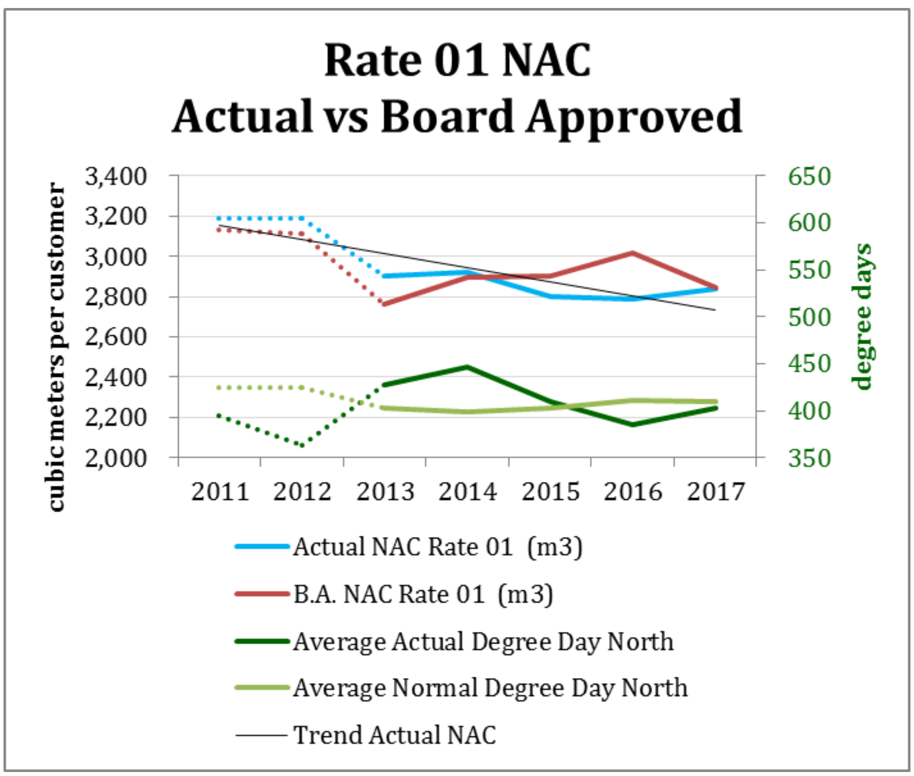
Response:

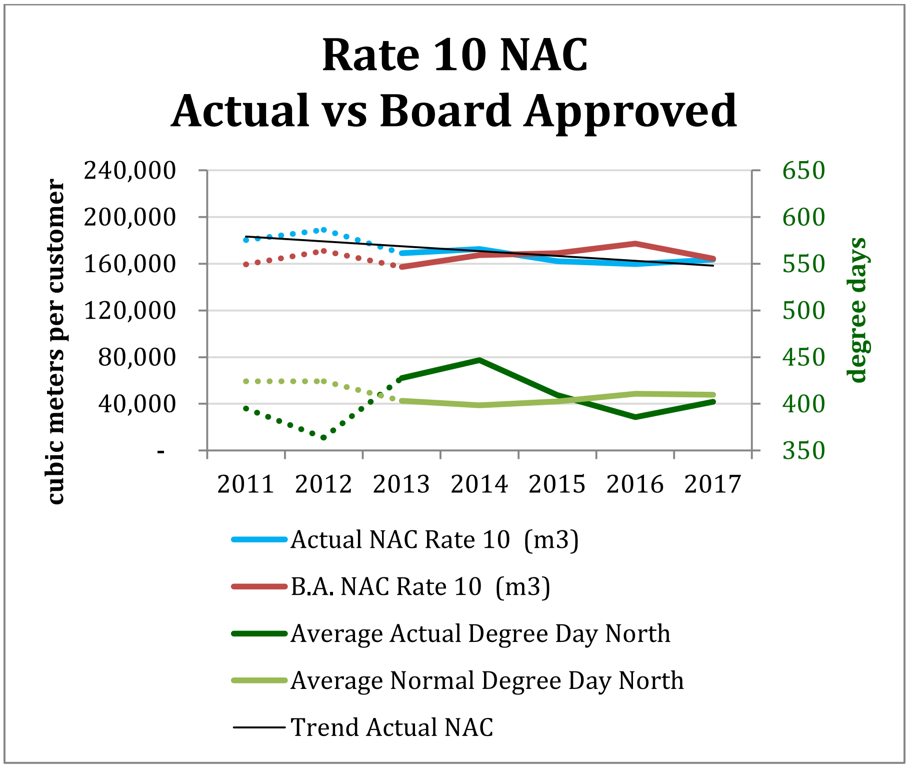
a) Please see Attachment 1.

b) and c) Please see the graphs below. The dotted lines correspond to the 2008-2012 Incentive Rate Mechanism ("IRM").




Rate M2 NAC
Actual vs Board Approved
cubic meters per customer
180,000
165,000
150,000
135,000
120,000
105,000
90,000
degree days
550
500
450
400
350
300
250
2011
2012
2013
2014
2015
2016
2017
Actual NAC Rate M2 (m3)
B.A. NAC Rate M2 (m3)
Average Actual Degree Day South
Average Normal Degree Day South
Trend Actual NAC


Rate 01 NAC
Actual vs Board Approved
cubic meters per customer
3,400
3,200
3,000
2,800
2,600
2,400
2,200
2,000
degree days
650
600
550
500
450
400
350
2011
2012
2013
2014
2015
2016
2017
Actual NAC Rate 01 (m3)
B.A. NAC Rate 01 (m3)
Average Actual Degree Day North
Average Normal Degree Day North
Trend Actual NAC



d) Based on the charts above, actual NAC is following a declining trend in all general service rate classes. In spite of the trend, in any given year NAC can increase relative to year prior.

The main factor affecting NAC is the increased efficiency being realized in the market. These efficiencies are gained from advancements in the space heating and water heating industries, as well as DSM programs promoted by Union and other energy savings initiatives. Other factors affecting the NAC variance include the comfort level desired by customers and other customer behaviours.

e) As noted in the EB-2017-0306/EB-2017-0307 proceeding, after amalgamation Amalco will work towards a single, revenue neutral approach to Average Use/NAC that will be addressed in a future rate application.[1] The timing of this review and future application are not yet known.

[1] EB-2017-0306/EB-2017-0307, Argument-in-Chief, Paragraph 97.

UNION GAS LIMITED
Board Approved NAC, Actual NAC, Normal Degree Day and Actual Degree Day

Line No.	Year		Actual NAC Former Rate M2 (m3)	B.A. NAC Former Rate M2 (m3)	Actual NAC Rate M1 (m3)	B.A. NAC Rate M1 (m3)	Actual NAC Rate M2 (m3)	B.A. NAC Rate M2 (m3)	Actual NAC Rate 01 (m3)	B.A. NAC Rate 01 (m3)	Actual NAC Rate 10 (m3)	B.A. NAC Rate 10 (m3)	Actual Degree Day South	Actual Degree Day North	Normal Degree Day South	Normal Degree Day North	Average Actual Degree Day South	Average Actual Degree Day North	Average Normal Degree Day South	Average Normal Degree Day North
1	2011	*(1)*	4,209	4,179					3,190	3,128	180,325	159,570	3,695	4,741	3,822	5,090	308	395	318	424
2	2012	*(2)*	4,090	4,096					3,186	3,109	189,164	170,899	3,274	4,367	3,822	5,090	273	364	318	424
3	2013	*(3)*			2,768	2,778	169,422	143,867	2,900	2,765	168,975	157,381	3,875	5,131	3,695	4,838	323	428	308	403
4	2014	*(4)*			2,748	2,751	167,537	165,085	2,923	2,898	172,516	167,443	4,221	5,361	3,644	4,782	352	447	304	398
5	2015	*(5)*			2,676	2,761	163,129	169,121	2,799	2,901	162,078	169,025	3,834	4,912	3,681	4,832	320	409	307	403
6	2016	*(6)*			2,667	2,852	159,933	172,693	2,788	3,015	159,855	177,214	3,510	4,628	3,780	4,930	292	386	315	411
7	2017	*(7)*			2,764	2,738	166,969	166,297	2,835	2,844	163,483	164,329	3,562	4,828	3,782	4,918	297	402	315	410

Notes:

(1) 2011 B.A. NAC is the AU target from the 2008 to 2012 IR period. Weather normal is the 55:45 2007 Normal.
(2) 2012 B.A. NAC is the AU target from the 2008 to 2012 IR period.Weather normal is the 55:45 2007 Normal.
(3) 2013 B.A. NAC is the Cost of Service NAC. 2013 is the Test Year for the 2014-2018 IR period.
(4) 2014 B.A. NAC is the actual 2012 NAC weather normalized at the 2014 weather normal.
(5) 2015 B.A. NAC is the actual 2013 NAC weather normalized at the 2015 weather normal.
(6) 2016 B.A. NAC is the actual 2014 NAC weather normalized at the 2016 weather normal.
(7) 2017 B.A. NAC is the actual 2015 NAC weather normalized at the 2017 weather normal.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Page 21. Table 7, and Page 23, Table 8

Question:

a) Please provide a version of Table 8 with the historical Storage Adjustments PJ indicating also indicating the Forecast and actual Degree Days

---

Response:

a) Please see Table 1 below.

Table 1
Storage Requirements Changes and Actual vs Budget Heating Degree Days

	Change in Storage Requirements from 2013 Board-approved (PJ)				Budget Normal (HDD)	Actual (HDD)
Year	Rate M1	Rate M2	Rate 01	Rate 10		
2014	1.14	(0.94)	0.03	0.09	3,929	4,506
2015	1.12	(1.50)	0.20	(0.15)	3,969	4,104
2016	0.47	(1.95)	0.10	(0.24)	4,068	3,789
2017	(0.88)	(1.89)	(0.11)	(0.15)	4,066	3,879

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Pages 27 and 28, and Table 10

Question:

a) Please provide the actual UFG and % for the years 2013-2017

b) What are the reasons for the higher UFG percentages as compared to the 2013 OEB approved percentage?

c) What measures does Union intend to implement to lower the UFG percentage in the future?

Response:

a) Please see the response at Exhibit B.Staff.8 b).

b) Union's 2013 Board-approved UFG percentage of 0.219% was based on the Board-approved methodology of a weighted average of the prior three years' actual UFG (2009 – 0.637%; 2010 – 0.192%; 2011 – 0.105%). Due to the low percentage in each of the three prior years the UFG factor was set at a historically low factor.

Actual UFG is calculated using actual throughput and consumption numbers. Although the 2017 UFG factor was higher than 2013 Board-approved (0.342% compared to 0.219%), the change represents only one tenth of one percent of total throughput.

c) Union monitors potential contributors to UFG on an ongoing basis. For instance, Union evaluates physical factors that could have impacted UFG including investigating meter reads between custody and check meters for inconsistencies. Union also explored changes in custody transfer meters and new meter stations at Parkway West and Parkway East for meter bias and verified measurement related to expansion facilities and commissioning activities.

UNION GAS LIMITED

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

Reference: OM&A Expenses Exhibit A, Tab 2, Appendix A, Schedule 13

Preamble:

The increase in O&M of $15.6 million relative to 2016 was mainly driven by salaries and integration-related costs related to the merger between Enbridge Inc. and Spectra Energy.

Question:

a) Please provide complete details of the year over year increase in Expenses, including drivers for increased costs. Specifically provide details of the 2016-2017 increase in Salary and Wages from $209.763 million to $221.758 million.

b) Please provide the 2017 earnings sharing calculation assuming the increase in O&M expense above 2016 was zero.

Response:

a) Please see Table 1 below for details of the O&M cost variances from 2016 to 2017:

Table 1
O&M Cost Variances 2016 to 2017

Particulars ($000s)	**Increase/(Decrease)**	**Main Drivers**
Salaries/Wages	11,995	Integration Related Costs Short-term / long-term incentive plan Merit
Benefits	(2,789)	Pension Costs
Materials	1,482	Obsolete inventory write-off Accumulation of small increases
Contract Services	1,824	Pipeline Integrity Program Locates
Consulting	(1,404)	Decrease in consulting engagements

General	1,968	EI/Spectra Integration Related Costs
Demand Side Management Programs	2,092	Higher OEB-approved budget
Cost Recovery from Third Parties	1,167	Insurance Recovery in 2016
Insurance	(1,341)	Lower insurance premiums
Donations	(2,308)	Lower donations in 2017
Non-Utility Earnings Adjustments	2,396	Due to a reduction in donations
Other	487	
Total	**15,569**	

Please see Table 2 for additional details on the change in Salary/Wages costs from 2016 to 2017:

Table 2
Salary & Wage Breakdown

Particulars	**($ 000's)**
Integration Related Costs	$4,653
STIP/LTIP	$2,873
Merit	$1,567
Other	$2,902
Total	**$11,995**

b) Please see Attachment 1. This calculation uses the actual 2016 Operating and Maintenance Expenses from Exhibit A, Tab 2, Appendix A, Schedule 13, column (b), row 28.

UNION GAS LIMITED
Earnings Sharing Calculation
Calendar Year Ending December 31, 2017

Line No.	Particulars ($000s)	2017 (a)	Non-Utility Storage (b)	Adjustments (c)		2017 Utility (d)=(a)-(b)+(c)
	Operating Revenues					
1	Gas Sales	1,872,522		(15,570)	i	1,856,952
2	Transportation	236,498	(439)	-		236,937
3	Storage	126,928	119,133	-		7,796
4	Other	24,252		(6,947)	ii	17,304
5		2,260,200	118,694	(22,517)		2,118,989
	Operating Expenses					
6	Cost of gas	1,070,458	23,924	(15,570)	i	1,030,965
7	Operating and maintenance expenses	414,496	13,410	(3,228)	iii	397,858
8	Depreciation	265,117	10,236			254,881
9	Other financing			1,013	iv	1,013
10	Property and other taxes	73,690	1,369			72,321
11		1,823,761	48,939	(17,785)		1,757,037
	Other					
12	Gain / (Loss) on sale of assets	(214)	(210)			(3)
13	Other / Huron Tipperary		-			-
14	Gain / (Loss) on foreign exchange	(873)	(47)	(612)	v	(1,438)
15		(1,087)	(257)	(612)		(1,441)
16	Earnings before interest and taxes	435,352	69,497	(5,344)		360,510
17	Income taxes					(921)
18	Total utility income subject to earnings sharing					361,431
	Less debt and preference share return components					
19	Long-term debt					165,315
20	Unfunded short-term debt					818
21	Preferred dividend requirements					2,769
22						168,902
	Less shareholder portions of:					
23	Net short-term storage revenue (after tax)					275
24	Net optimization activity (after tax)					369
25						643
26	Earnings subject to sharing					191,886
27	Common equity					1,970,608
28	Return on equity (line 26 / line 27)					9.74%
29	Benchmark return on equity					9.93%
30	50% earnings sharing % (line 28 - line 29, maximum 1%)					0.00%
31	90% earnings sharing % (if line 30=1%, then line 28 - line 29 - line 30)					0.00%
32	50% earnings sharing $ (line 27 x line 30 x 50%)					-
33	90% earnings sharing $ (line 27 x line 31 x 90%)					-
34	Total earnings sharing $ (line 32 + line 33)					-
35	Pre-tax earnings sharing (line 34 / (1 minus tax rate)					-

Notes:

i Reclassification of optimization revenue as cost of gas

ii Demand-side management incentive

iii	Donations	3,089
	CDM program	139
		3,228

iv Facility fees and customer deposit interest

v Foreign exchange gain on bank balances

UNION GAS LIMITED

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

Reference: OM&A Expenses Exhibit A, Tab 2, Appendix A, Schedule 13, lines 21 and 22

Question:

a) Please provide breakdown of Affiliate inbound/outbound Revenue and Expenses for 2017

b) Please provide details of changes in Inbound Affiliate Services including specifically Enbridge 2017 Corporate Charges

---

Response:

a) Please see the 2017 Affiliate Revenue and Expenses in the tables below.

Union Gas Limited
Affiliate Revenue
($000's)

Line No.	Functional Service	2013 Board-approved	2013 Actuals	2014 Actuals	2015 Actuals	2016 Actuals	2017 Actuals
		(a)	(b)	(c)	(d)	(e)	(f)
1	Bus Devel, S&T	728	506	383	550	427	354
2	Corp Services	-	-	-	-	-	-
3	Engineering & Construction	485	178	229	40	35	43
4	EHS	821	702	912	523	624	453
5	Ethics	-	-	-	-	-	-
6	Finance	1,951	1,881	2,434	2,942	3,348	3,600
7	Gov Relations	701	627	379	404	348	48
8	HR	2,480	2,782	2,694	2,927	2,806	2,790
9	Insurance	150	118	80	68	75	29
10	IT	4,339	5,509	5,670	6,091	5,810	6,191
11	Legal	13	5	2	1	66	291
12	Other	14	8	4	10	7	64
13	Public Affairs	-	-	-	-	-	-
14	Supply Chain	801	772	764	906	963	672
15	Tax	1,224	1,166	1,068	992	968	839
16	Audit	-	-	-	-	429	470
17	Total	13,706	14,254	14,619	15,454	15,905	15,842

Union Gas Limited
Affiliate Expenses
($000's)

Line No.	Functional Service	2013 Board-approved	2013 Actuals	2014 Actuals	2015 Actuals	2016 Actuals	2017 Actuals
1	Bus Devel, S&T	206	(65)	-	-	-	-
2	Corp Services	68	109	109	81	70	91
3	Engineering & Construction	437	56	-	-	-	-
4	EHS	1,097	831	922	701	640	714
5	Ethics	230	376	280	424	342	330
6	Finance	1,286	1,349	1,843	2,158	2,898	2,782
7	Gov Relations	-	-	-	-	-	-
8	HR	2,207	1,588	1,825	1,887	1,809	2,056
9	Insurance	505	97	127	310	302	217
10	IT	1,729	5,046	5,403	7,945	8,741	8,395
11	Legal	156	73	155	204	218	213
12	Other	315	-	-	-	-	1,982
13	Pub Affairs	5	3	3	20	-	-
14	Supply Chain	752	889	1,768	3,218	3,772	3,483
15	Tax	450	455	435	475	481	472
16	Audit	-	-	-	-	583	434
17	Sub Total	9,443	10,807	12,870	17,423	19,856	21,170
18	Depreciation	2,445	2,052	2,208	2,526	2,152	1,440
19	Total	11,888	12,859	15,078	19,949	22,008	22,610

b) There have been no significant changes in Inbound Affiliate Services in 2017. Union received a similar level of service from affiliates in 2017, including corporate charges, as in 2016.

As shown above, Union's Affiliate Expenses were $22.6 million in 2017 and $22.0 million in 2016; which represents an increase of less than 3%.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Pages 41-43: Exhibit A, Tab 1, Appendix A, Schedule 8

Question:

a) Please provide the forecast volumes and PDO Credit for 2018

b) With respect to the Parkway Delivery Obligation Rate Variance Account, please provide reasons why the provisions of the Settlement should continue in 2018, given the increased D-P capacity available.

Response:

a) Please see Attachment 1 for the 2018 PDO volume forecast provided as part of the annual PDO reporting requirement filed with Union's 2018 Rates application (EB-2017-0087). Union confirms there has been no change to the PDO volume forecast since it was filed.

   Union is forecasting a debit balance in the Parkway Delivery Obligation Rate Variance Account for 2018 of approximately $0.3 million.

b) Union 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 long-term or short-term transportation revenue.

Parkway Delivery Obligation (PDO) for 2016 - 2019
(TJ/day)

Line No.	Particulars	2016 Rates As Filed (EB-2015-0116)			2016 Rates IR As Filed (EB-2015-0116)			2017 Rates As Filed (EB-2016-0245)			2018 Rates As Filed (EB-2017-0087)		
		Nov-15	Nov-16	Nov-17	Nov-15	Nov-16	Nov-17	Nov-16	Nov-17	Nov-18	Nov-17	Nov-18	Nov-19
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	CAPACITY AVAILABLE FOR PDO SHIFT												
1	Ex-Franchise M12 Dawn to Kirkwall Turnback	-123	-10	-29	-123	-10	-67	-10	-67	0	-67	0	0
	Allocation of Capacity Available (turnback):												
2	Opening Balance	-146	-23	-13	-146	-23	-13	-23	-13	0	-13	0	0
3	Temporary Capacity Provided	0	0	0	0	0	0	0	0	0	0	0	0
4	Replacement of Temporary Capacity	123	10	13	123	10	13	10	13	0	13	0	0
5	Closing Balance	-23	-13	0	-23	-13	0	-13	0	0	0	0	0
6	Available for PDO Shift	0	0	-16	0	0	-54	0	-54	0	-54	0	0
	TOTAL DIRECT PURCHASE PDO												
7	Beginning PDO	369	369	369	369	369	369	376	376	303	366	298	228
8	Annual PDO Shift *line 11 + line 17 + line 21*	0	0	-23	0	0	-79	0	-73	-70	-68	-70	0
9	Remaining PDO	369	369	346	369	369	290	376	303	233	298	228	228
	DIRECT PURCHASE PDO DETAIL BY CUSTOMER GROUP												
	PDO for Customers without M12 Service:												
10	Beginning PDO	254	254	254	254	254	254	261	261	207	251	197	197
11	PDO Shift	0	0	-16	0	0	-54	0	-54	0	-54	0	0
12	Surplus Required	0	0	0	0	0	0	0	0	0	0	0	0
13	Remaining PDO	254	254	238	254	254	200	261	207	207	197	197	197
14	Annual PDO Shift	0	0	16	0	0	54	0	54	0	54	0	0
15	Allocation to those with PO < 100 GJ/day (1)	0	0	0	0	0	0	0	12	0	14	0	0
16	Percentage Reduction for those with PO > 99 GJ/day (1)	0%	0%	6%	0%	0%	21%	0%	17%	0%	17%	0%	0%
	PDO for Customers with M12 Service (except TCE):												
17	Beginning PDO	31	31	31	31	31	31	31	31	26	31	31	31
18	In-Franchise M12 Dawn to Parkway Turnback *line 15 * line 16*	0	0	-2	0	0	-7	0	-5	0	0	0	0
19	Remaining PDO	31	31	29	31	31	24	31	26	26	31	31	31
20	Annual PDO Shift	0	0	2	0	0	7	0	5	0	0	0	0
	PDO for TCE Halton Hills:												
21	Beginning PDO	84	84	84	84	84	84	84	84	70	84	70	0
22	In-Franchise M12 Dawn to Parkway turnback *line 15 * line 20*	0	0	-5	0	0	-18	0	-14	-70	-14	-70	0
23	Remaining PDO	84	84	79	84	84	66	84	70	0	70	0	0
24	Annual PDO Shift	0	0	5	0	0	18	0	14	70	14	70	0
25	**PDO for Sales Service (2)**	103	11	11	103	11	11	19	11	11	11	11	11

Notes:

(1) For November, 2017 customers with PO < 40 GJs/day will be allocated to shift 100% of their obligation to Dawn

(2) The actual contract amount for November 1, 2016 is higher, but Union has turnback rights which are effective January, 2017

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 41-43 and EB-2013-0365 Settlement Agreement

Preamble:

We are interested in understanding better the application of principles from the EB-2013-0365 Settlement Agreement to the current situation and the deferral account 179-138.

Excerpt 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.

Question:

Please populate the Tables 1 and 2 in Attachment 1 to the IR's.

Pertaining to Tables 1 and 2:

a) For the following categories in Table 1, please confirm that the recovery of the costs of that capacity falls into one of either "*base rates, Y factors and/or existing deferral or variance accounts.*"

   i) Line 1 - Capacity in Base Rates

   ii) Line 2 - PDO Capacity from Temporarily Available Capacity in In-franchise Rates

   iii) Line 3 - PDO Capacity from Dawn-Kirkwall Capacity in In-franchise Rates

   iv) Line 4 - PDO Capacity from PDO Capacity from Customers with M12 service in In-franchise Rates

   v) Line 5 - Incremental Build Capacity in Rates

b) If any of the above are not confirmed, specify where the recovery occurs and how it is classified.

c) For line 7 in Table 1, please provide a complete description of the Other Changes that have served to reduce Total Physical capacity over the last three design winters.

   i) Please ensure the description outlines the various components that contribute to the reduction of the capacity.

   ii) Please advise if there are technical solutions such as compressor refinements that could minimize these reductions in a cost effective manner.

   iii) Please advise if there were errors in the forecast or simulation that contributed to the difference.

   iv) If the change is the interaction of the new build facilities with the existing facilities, please specify if that was evidenced in any of the build proceedings.

      (1) If the reduction came as a result of the combination of new facilities with old, did it contribute to additional facilities being built (e.g., if reduction did not happen, only 2 compressors would have been required in the 2017 build). Please provide the supporting analysis that demonstrates that is not the case

Response:

In this proceeding, Union is asking to dispose of the 2017 balances in its deferral and variance accounts, including the credit balance of $0.121 million in the Parkway Obligation Rate Variance Deferral Account No. 179-138. The purpose of Deferral Account No. 179-138 is to record the rate variances associated with the timing differences between the effective date of the Parkway delivery obligation changes (November 1) and the inclusion of the cost impacts in approved rates (January 1 of the following year). The information requested in Exhibit B.FRPO.1 through Exhibit B.FRPO.4 relates to the Parkway Delivery Obligation ("PDO") but not to the requested relief in this proceeding. Similar information was requested in EB-2017-0306/EB-2017-0307 proceeding, for which the Board has not yet rendered its Decision. As noted in the Reply Argument in that proceeding:

> *"In each rates proceeding subsequent to the PDO Settlement Agreement, Union has proposed to adjust rates as contemplated by the Agreement and the Board has approved these adjustments. In none of the proceedings has any party objected to the adjustment."*[1]

In order to be responsive to the questions posed in this proceeding, Union has provided much of the information requested in its responses on the topic of PDO, however, as set out above, the information is not relevant to the relief requested in this proceeding.

Please see Attachment 1 for Table 1 and Attachment 2 for Table 2.

a) Paragraph B.10 of The Settlement Framework for Reduction of Parkway Delivery Obligation ("PDO Framework") describes the annual reporting requirements Union is to include in its annual rate applications. The preamble to this question includes Section 10 c) of the PDO Framework that references the annual reporting requirements on the Parkway delivery shortfall position.

   Paragraph B.2 of the PDO Framework describes the quantity and time periods for which Union was forecasting to be in a Parkway delivery shortfall position at the time the PDO Framework was established. The Parkway delivery shortfall was expected to result from temporarily available Dawn-Parkway capacity Union was using to facilitate the initial PDO reduction effective April 1, 2014 that would no longer be available effective November 1, 2015.

As described at Paragraph B.2 ii):

> *Effective November 1, 2015, the temporarily available Dawn to Parkway capacity will be used for other purposes leaving Parkway in a delivery shortfall position. The demand costs associated with the temporarily unavailable capacity as described above will*

[1] EB-2017-0306/EB-2017-0307 Reply Argument of the Applicants, filed June 28, 2018, p. 71

> *nevertheless remain in delivery rates to be used by Union to manage the Parkway delivery shortfall through the acquisition of incremental resources, the costs of which are not already covered by base rates, Y factors and/or deferral and variance accounts and subject to the reporting and risk allocation measures described in paragraph B.10 (c) below.*

Union has reported in its annual rate application that there were no additional costs to manage the Parkway delivery shortfall and has managed the shortfall through M12 Dawn-Kirkwall turnback that was not forecast at the time the PDO Framework was established.

The Parkway delivery shortfall was eliminated effective November 1, 2017 when M12 Dawn-Kirkwall turnback created sufficient permanent capacity to replace the temporarily available capacity. Accordingly, Union no longer has a Parkway delivery shortfall to manage as described in the PDO Framework.

The PDO Framework provided Union the ability to include the Dawn-Parkway demand and fuel costs in in-franchise rates associated with the temporarily available and permanent Dawn-Parkway capacity used to facilitate PDO reduction (shift). The demand costs included in Union's annual rate application recovers from in-franchise customers the revenue Union is no longer receiving through M12 Dawn-Parkway and Dawn-Kirkwall contracts. The paragraphs in the PDO Framework that reference "costs of which are not already covered by base rates, Y factors and/or deferral and variance accounts" are in reference to the incremental costs Union may have incurred to manage the Parkway delivery shortfall. It is not in reference to the demand costs included in Union's rates.

The response to parts i) to v) is provided below. Please also see the response at Exhibit B.EP.7 b).

i) The capacity in base rates is recovered in base rates.

ii) The PDO capacity from temporarily available capacity in in-franchise rates was included in base rates as an annual Y-factor adjustment. The PDO Framework provided Union the ability to include the Dawn-Parkway demand costs in rates associated with the temporarily available Dawn-Parkway capacity used to facilitate the PDO shift.

iii) The PDO capacity from Dawn-Kirkwall capacity in in-franchise rates was recovered in base rates through M12 Dawn-Kirkwall contracts. These contracts were turned back and used to facilitate the PDO shift. The recovery of these costs is now included in base rates as an annual Y-factor adjustment (Parkway Delivery Obligation) of in-franchise customers. The rate variances associated with the timing differences between the effective date of the PDO changes and the inclusion of cost impacts in approved rates are recorded in the Parkway Obligation Rate Variance deferral account.

iv) The PDO capacity from customers with M12 service in in-franchise rates was recovered in base rates through M12 Dawn-Parkway contracts. These contracts were turned back and used to facilitate the PDO shift. The recovery of these costs is now included in base rates as an annual Y-factor adjustment (Parkway Delivery Obligation) of in-franchise customers. The rate variances associated with the timing differences between the effective date of the PDO changes and the inclusion of cost impacts in approved rates are recorded in the Parkway Obligation Rate Variance deferral account.

v) The recovery of the costs associated with the incremental build capacity in rates is included in base rates as an annual Y-factor adjustment (Capital Pass-through) with deferral account true-up by Project to reflect the true-up of forecast costs included in rates to actual costs.

b) Please see the response at part a).

c)

i) The total Dawn Parkway system capacity has been reduced due to year to year modelling changes, in-franchise and ex-franchise demand changes and PDO reduction along the Dawn Parkway system.

ii) There are no compressor refinements that can be completed in a cost-effective manner that can minimize the capacity reductions.

iii) There are no errors in the forecast or simulation that contributed to capacity reduction.

iv) The capacity reduction is not related to the interaction of new and old facilities.

EB-2018-0105 Union 2017 Dispositions

FRPO Table 1

Line No.	Rate Year / Winter Design Period	2013 W13/14 (a)	2014 W14/15 (b)	2015 W15/16 (c)	2016 W16/17 (d)	2017 W17/18 (e)	2018 W18/19 (f)
1	Capacity in Base Rates (TJ/d)	6,803	6,803	6,803	6,803	6,803	
2	PDO Capacity from Temporarily Available Capacity in In-Franchise Rates (TJ/d) (1)	-	-	-	-	-	
3	PDO Capacity from Dawn-Parkway & Dawn-Kirkwall Turnback in In-Franchise Rates (TJ/d) (1)	-	-	-	-	-	
4	PDO Capacity from Customers with M12 service in In-Franchise Rates (TJ/d) (1)	-	-	-	-	-	
5	Incremental Build Capacity in Rates (TJ/d) (3)	-	-	433	876	1,332	
6	Total Capacity in Rates (TJ/d) (line 1 + line 2 + line 3 + line 4 + line 5)	6,803	6,803	7,236	7,678	8,135	
7	Other Changes (TJ/d)	-	(2)	(222)	(170)	(246)	
8	Total Capacity in Rates Net of Other Changes (TJ/d) (line 6 - line 7)	6,803	6,801	7,014	7,508	7,889	
9	Total Revenue Requirement of Assets in Base Rates ($000's) (4)	144,866	145,605	146,799	147,973	148,950	149,710
10	Total Revenue Requirement of PDO ($000's) (2)	-	-	-	-	-	-
11	Build Revenue Requirement ($000's)	-	804	14,223	48,891	92,360	116,884
12	Total D-P Revenue Requirement ($000's) (line 9 + line 10 + line 11)	144,866	146,409	161,022	196,864	241,310	266,594

Notes:

(1) PDO costs in Union's rates did not change the capacity of the Dawn-Parkway transmission system. Union facilitated a PDO shift of the following quantities:

	W13/14	W14/15	W15/16	W16/17	W17/18	W18/19
Temporarily Available Capacity (TJ/d)	-	146	23	13	-	
Permanent Capacity from Dawn-Kirkwall Turnback (TJ/d)	-	-	123	133	200	
Permanent Capacity from Dawn-Parkway Turnback (Customers with M12 service) (TJ/d)	-	66	66	66	81	
	-	212	212	212	280	

(2) The PDO shift did not impact the Dawn-Parkway demand revenue requirement. The PDO Framework provided Union the ability to include the Dawn-Parkway demand costs in rates associated with the temporarily available and permanent Dawn-Parkway capacity used to facilitate the PDO shift. Union included the following demand costs associated with the PDO shift quantities in rates and had the following decrease in demand revenue from M12 turnback:

	2013	2014	2015	2016	2017	2018
Temporarily Available Capacity ($000's)	-	-	4,563	796	531	-
Permanent Capacity from Dawn-Kirkwall Turnback ($000's)	-	-	-	4,256	5,431	8,898
Permanent Capacity from Dawn-Parkway Turnback (Customers with M12 service) ($000's)	-	-	580	643	758	828
PDO Shift Dawn-Parkway Demand Costs in Rates ($000's)	-	-	5,143	5,694	6,720	9,726
Decrease in Demand Revenue from M12 Turnback Used for PDO Shift ($000's)	-	-	(580)	(4,669)	(5,937)	(9,993)
Revenue/(Shortfall) from Temporarily Available Capacity and Dawn-Parkway Equivalency Differences ($000's)	-	-	4,563	1,025	783	(267)

(3) W15/16 - Incremental capacity resulting from the Brantford-Kirkwall / Parkway D Project of 433 TJ/d.
W16/17 - Incremental capacity resulting from the Dawn Parkway 2016 System Expansion Project of 443 TJ/d.
W17/18 - Incremental capacity resulting from the 2017 Dawn Parkway Project of 457 TJ/d.

(4) 2013 Dawn-Parkway demand revenue requirement escalated annually by the Price Cap Index approved in Union's annual rate proceeding.

EB-2018-0105 Union 2017 Dispositions
FRPO Table 2

Line No.	Rate Year Deliveries to Parkway for Winter Design Period	2014 W13/14 (a)	2015 W14/15 (3) (b)	2016 W15/16 (c)	2017 W16/17 (d)	2018 W17/18 (e)	W18/19 (f)
1	Total Physical Capacity (TJ/d)	2,276	2,465	3,433	3,892	4,408	4,473
2	M12 Contracted (TJ/d)	2,304	2,546	3,470	3,801	4,170	4,059
3	D-P In-franchise Demand w/o PDO (TJ/d)	401	400	479	407	412	510
4	PDO Capacity	639	639	481	381	280	222
5	Peak Day Capacity Required at Parkway (TJ/d) (line 2 + line 3 - line 4) (1)	2,066	2,307	3,468	3,827	4,302	4,347
6	Excess Capacity on Peak Day (TJ/d) (line 1 - line 5) (2)	210	158	(35)	65	106	126

Notes:

(1) The Peak Day Capacity Required at Parkway is equal to the M12 Contracted (line 2) easterly flowing demand on the discharge side of Parkway plus the D-P In-franchise Demand (line 3) delivered on the discharge side of Parkway minus the amount of PDO Capacity (line 4) delivered to the discharge side of Parkway. Therefore line 5 = line 2 + line 3 – line 4.

(2) The Excess Capacity on Peak Day on the discharge side of Parkway equals the Total Physical Capacity of Parkway (line 1) minus the Peak Day Capacity Required at Parkway (line 5). Therefore line 6 = line 1 – line 5.

(3) Winter 14/15 PDO capacity was reduced to 428 TJ/d and the M12 Contracted was reduced to 2,481 TJ/d due to the results of the settlement agreement for PDO reduction. The Peak Day Capacity Required at Parkway increased to 2,453 TJ/d, causing the surplus to be reduced from 158 TJ/d to 12 TJ/d.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 41-43 and EB-2013-0365 Settlement Agreement

Question:

For each of 2013/14, 2014/15, 2015/16, 2016/17 and 2017/18, please provide:

a) 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.

b) 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.

Response:

a) As outlined in EB-2017-0091, Exhibit B.FRPO.5 d) and EB-2017-0087, Exhibit B.FRPO.8 c), Union did not acquire incremental resources in any of the years listed to manage the Parkway delivery shortfall.

b) As outlined in EB-2017-0091, Exhibit B.FRPO.5 e) and EB-2017-0087, Exhibit B.FRPO.8 d), Union did not interrupt customers on the Dawn Parkway System in any of the years listed.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 41-43 and EB-2013-0365 Settlement Agreement

Question:

For the last 4 calendar years, for each month, please provide:

a) the revenues generated from Dawn-Parkway sale of unutilized transport, broken out between C1 and Interruptible Transport

b) the maximum daily amount of Dawn-Parkway capacity sold and the $/GJ and HDD for that day

c) The highest daily $/GJ/day and the total amount of Dawn-Parkway sold and HDD for that day

d) the number of days in each respective month where Union was required to turndown requests for short-term or IT service, due to insufficient capacity.

e) 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 capacity to meet the request for short-term or IT service.

Response:

a) The revenues generated from the sale of C1 and Interruptible Dawn Parkway transportation for the last four calendar years, for each month, is provided in Table 1 below.

Table 1
Revenue from C1 and Interruptible Transportation 2014 - 2017

Revenue ($ millions) **C1 Transportation**	January	February	March	April	May	June	July	August	September	October	November	December	Total
2014	0.91	0.76	0.66	0.03	0.02	0.04	0.05	0.10	0.09	0.08	0.43	0.56	3.75
2015	0.50	0.87	2.07	0.75	0.19	0.21	0.19	0.21	0.21	0.23	0.27	0.30	6.00
2016	0.43	0.52	0.43	0.26	0.20	0.12	0.15	0.18	0.65	0.13	0.37	0.90	4.35
2017	0.92	0.89	0.77	0.32	0.01	0.21	0.05	0.03	0.04	0.04	0.75	1.01	5.04

Interruptible Transportation	January	February	March	April	May	June	July	August	September	October	November	December	Total
2014	0.18	0.20	0.21	0.10	0.01	0.05	0.08	0.01	0.02	0.03	0.00	0.00	0.90
2015	0.09	0.09	0.10	0.03	0.01	0.01	0.01	0.01	0.02	0.00	0.03	0.01	0.40
2016	0.02	0.01	0.00	0.02	0.01	0.01	0.01	0.01	0.03	0.05	0.04	0.05	0.25
2017	0.08	0.11	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.15	0.75

b) The maximum daily amount of Dawn-Parkway capacity sold in an individual contract, and the related $/GJ and HDDs based on the start date of the contract, is shown in Tables 2-5 below for 2014-2017. HDDs provided are based on Union South.

Table 2
Maximum Daily Amount of Dawn-Parkway Capacity Sold and the Associated $/GJ and HDD for 2014

2014	January	February	March	April	May	June	July	August	September	October	November	December
Maximum volume (GJ/d)	70,926	158,258	105,506	38,450	22,413	71,953	50,432	58,334	28,292	26,376	22,812	27,634
$/GJ	0.16	0.06	0.06	0.07	0.03	0.02	0.05	0.03	0.01	0.02	0.11	0.08
HDD	36.7	19.6	28.3	13.3	0.0	0.0	1.5	0.0	3.5	2.9	18.2	26.0

Table 3
Maximum Daily Amount of Dawn-Parkway Capacity Sold and the Associated $/GJ and HDD for 2015

2015	January	February	March	April	May	June	July	August	September	October	November	December
Maximum volume (GJ/d)	44,201	71,931	33,968	77,019	30,520	19,519	15,804	34,096	15,000	84,000	24,266	47,478
$/GJ	0.08	0.16	0.11	0.05	0.02	0.05	0.01	0.05	0.09	0.01	0.05	0.03
HDD	31.4	39.8	25.6	14.5	5.5	6.3	0.0	0.0	0.0	12.3	11.1	12.1

Table 4
Maximum Daily Amount of Dawn-Parkway Capacity Sold and the Associated $/GJ and HDD for 2016

2016	January	February	March	April	May	June	July	August	September	October	November	December
Maximum volume (GJ/d)	33,672	67,336	38,009	105,506	21,101	19,789	26,156	60,000	33,713	21,101	73,854	66,239
$/GJ	0.04	0.07	0.03	0.02	0.06	0.05	0.04	0.02	0.10	0.13	0.02	0.06
HDD	21.0	36.7	23.6	15.1	9.8	0.0	0.0	0.0	1.3	15.9	1.3	31.4

Table 5
Maximum Daily Amount of Dawn-Parkway Capacity Sold and the Associated $/GJ and HDD for 2017

2017	January	February	March	April	May	June	July	August	September	October	November	December
Maximum volume (GJ/d)	45,498	52,753	62,167	52,753	8,552	235,000	105,000	37,982	17,408	36,927	31,652	79,129
$/GJ	0.08	0.07	0.03	0.09	0.03	0.07	0.07	0.06	0.07	0.04	0.08	0.12
HDD	30.1	10.5	15.1	13.5	11.6	0.3	0.0	0.0	7.6	0.0	26.9	34.2

c) The highest daily $/GJ/day sold in an individual contract, and the related contracted capacity and HDDs based on the start date of the contract, is shown in Tables 6-9 below for 2014-2017. HDDs provided are based on Union South.

Table 6
Highest Daily $/GJ/Day and the Associated Dawn-Parkway Sold and HDD for 2014

2014	January	February	March	April	May	June	July	August	September	October	November	December
Highest $/GJ	2.00	0.52	1.05	0.10	0.08	0.08	0.05	0.05	0.04	0.11	0.41	0.53
Capacity sold	5,275	21,101	21,101	3,798	21,101	6,443	50,432	42,202	21,101	65	8,100	150
HDD	32.7	32.4	24.9	13.1	0.0	0.0	1.5	0.0	0.0	13.0	18.2	23.4

Table 7
Highest Daily $/GJ/Day and the Associated Dawn-Parkway Sold and HDD for 2015

2015	January	February	March	April	May	June	July	August	September	October	November	December
Highest $/GJ	2.50	2.10	2.16	0.12	0.07	0.11	0.10	0.07	0.09	1.24	1.05	0.17
Capacity sold	3,000	1,500	8,440	17,000	2,835	2,835	325	7,385	15,000	2,076	1,952	750
HDD	27.9	29.5	35.5	14.5	3.7	1.4	0.0	0.0	0.0	3.1	10.1	13.2

Table 8
Highest Daily $/GJ/Day and the Associated Dawn-Parkway Sold and HDD for 2016

2016	January	February	March	April	May	June	July	August	September	October	November	December
Highest $/GJ	0.75	0.55	0.54	0.23	0.10	0.10	0.49	0.16	0.17	0.13	0.55	0.32
Capacity sold	1,000	150	120	41,886	2,110	2,110	5,275	10,234	2,600	21,101	15,826	2,638
HDD	27.3	30.6	24.2	19.8	9.8	0.0	0.0	0.0	0.0	15.9	1.3	25.0

Table 9
Highest Daily $/GJ/Day and the Associated Dawn-Parkway Sold and HDD for 2017

2017	January	February	March	April	May	June	July	August	September	October	November	December
Highest $/GJ	0.75	0.19	0.13	0.09	0.26	0.08	1.25	0.10	0.08	0.12	0.61	0.24
Capacity sold	2,000	1,055	1,800	52,753	1,412	4,500	7,500	701	200	31,652	7,000	6,330
HDD	31.2	26.4	15.6	13.5	3.5	2.3	0.0	0.0	0.0	2.9	26.9	21.0

d) and e)

As outlined in EB-2017-0087, Exhibit B.FRPO.11 g), Union did not turn down any requests for short-term or IT service due to insufficient capacity in any of the last four calendar years and therefore did not need to communicate to customers that IT was unavailable.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 41-43 and EB-2013-0365 Settlement Agreement

Question:

For each of the last 4 calendar years, please provide the total PDCI collected in rates and the amount of PDCI paid out to the parties who obligated volumes at Parkway.

a) For each of those years, please provide the cost in $/GJ/day to generate firm deliveries at Parkway using PDCI.

b) For each of the 2015, 2016 and 2017 builds, please provide the cost in $/GJ/day of generating firm deliveries through each of the respective builds. To ensure clarity for these figures, the requested figure should be the cost of the build divided by the design day demand it delivers to Parkway.

Response:

The effective date of the PDCI credit payment to customers for obligated deliveries at Parkway was November 1, 2016. Prior to that effective date, Union incurred no costs associated with the PDCI.

In 2016, Union included, and the Board approved, $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.

In 2017, Union included, and the Board approved, $17.6 million in rates related to the 2017 PDCI costs (EB-2016-0245). Union is proposing to refund $0.6 million, as part of this proceeding, related to the timing difference between the effective date of the PDO shift at November 1, 2017 and the inclusion of the cost impacts in 2018 approved rates. Union paid out $16.0 million of PDCI credit to customers with obligated deliveries at Parkway for the period January 1, 2017 to December 31, 2017.

Effective January 1, 2018, Union included $13.2 million in rates related to the 2018 PDCI costs (EB-2017-0087).

a) Please see Table 1 below.

Table 1
Cost per GJ of 2017 & 2018 PDCI in Rates

Line No.	Particulars	2017 PDCI (a)		2018 PDCI (b)	
1	Total Cost in Rates ($000's)	17,559	(1)	13,171	(2)
2	Remaining PDO Obligation (TJ/d)	304		231	
3	Annual Cost per GJ ($/GJ/d) (line 1/line 2)	57.67		56.94	
4	Daily Cost per GJ ($/GJ/d) (line 3/365)	0.158		0.156	

Notes:
(1) EB-2016-0296, Exhibit 7, Schedule 2, p. 1, line 15, col. (f).
(2) EB-2017-0087, Rate Order, Working Papers, Schedule 20, p. 1, line 29, col. (f).

b) Please see Table 2 below.

Table 2
Capital Cost per GJ/d of Dawn-Parkway Growth Projects

	2015	**2016**	**2017**
Projects	Parkway D Brantford-Kirkwall	Hamilton Milton Lobo C	Lobo D Bright C
Total Forecast Final Capital Cost ($M)	$197	$348	$338
Capacity Created (GJ/d)	433,000	442,764	456,647
Capital Cost per GJ/d ($/GJ/d)	$455	$786	$740

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 41-43 and EB-2013-0365 Settlement Agreement

Question:

For the last 4 years please provide the daily storage levels (Sept.-Nov), separated by utility and non-utility.

a) For each day, please indicate

   i) The colour of the storage Operational Status light

   ii) Amount of interruptible injection nominated

   iii) Amount of interruptible injection accepted

   iv) Amount of injection accepted from other non-firm injection right services

   v) Revenue generated from services associated with these injections

b) What criteria does Union use to change the Operational Status light:

   i) From green to yellow?

   ii) From yellow to red?

c) What criteria does Union publicize to indicate approaching risk of a change in status light?

d) Would Union entertain posting storage fill positions of the Dawn storage pools on a weekly basis? If not, why not?

Response:

a) to d) Union declines to provide the requested information as it is not relevant to the relief sought in this application for approval and disposition of balances in certain non-commodity deferral accounts.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Page 7

Preamble:

We would like to understand better the evolution of optimization revenue in Account 179-131 over the IRM period. While we understand the effect of the elimination FT-RAM, Union's evidence states:

> *"2017 weather in traditional delivery areas where Union would transact was between 2 - 5% warmer compared to what was experienced in 2013 when the Board-approved revenue was determined, resulting in less demand and lower prices for exchange transactions compared to 2013 Board-approved levels."*

Question:

Please specify the traditional delivery areas where Union would transact.

Response:

The traditional delivery areas where Union would predominantly transact exchanges are Union South, Union CDA, Union NDA and Union EDA.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Page 7

Preamble:

We would like to understand better the evolution of optimization revenue in Account 179-131 over the IRM period. While we understand the effect of the elimination FT-RAM, Union's evidence states:

> *"2017 weather in traditional delivery areas where Union would transact was between 2 - 5% warmer compared to what was experienced in 2013 when the Board-approved revenue was determined, resulting in less demand and lower prices for exchange transactions compared to 2013 Board-approved levels."*

Question:

For each year since and including 2013, please provide:

a) The optimization revenues

b) The HDD for the Jan-Mar and Nov.-Dec. for those years

Response:

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

b) The HDD for the Jan.-Mar. and Nov.-Dec. periods of the years 2013 to 2017 are shown in Table 1 below:

Table 1
HDDs for the Jan.-Mar. and Nov.-Dec. Periods

Years	**Jan.**	**Feb.**	**Mar.**	**Nov.**	**Dec.**	**Total**
2013	693.9	666.7	597.8	504.1	744.3	3,206.8
2014	865.7	779.4	716.5	526.0	608.9	3,496.4
2015	836.6	890.0	639.5	374.4	473.2	3,213.8
2016	710.2	638.1	493.5	373.7	658.0	2,873.5
2017	654.7	536.5	601.0	473.2	764.1	3,029.4

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 20-25 and EB-2017-0091 Exhibit A., Tab 1, page 23

Preamble:

We would like to understand better the impact of the methodology on the establishment of the target NAC.

Question:

Please provide the monthly forecasted and actual heating degree days and actual monthly volumes in the form of Excel spreadsheets with working formulae that determine:

a) the targeted annual NAC

b) the resulting actual NAC

Response:

a) to b) Please see Attachment 1.

		January	February	March	April	May	June	July	August	September	October	November	December	Total
	2017 Normal Weather (HDD)													
	South	712	636	544	325	148	34	7	13	77	256	423	608	3,782
	North	898	777	671	419	218	76	29	44	141	348	533	764	4,918
	2017 Actual Weather (HDD)													
	South	619	492	561	258	181	30	2	22	69	175	439	714	3,562
	North	762	671	720	396	254	74	25	66	115	256	575	913	4,828
	Variance to 2017 Normal Weather (HDD)													
	South	-93	-144	17	-67	33	-4	-5	9	-8	-80	16	106	-220
	North	-137	-106	49	-23	36	-2	-3	23	-26	-92	41	149	-89
	%													
	South	-13%	-23%	3%	-21%	22%	-11%	-66%	71%	-11%	-31%	4%	17%	-6%
	North	-15%	-14%	7%	-5%	17%	-2%	-12%	52%	-18%	-26%	8%	20%	-2%
	2015 Actual Weather (HDD)													
	South	792	857	612	334	99	35	10	16	47	245	349	440	3,834
	North	970	989	722	430	197	80	24	36	84	356	449	574	4,912
	Variance to 2017 Normal Weather (HDD)													
	South	80	221	68	9	-50	1	3	3	-30	-11	-74	-169	-52
	North	71	212	51	11	-21	4	-5	-8	-57	8	-84	-189	-6
	%													
	South	11%	35%	13%	3%	-33%	2%	39%	25%	-39%	-4%	-17%	-28%	-1%
	North	8%	27%	8%	3%	-9%	5%	-16%	-17%	-40%	2%	-16%	-25%	0%
	Leap Year Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	2013 Board Approved Weather Elasticity													
Rate M1	Residential	0.98	0.98	0.98	0.96	0.91	-	-	-	-	0.90	0.95	0.97	
	Commercial	0.90	0.89	0.87	0.79	0.60	-	-	-	0.21	0.71	0.83	0.89	
	Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	
	Industrial	0.77	0.77	0.77	0.38	0.38	-	-	-	-	0.67	0.67	0.67	
Rate M2	Residential	0.98	0.98	0.98	0.96	0.91	-	-	-	-	0.90	0.95	0.97	
	Commercial	0.90	0.89	0.87	0.79	0.61	-	-	-	0.22	0.72	0.84	0.88	
	Tobacco	-	-	-	-	-	-	-	-	-	-	-	-	
	Industrial	0.77	0.77	0.77	0.38	0.38	-	-	-	-	0.67	0.67	0.67	
Rate 01	Residential	0.94	0.93	0.91	0.85	0.72	-	-	-	-	0.77	0.88	0.92	
	Commercial	0.91	0.90	0.89	0.82	0.64	-	-	-	0.25	0.75	0.86	0.90	
Rate 10	Commercial	0.91	0.90	0.89	0.82	0.63	-	-	-	0.24	0.74	0.86	0.90	
	Industrial	0.77	0.77	0.77	0.38	0.38	-	-	-	-	0.67	0.67	0.67	
	Industrial CIA	0.77	0.77	0.77	0.38	0.38	-	-	-	-	0.67	0.67	0.67	

2017 Actual Average Use per Customer (m3)

Rate M1	Residential	363	278	320	158	113	63	57	52	59	93	226	388	2,169
	Commercial	1,419	1,096	1,141	554	333	154	152	144	169	313	1,016	1,533	8,024
	Tobacco	-898	373	488	997	116	-43	225	1,230	5,697	-57	145	4,630	12,903
	Industrial	2,438	2,062	2,063	768	286	188	155	61	208	395	1,971	3,076	13,672
Rate M2	Residential	10,439	8,510	9,203	4,903	5,593	2,165	1,926	1,342	3,226	3,650	7,067	6,695	64,720
	Commercial	18,132	16,427	19,196	10,932	8,873	4,103	3,092	4,077	4,520	8,345	17,405	24,435	139,537
	Tobacco	-423	3,123	2,624	7,683	1,789	291	1,788	8,609	38,458	7,669	-9,406	25,173	87,379
	Industrial	34,141	30,755	31,887	18,841	16,224	11,735	11,011	11,942	13,303	17,892	30,047	41,330	269,108
Rate 01	Residential	380	298	326	195	120	60	45	31	56	100	257	404	2,271
	Commercial	1,491	1,188	1,328	658	380	171	154	244	69	367	985	1,655	8,689
Rate 10	Commercial	17,270	16,369	17,353	10,651	8,584	3,090	3,654	3,696	4,756	7,768	14,952	21,540	129,682
	Industrial	47,462	45,463	45,305	34,208	30,261	27,296	21,978	23,985	24,278	32,503	37,671	77,264	447,673
	Industrial CIA	212,854	185,699	204,321	179,878	112,878	65,261	51,291	61,032	63,929	90,851	161,544	206,370	1,595,908
Total Rate M1		445	343	384	189	129	69	64	59	70	109	288	481	2,630
Total Rate M2		20,521	18,611	21,037	12,224	9,992	5,281	4,425	5,499	6,597	10,005	19,098	27,247	160,537
Total Rate 01		472	371	409	233	142	69	54	49	57	121	316	507	2,799
Total Rate 10		20,830	19,578	20,731	13,525	10,551	5,169	5,213	5,503	6,482	9,999	17,583	26,256	161,420

2015 Actual Average Use per Customer (m3)

Rate M1	Residential	460	467	328	181	77	67	60	51	58	105	187	249	2,290
	Commercial	1,745	1,840	1,319	652	238	124	157	219	109	325	810	914	8,452
	Tobacco	1,133	660	727	1,036	222	-116	184	1,053	5,736	145	-2,559	3,099	11,319
	Industrial	3,909	3,923	2,653	899	216	52	123	76	159	381	1,241	3,016	16,649
Rate M2	Residential	8,412	10,736	6,592	4,619	2,935	1,440	907	1,011	963	2,702	5,418	2,401	48,134
	Commercial	24,214	27,745	21,024	13,056	6,733	4,111	3,682	3,745	4,611	10,049	15,280	14,345	148,595
	Tobacco	4,970	3,691	2,730	5,870	1,420	13	1,121	5,589	36,554	14,393	-19,047	9,990	67,295
	Industrial	47,587	47,252	34,350	20,830	12,408	11,141	9,308	9,585	11,641	18,699	23,462	26,370	272,635
Rate 01	Residential	477	435	327	196	93	58	42	40	45	132	209	261	2,314
	Commercial	1,855	1,847	1,446	734	292	145	146	148	160	453	837	1,023	9,086
Rate 10	Commercial	21,278	24,611	18,271	10,093	5,344	3,841	3,203	3,711	4,159	8,973	13,139	13,850	130,474
	Industrial	53,043	57,081	43,878	33,246	23,052	23,104	18,438	21,728	23,179	31,528	37,439	43,934	409,650
	Industrial CIA	299,769	332,480	253,170	179,922	88,058	78,906	62,578	65,115	111,293	83,243	158,304	181,994	1,894,832
Total Rate M1		567	580	409	218	89	71	67	64	65	122	234	308	2,793
Total Rate M2		27,924	30,667	22,992	14,276	7,608	5,228	4,600	4,788	6,478	11,605	15,960	16,272	168,399
Total Rate 01		594	555	422	242	109	65	51	49	55	159	261	324	2,885
Total Rate 10		26,411	30,136	22,404	13,250	7,291	5,757	4,678	5,413	6,339	11,073	16,019	17,126	165,898

2017 Actual NAC (m3)

Rate M1	Residential	417	358	310	197	94	63	57	52	59	129	218	332	2,284
	Commercial	1,609	1,373	1,110	662	294	154	152	144	173	404	985	1,327	8,387
	Tobacco	-898	373	488	997	116	-43	225	1,230	5,697	-57	145	4,630	12,903
	Industrial	2,712	2,501	2,013	833	264	188	155	61	208	501	1,921	2,752	14,109
Rate M2	Residential	11,973	10,953	8,921	6,126	4,654	2,165	1,926	1,342	3,226	5,083	6,819	5,721	68,908
	Commercial	20,547	20,573	18,672	13,084	7,820	4,103	3,092	4,077	4,629	10,796	16,863	21,165	145,421
	Tobacco	-423	3,123	2,624	7,683	1,789	291	1,788	8,609	38,458	7,669	-9,406	25,173	87,379
	Industrial	37,974	37,293	31,114	20,436	14,974	11,735	11,011	11,942	13,303	22,709	29,289	36,977	278,758
Rate 01	Residential	443	341	306	204	107	60	45	31	56	125	240	343	2,300
	Commercial	1,732	1,354	1,246	688	343	171	154	244	72	458	924	1,408	8,793
Rate 10	Commercial	20,061	18,667	16,284	11,143	7,761	3,090	3,654	3,696	4,977	9,671	14,021	18,321	131,346
	Industrial	53,784	50,806	42,862	34,920	28,470	27,296	21,978	23,985	24,278	39,546	35,799	68,284	452,008
	Industrial CIA	241,205	207,526	193,305	183,622	106,197	65,261	51,291	61,032	63,929	110,539	153,518	182,384	1,619,809
Total Rate M1		509	438	373	233	109	69	64	59	70	150	278	413	2,764
Total Rate M2		23,134	23,089	20,480	14,243	8,924	5,281	4,425	5,499	6,686	12,830	18,529	23,850	166,969
Total Rate 01		550	425	384	244	127	69	54	49	57	152	296	430	2,835
Total Rate 10		24,063	22,228	19,489	14,058	9,631	5,169	5,213	5,503	6,688	12,371	16,534	22,536	163,483

2017 Target NAC (m3)

Rate M1	Residential	415	348	292	176	110	67	60	51	58	109	224	341	2,290
	Commercial	1,584	1,406	1,189	639	297	124	157	219	119	334	947	1,211	8,452
	Tobacco	1,133	660	727	1,036	222 -	116	184	1,053	5,736	145 -	2,559	3,099	11,319
	Industrial	3,597	3,093	2,418	890	247	52	123	76	159	392	1,407	3,710	16,649
Rate M2	Residential	7,576	8,003	5,866	4,504	4,218	1,440	907	1,011	963	2,806	6,490	3,291	48,134
	Commercial	21,988	21,202	18,946	12,788	8,448	4,111	3,682	3,745	5,051	10,360	17,888	19,006	148,595
	Tobacco	4,970	3,691	2,730	5,870	1,420	13	1,121	5,589	36,554	14,393 -	19,047	9,990	67,295
	Industrial	43,780	37,251	31,309	20,625	14,194	11,141	9,308	9,585	11,641	19,238	26,584	32,430	272,635
Rate 01	Residential	444	347	305	192	100	58	42	40	45	130	242	338	2,314
	Commercial	1,730	1,482	1,355	718	310	145	146	148	178	446	968	1,317	9,086
Rate 10	Commercial	19,839	19,739	17,114	9,875	5,686	3,841	3,203	3,711	4,608	8,827	15,186	17,831	130,474
	Industrial	49,980	47,141	41,444	32,910	23,905	23,104	18,438	21,728	23,179	31,065	41,883	52,748	409,650
	Industrial CIA	282,457	274,584	239,124	178,109	91,316	78,906	62,578	65,115	111,293	82,020	177,095	218,502	1,894,832
Total Rate M1		512	435	365	213	124	71	67	64	66	126	279	416	2,738
Total Rate M2		25,466	23,653	20,787	14,025	9,301	5,228	4,600	4,788	6,833	11,949	18,599	21,070	166,297
Total Rate 01		553	443	394	236	117	65	51	49	56	156	303	420	2,844
Total Rate 10		24,691	24,345	21,027	13,009	7,695	5,757	4,678	5,413	6,758	10,898	18,374	21,683	164,329

2017 Actual Customers

Rate M1	Residential	1,021,882	1,022,860	1,024,285	1,025,116	1,028,391	1,027,813	1,029,561	1,030,421	1,032,052	1,030,546	1,032,778	1,034,745	12,340,450
	Commercial	78,930	78,999	78,932	78,962	78,851	78,587	78,797	78,616	78,512	78,444	78,725	78,966	945,321
	Tobacco	575	567	573	572	574	534	583	574	575	578	573	582	6,860
	Industrial	3,829	3,835	3,827	3,812	3,815	3,822	3,848	3,831	3,836	3,768	3,820	3,856	45,899
Rate M2	Residential	17	17	17	16	12	15	13	13	13	13	13	13	172
	Commercial	6,278	6,293	6,351	6,251	6,257	6,319	5,947	5,920	5,936	5,951	5,968	6,021	73,492
	Tobacco	129	133	129	128	132	163	118	123	123	122	124	115	1,539
	Industrial	1,312	1,316	1,315	1,326	1,306	1,287	1,256	1,255	1,261	1,299	1,260	1,238	15,431
Rate 01	Residential	314,505	314,594	314,787	314,976	315,549	315,779	316,329	316,459	316,989	317,118	318,102	318,345	3,793,532
	Commercial	28,291	28,352	28,463	28,399	28,139	28,425	28,326	28,284	28,275	28,266	28,400	28,342	339,962
Rate 10	Commercial	2,105	2,092	2,040	2,050	2,301	1,944	2,002	1,944	1,962	1,963	2,008	2,088	24,499
	Industrial	130	131	131	132	131	131	134	130	129	130	134	133	1,576
	Industrial CIA	21	20	20	19	19	19	19	20	19	18	18	17	229
Total Rate M1		1,105,216	1,106,261	1,107,617	1,108,462	1,111,631	1,110,756	1,112,789	1,113,442	1,114,975	1,113,336	1,115,896	1,118,149	13,338,530
Total Rate M2		7,736	7,759	7,812	7,721	7,707	7,784	7,334	7,311	7,333	7,385	7,365	7,387	90,634
Total Rate 01		342,796	342,946	343,250	343,375	343,688	344,204	344,655	344,743	345,264	345,384	346,502	346,687	4,133,494
Total Rate 10		2,256	2,243	2,191	2,201	2,451	2,094	2,155	2,094	2,110	2,111	2,160	2,238	26,304

2015 Actual Customers

Rate M1	Residential	995,102	995,667	996,627	997,904	1,000,071	999,338	1,001,975	1,002,487	1,003,135	1,003,485	1,005,608	1,007,403	12,008,802
	Commercial	78,276	78,425	78,548	78,393	77,926	77,674	77,535	77,382	77,321	77,391	77,704	77,849	934,424
	Tobacco	586	582	581	585	567	555	554	554	552	554	554	558	6,782
	Industrial	3,985	3,981	3,962	3,915	3,858	3,832	3,810	3,808	3,797	3,786	3,821	3,823	46,378
Rate M2	Residential	6	6	7	10	14	16	16	16	16	16	16	16	155
	Commercial	5,585	5,600	5,611	5,755	6,094	6,172	6,152	6,135	6,121	6,168	6,158	6,268	71,819
	Tobacco	139	141	140	137	150	156	157	157	157	154	157	154	1,799
	Industrial	1,222	1,223	1,232	1,262	1,318	1,314	1,328	1,320	1,317	1,313	1,313	1,314	15,476
Rate 01	Residential	303,845	304,031	304,182	304,694	305,121	305,029	305,912	306,097	306,048	307,001	308,214	308,806	3,668,980
	Commercial	28,229	28,231	28,198	28,082	28,051	27,973	27,922	27,886	27,824	27,860	27,988	28,051	336,295
Rate 10	Commercial	1,884	1,878	1,939	1,991	2,031	2,046	2,058	1,999	2,040	2,037	2,039	2,070	24,012
	Industrial	127	127	126	131	128	129	128	128	127	128	128	130	1,537
	Industrial CIA	23	23	23	22	24	23	22	22	22	23	22	20	269
Total Rate M1		1,077,949	1,078,655	1,079,718	1,080,797	1,082,422	1,081,399	1,083,874	1,084,231	1,084,805	1,085,216	1,087,687	1,089,633	12,996,386
Total Rate M2		6,952	6,970	6,990	7,164	7,576	7,658	7,653	7,628	7,611	7,651	7,644	7,752	89,249
Total Rate 01		332,074	332,262	332,380	332,776	333,172	333,002	333,834	333,983	333,872	334,861	336,202	336,857	4,005,275
Total Rate 10		2,034	2,028	2,088	2,144	2,183	2,198	2,208	2,149	2,189	2,188	2,189	2,220	25,818

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 20-25 and EB-2017-0091 Exhibit A., Tab 1, page 23

Preamble:

We would like to understand better the determination of the reduction in storage space required as a result of the NAC volume variance. Union's evidence states:

> *Overall, the NAC volume variance between the 2017/2018 Gas Supply Plan and the 2013 Board approved volumes resulted in a decrease in general service storage requirements of 3.03 PJ…..*
>
> *The reduction in storage activity has decreased storage deliverability costs, the commodity related costs at Dawn and storage inventory carrying costs.*
>
> *The 3.03 PJ reduction in general service storage requirements due to NAC volume variances forms part of the 6.8 PJ of excess utility space available for sale for winter 2017/2018.*

Question:

Please provide the data and supporting calculations for this determination.

a) If possible, please provide the data and calculations in an Excel spreadsheet with working formulae.

b) Please clarify the 3.03 PJ reduction is a reduction from what number i.e., what period?

Response:

a) Please see Attachment 1.

b) The 3.03 PJ reduction is a result of applying the aggregate excess storage allocation methodology to the volume variance between the 2017/2018 Gas Supply Plan and the 2013 Board-approved volumes multiplied by the 2013 Board-approved number of customers.

Attachment 1

Volume Change due to Change in Usage (in 10^3m^3)

	Rate M1	Rate M2	Rate 01	Rate 10	Total
Apr-17	-18,585	17,024	-1,723	2,114	-1,170
May-17	-12,455	20,786	-1,408	2,259	9,183
Jun-17	-6,389	14,432	2,069	4,533	14,644
Jul-17	-3,662	6,734	-270	2,993	5,796
Aug-17	-5,280	5,917	-2,366	4,289	2,560
Sep-17	-17,072	14,237	-2,199	4,352	-682
Oct-17	-30,527	27,078	-525	4,535	561
Nov-17	-20,571	20,422	-1,460	2,852	1,243
Dec-17	-14,672	-9,272	-3,788	3,100	-24,632
Jan-18	-25,290	-11,425	-341	1,572	-35,483
Feb-18	-13,108	-11,999	-2,256	2,576	-24,787
Mar-18	-31,185	4,344	-1,541	765	-27,617
Total	**-198,796**	**98,279**	**-15,807**	**35,940**	**-80,384**
Convert to PJs (Note 1)	**-7.74**	**3.83**	**-0.62**	**1.40**	**-3.13**

Aggregate Excess Impact - Volume Change due to change in Usage

	Rate M1	Rate M2	Rate 01	Rate 10	Total
Annual	-198,796	98,279	-15,807	35,940	-80,384
(/365*151)	-82,242	40,658	-6,539	14,868	-33,255
Winter	-104,825	-7,930	-9,385	10,865	-111,276
Storage Impact (in 10^3m^3)	-22,584	-48,588	-2,846	-4,003	-78,021
Convert to GJs	-879,642	-1,892,510	-108,750	-152,963	-3,033,866
Total Aggregate Excess Impact (GJs)	**-879,642**	**-1,892,510**	**-108,750**	**-152,963**	**-3,033,866**
Total Aggregate Excess Impact (PJs)	**(0.88)**	**(1.89)**	**(0.11)**	**(0.15)**	**(3.03)**

Note 1: Apr. 1/17 heat value conversion rate for M1/M2 = 38.95/1,000,000
Apr. 1/17 heat value conversion rate for 01/10 = 38.21/1,000,000

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 20-25 and EB-2017-0091 Exhibit A., Tab 1, page 23

Preamble:

In EB-2017-0091, on the same topic, Union's evidence stated:

> *The 1.62 PJ reduction in general service storage requirements due to NAC volume variances forms part of the 6.4 PJ of excess utility space available for sale for winter 2016/2017. The revenue from the sale of the 6.4 PJ of excess utility space is recorded in the Short-Term Storage and Other Balancing Deferral Account (Account No. 179-70).*

Question:

Please reconcile the reductions and the resulting excess utility space from the two evidentiary submissions.

Response:

The 2013 Board-approved excess utility storage was 11.3 PJ. The NAC changes noted above (1.62 PJ in 2016 and 3.03 PJ in 2017) partially make up the changes in the excess utility storage for each respective year relative to 2013 Board-approved.

Actual excess utility storage for 2017 was 6.8 PJ, which was 0.4 PJ higher than the 2016 excess utility storage of 6.4 PJ. The increase in excess utility storage from 2016 to 2017 was driven by:

- A decrease in storage requirements of 0.2 PJ for the contract market
- A decrease in storage requirements of 0.2 PJ for the general service market
    - A 1.4 PJ decrease driven by NAC change
    - A 1.2 PJ increase driven by growth

Please see Table 1 for the reconciliation of excess utility storage space.

Table 1
Union Gas Excess Utility Storage
Actual vs. 2013 Board-approved

2013 B.A	11.3	PJ
NAC	1.6	PJ
Growth	(6.5)	PJ
2016	6.4	PJ

2013 B.A	11.3	PJ
NAC	3.0	PJ
Growth	(7.5)	PJ
2017	6.8	PJ

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 51-52

Preamble:

We would like to understand better Union's views on the utilization of the surplus created from the project. Union's evidence states:

> *In the 2017 Dawn Parkway Project Settlement Proposal (EB-2015-0200), Union agreed to record in the deferral account variances in actual revenue generated from forecast surplus capacity of 30,393 GJ/d relative to the maximum annual revenue of $1.34 million that could be realized from the sale of long-term firm surplus capacity effective November 1, 2017. Union's actual Dawn to Parkway surplus for winter 2017/2018 was in excess of 30,393 GJ/d, therefore no long-term Dawn to Parkway revenue was earned from the forecast surplus to apply against the deferral account.*

Question:

Please provide Union's support for viewing the 30,393GJ/d not being utilized unless the surplus is less than 30,393 GJ/day.

a) Is it Union's position that this capacity will not attract revenue until the surplus is below 30,393 GJ/d?

b) Is it Union's position that this capacity does not contribute to short-term C1 revenues (firm sales vs. IT)? Please explain how this capacity would not/could not?

Response:

a) Please see the response at Exhibit B.Staff.13 b).

b) All available Dawn Parkway capacity could contribute to short-term/IT revenue. Please see Exhibit B.Staff.13 b) for Union's position on how these revenues should be treated for purposes of Deferral Account No. 179-144.

UNION GAS LIMITED

Answer to Interrogatory from
Industrial Gas Users Association ("IGUA")

Reference: Exhibit A, Tab 2, page 3 (lines 17-19) and page 6 (lines 1-4)

Preamble:

In respect of an increase of $15.6 million in utility O&M costs in 2017, Union identifies the main drivers as *"salaries and integration-related costs related to the merger between Enbridge Inc. and Spectra Energy"*.

In respect of legal costs relating to the application for approval of the merger of Union and EGD (EB-2017-0306/0307) of $0.180 million Union has removed these costs from operating and maintenance expenses on the basis that *"they are outside the scope of the current IR term and will be borne by the shareholder"*.

Question:

Please explain the distinction between the former category of costs ($15.6 million of Enbridge Inc. and Spectra merger related costs) and the latter category of costs ($0.180 million in legal costs related to the Union and Enbridge Gas Distribution merger application) which supports inclusion of the former in, but exclusion of the latter from, utility expenses in 2017.

Response:

Please see Union's response at Exhibit B.LPMA.13 for the rationale supporting the inclusion of integration-related costs in utility earnings.

The legal costs of $0.180 million associated with the Union/Enbridge Gas Distribution merger application are not costs related to the ongoing provision of utility service to ratepayers. In accordance with the evidence provided in EB-2017-0306/0307, Union has removed the costs of the merger application from utility financial results. [1]

[1] EB-2017-0306, Application and Evidence, p.17.

UNION GAS LIMITED

Answer to Interrogatory from
Industrial Gas Users Association ("IGUA")

Reference: Exhibit A, Tab 3, pages 6-10

Preamble:

Union's proposals for allocation of variances associated with the following capital project cost accounts are all formulated in the evidence in the same way. In each case Union proposes to allocate account balances to rate classes *"in proportion to the difference between the actual project costs and the forecasted project costs included in 2017 rates"*.

Account No.	**Account Name**
179-135	Parkway West Project Costs
179-137	Brantford-Kirkwall/Parkway D Project Costs
179-142	Lobo C Compressor/Hamilton-Milton Pipeline Project Costs
179-144	Lobo D/Bright C/Dawn H Compressor Project Costs
179-149	Burlington-Oakville Project Costs

Question:

a) Please confirm that Union's proposal is to:

   (i) derive the percentage by which the actual aggregate project costs exceeds the forecasted Project costs included in 2017 rates; and

   (ii) increase the allocation for the subject project costs in each applicable 2017 rate by the percentage described in (i).

b) If not confirmed, please provide an additional explanation of Union's proposed allocation of the subject variances, with a numerical example to illustrate Union's proposal.

Response:

a) Parts (i) and (ii) are not confirmed.

b) Union's proposed allocation of capital pass-through project deferral account balances to rate classes is determined as the difference between the allocation to rate classes of the actual project costs for 2017 and the allocation to rate classes of project costs included in 2017 rates. To determine the allocation of actual project costs, Union updated the 2013 Board-approved cost allocation study to include the actual 2017 project costs for each project.

Please see Attachment 1 for a numerical example of the deferral account balance allocation to rate classes of the Burlington-Oakville Project (Account No. 179-149).

UNION GAS LIMITED
Burlington-Oakville Project Revenue Requirement
2017 Deferral Account Allocation by Rate Class
Account No. 179-149

Line No.	Particulars ($000's)	Allocation of Actual Project Costs (1)	Allocation of Project Costs in 2017 Rates (2)	2017 Deferral Account Allocation before Interest	Allocation of Interest (3)	2017 Deferral Account Allocation
		(a)	(b)	(c) = (a - b)	(d)	(e) = (c + d)
1	Rate M1	1,954	3,435	(1,480)	(7)	(1,488)
2	Rate M2	830	1,480	(650)	(3)	(654)
3	Rate M4	277	495	(218)	(1)	(219)
4	Rate M5	(23)	(44)	22	0	22
5	Rate M7	101	181	(80)	(0)	(80)
6	Rate M9	34	61	(27)	(0)	(27)
7	Rate M10	1	2	(1)	(0)	(1)
8	Rate T1	241	431	(190)	(1)	(191)
9	Rate T2	1,841	3,306	(1,465)	(7)	(1,473)
10	Rate T3	236	425	(188)	(1)	(189)
11	Total Union South In-franchise	5,492	9,771	(4,279)	(21)	(4,300)
12	Excess Utility Space	(13)	(24)	12	0	12
13	Rate C1	0	(3)	3	0	3
14	Rate M12	(120)	(429)	309	2	310
15	Rate M13	(3)	(1)	(2)	(0)	(2)
16	Rate M16	0	(0)	0	0	0
17	Total Ex-franchise	(135)	(457)	322	2	324
18	R01	(395)	(758)	363	2	364
19	R10	(56)	(110)	54	0	54
20	R20	(39)	(78)	39	0	39
21	R100	(31)	(61)	30	0	31
22	R25	(11)	(22)	11	0	11
23	Total Union North In-franchise	(533)	(1,030)	497	2	500
24	Total	4,824	8,284	(3,460)	(17)	(3,477)

Notes:
(1) Allocation of actual project costs to rate classes determined by updating the 2013 Board-approved cost allocation study to include the actual 2017 project costs.
(2) EB-2016-0245, Rate Order, Working Papers, Schedule 10, p.2, column (b).
(3) Interest of $0.17 million allocated to rate classes in proportion to column (c).

UNION GAS LIMITED

Answer to Interrogatory from
Industrial Gas Users Association ("IGUA")

Reference: Exhibit A, Tab 3, page 10

Preamble:

In respect of Account No. 179-156 Panhandle Reinforcement Project Costs Union proposes to allocate the account balance to rate classes *"in proportion to the difference between the actual Project net delivery revenue and the forecasted Project net delivery revenue included in 2017 Rates*.

Union goes on to note that *"the 2017 net delivery revenue requirement of the Panhandle Project was not included in Union's 2017 rates"* [emphasis added].

It appears, then, that Union has derived net 2017 delivery revenues associated with the Project, allocated those net 2017 delivery revenues to rate classes by applying the 2013 cost allocation study methodology applicable to the Panhandle/St. Clair system, and compared those allocated net delivery revenues to forecasted delivery project related revenues similarly allocated to determine Project related variances by rate class.

Question:

a) Please confirm, correct, or supplement (as appropriate) the foregoing description of Union's proposed approach to allocating the balance in this account.

b) Please provide the calculations supporting Union's proposed allocation of the balance in this account to rate classes. Please include notes to these calculations sufficient to clarify Union's proposed approach to allocation of the account balance.

Response:

a) The description of the allocation to rate classes of the Panhandle Reinforcement Project costs in the preamble to this question is not confirmed. Union allocated the actual 2017 Project costs of $0.368 million to rate classes by updating the 2013 Board-approved cost allocation study to include the actual Project costs. The allocation of Project costs was reduced by the allocation to rate classes of the actual 2017 incremental Project revenue of $0.285 million. The Project revenue was allocated to rate classes in proportion to the 2013 Board-approved Panhandle System and St. Clair System demand costs, updated for the Project. Union's 2017 Board-approved rates did not include the forecast net revenue requirement based on the

Board's Decision in EB-2016-0186. Accordingly, the 2017 deferral account balance represents the 2017 actual Project net revenue requirement.

b) Please see Attachment 1 for the calculation of the Panhandle Reinforcement Project deferral account (Account No. 179-156) balance allocation to rate classes.

UNION GAS LIMITED
Panhandle Reinforcement Project Revenue Requirement
2017 Deferral Account Allocation by Rate Class
Account No. 179-156

Line No.	Particulars ($000's)	Allocation of 2017 Net Project Costs: Actual Project Costs (1)	Allocation of 2017 Net Project Costs: Incremental Revenue (2)	Allocation of 2017 Net Project Costs: Net Delivery Revenue	Allocation of Net Project Costs in 2017 Rates (3)	2017 Deferral Account Allocation before Interest	Allocation of Interest	2017 Deferral Account Allocation
		(a)	(b)	(c) = (a+b)	(d)	(e) = (c +d)	(f)	(g) = (e + f)
1	Rate M1	(537)	(61)	(598)	-	(598)	-	(598)
2	Rate M2	60	(21)	40	-	40	-	40
3	Rate M4	303	(16)	287	-	287	-	287
4	Rate M5	(36)	(0)	(36)	-	(36)	-	(36)
5	Rate M7	154	(5)	148	-	148	-	148
6	Rate M9	(3)	-	(3)	-	(3)	-	(3)
7	Rate M10	(0)	-	(0)	-	(0)	-	(0)
8	Rate T1	193	(17)	176	-	176	-	176
9	Rate T2	1,276	(122)	1,154	-	1,154	-	1,154
10	Rate T3	(16)	-	(16)	-	(16)	-	(16)
11	Total Union South In-franchise	1,395	(241)	1,153	-	1,153	-	1,153
12	Excess Utility Storage	(19)	-	(19)	-	(19)	-	(19)
13	Rate M12	(557)	-	(557)	-	(557)	-	(557)
14	Rate M13	(0)	-	(0)	-	(0)	-	(0)
15	Rate M16	55	(8)	47	-	47	-	47
16	Rate C1	279	(36)	243	-	243	-	243
17	Total Ex-Franchise	(243)	(44)	(286)	-	(286)	-	(286)
18	Rate 01	(570)	-	(570)	-	(570)	-	(570)
19	Rate 10	(86)	-	(86)	-	(86)	-	(86)
20	Rate 20	(62)	-	(62)	-	(62)	-	(62)
21	Rate 25	(17)	-	(17)	-	(17)	-	(17)
22	Rate 100	(48)	-	(48)	-	(48)	-	(48)
23	Total Union North In-franchise	(784)	-	(784)	-	(784)	-	(784)
24	Total	368	(285)	83	-	83	-	83

Notes:
(1) Allocation of actual project costs to rate classes determined by updating the 2013 Board-approved cost allocation study to include the actual 2017 project costs.
(2) Incremental revenue allocated to rate classes in proportion to the 2013 Board-approved Panhandle System and St. Clair System demand costs, updated for the project.
(3) The 2017 net delivery revenue requirement of the Panhandle Reinforcement Project was not included in Union's 2017 rates.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1

Question:

Union filed the current application and evidence June 6, 2018, which was about six weeks later than the filing of the 2016 disposition of deferral account balances and 2016 utility earnings (EB-2017-0091). Please explain why the current filing was significantly later than the 2016 filing.

Response:

Union filed the 2017 Deferrals application and evidence approximately six weeks later in the year than the 2016 Deferrals application and evidence due to resourcing constraints. There were many other regulatory proceedings throughout the first part of 2018 (e.g. the MAADs/Rate Setting Mechanism proceeding (EB-2017-0306/EB-2017-0307), the 2018 Cap-and-Trade Compliance Plan proceeding (EB-2017-0255), and the 2015 DSM Deferrals proceeding (EB-2017-0323), among others).

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, page 1

Question:

Is Union requesting the disposition of the interest component associated with each of the accounts (debit or credit) based on the interest at the end of December 2017 only, or does the requested disposition include any interest (debit or credit) associated with the accounts in 2018? If yes, please quantify the amount of interest associated with the accounts that has accrued in 2018.

Response:

The requested amount of interest included in Exhibit A, Tab 1, Appendix A, Schedule 1 is calculated as of December 31, 2017. Consistent with prior years, the interest balances will be updated to reflect interest up to the disposition effective date, proposed to be January 1, 2019. The interest amount will be updated from a credit of $30,000 to a debit of $8,000.

This calculation assumes that the disposition of deferral account balances are approved for implementation on January 1, 2019 and uses the OEB's prescribed interest rate for deferral accounts for Q3 2018.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, page 6

Question:

Please confirm that the $15.570 million credited to rates by Union in 2017 is based on actual calendar 2017 volumes. If not confirmed, please explain and show how the $15.570 million was calculated.

Response:

Confirmed. Please also see the response at Exhibit B.Staff.3 a).

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, page 14

Question:

Please explain and show the current tax figures shown in Table 5. For example, please explain the derivation of $15 in current tax in 2017 when the return amount is only $1.

Response:

The $15,000 of current tax is calculated as follows and is primarily the result of timing differences between capital cost allowance for income tax purposes and the provision for book depreciation in the year.

Table 1
Calculation of 2017 GDAR Current Income Tax

Particulars ($ 000's)	**2017**
Return	1
Add back: Depreciation	59
Deduct: CCA	-
Taxable Income	60
Current Income Tax (25.5% 2013 Board-Approved tax rate)	15

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, page 16

Question:

The balance in the Deferral Clearing Variance Account is made up of variances resulting from the 2015 deferral account disposition and the 2014 DSM deferral account disposition.

Please confirm that any amount associated with the 2016 deferral account disposition and DSM deferral account dispositions associated with 2015 or later years will be brought forward in this account as part of the 2018 deferral account disposition proceeding.

Response:

Amounts associated with the 2016 non-commodity deferral disposition will be brought forward in the Deferral Clearing Variance Account in the 2018 non-commodity deferral proceeding. The disposition of the 2015 DSM deferral balances will not be complete until March 31, 2019, after which any variance will be captured in this account.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, page 18

Question:

Please explain why there is a debit in interest costs to ratepayers in Account 179-133 (NAC) when there is a credit to ratepayers in the account.

Response:

Interest costs related to Account No. 179-133 (NAC) are calculated based on the monthly balance in the NAC deferral account. From January to September 2017, the NAC deferral account was in a debit position, which resulted in an interest charge to ratepayers.

For the remainder of the year, the NAC deferral account was in a credit position, resulting in an interest credit to ratepayers. Due to the timing of the NAC deferral account balance moving from a debit to a credit position, the interest charge for the first 9 months exceeded the interest credit from October to December 2017.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, page 51

Question:

When was the Lobo D/Bright C/Dawn H Compressor Project placed into service and when was the forecast in-service date?

Response:

As referenced at Exhibit A, Tab 1, p. 57, the actual in-service dates for the 2017 Dawn to Parkway projects were: July 2017 for Lobo D, September 2017 for Bright C and October 2017 for Dawn H. The forecast in-service date for all three projects was November 2017.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 58 and 62 and 69

Question:

Please explain the difference in the 2017 long term debt rate of 3.29% noted on page 58 and page 69 and the figure of 3.36% shown on page 62.

Response:

Union uses the following approach with respect to the long term debt rate that is used to calculate the debt portion of the utility required return for the capital pass-through projects.

Union estimates the long term debt rate at the time of preparing the respective capital pass-through facility applications. In the year that the project is placed into service Union uses the actual average long term debt rate for debt that was issued in that year to calculate the debt portion of the utility required return. That debt rate is then used for that capital pass-through project through to and including 2018.

2016 In-Service Projects (Burlington-Oakville)
The long term debt rate of 3.36% is based on the actual average rate for long term debt that was issued in 2016 and is used to calculate the debt portion of the utility required return for projects that went into service in 2016.

2017 In-Service Projects (Dawn H/Lobo D/Bright C Compressor, Panhandle Reinforcement)
The long term debt rate of 3.29% is based on the actual average rate for long term debt that was issued in 2017 and is used to calculate the debt portion of the utility required return for projects that went into service in 2017.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, page 63

Question:

What is Union's materiality threshold in the current IRM plan?

Response:

Union's current Z factor materiality threshold is $4.0 million.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 2

Question:

Please explain any changes Union has made in financial accounting and/or regulatory accounting that impacts the 2017 figures relative to the Board Approved 2013 figures.

Response:

Union has not made any changes in financial and/or regulatory accounting that impact the 2017 figures relative to the 2013 Board-approved figures.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 2

Question:

Is the calculation of utility earnings consistent with the methodology used to calculate the earnings in previous years? If not, please explain any differences.

Response:

Yes, the methodology used to calculate earnings sharing and utility earnings is consistent with previous years.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 2

Question:

a) What was Union's normalized actual return on equity for 2017?

b) Please provide a version of Table 1 that adds a column that shows the total revenue sufficiency for Normalized Actual 2017.

Response:

a) Union's weather normalized return on equity for 2017 is 9.55%.

b) Please see Attachment 1.

Calculation of Revenue Deficiency/(Sufficiency) from Utility Operations
For the Year Ended December 31, 2017

Line No.	Particulars ($ Millions)	Board Approved 2013	Actual 2016	Actual 2017	Increase/ (decrease) 2017 vs. 2016	Weather Normalized 2017	Increase/ (Decrease) 2017 vs. 2017
		(a)	(b)	(c)	(d) = (c) - (b)	(e)	(f) = (e) - (c)
1	Gas sales and distribution revenue	1,448.8	1,514.5	1,857.0		1,857.0	
2	Cost of gas	701.4	700.4	1,031.0		1,031.0	
3	Weather impact					10.5	10.5
4	Gas distribution margin	747.4	814.1	826.0	11.9	836.5	10.5
5	Transportation	157.0	182.7	236.9	54.2	236.9	-
6	Storage	10.4	8.5	7.8	(0.7)	7.8	-
7	Other revenue	20.2	16.5	17.3	0.8	17.3	-
8	Expenses	643.8	695.6	743.1	47.5	743.1	-
9	Income taxes	17.1	4.4	(5.0)	(9.4)	(2.3)	2.8
10	Utility income	274.1	321.8	350.0	28.2	357.7	7.7
11	Cost of Capital	272.6	315.6	344.9	29.3	344.9	-
12	Revenue deficiency / (sufficiency) after tax	(1.5)	(6.2)	(5.1)	1.1	(12.9)	(7.7)
13	Provision for income taxes on	(0.5)	(2.2)	(1.8)	0.4	(4.6)	(2.8)
	deficiency / (sufficiency)				-		-
14	Distribution revenue deficiency/(sufficiency)	(2.0)	(8.4)	(7.0)	1.4	(17.5)	(10.5)
15	Shareholder portion of short-term storage revenue	0.5	0.8	0.4	(0.4)	0.4	-
16	Shareholder portion of optimization activity	1.5	0.3	0.5	0.2	0.5	-
							-
17	Total revenue deficiency/(sufficiency)	-	(7.3)	(6.1)	1.2	(16.6)	(10.5)

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 2, page 2

Question:

a) How much the $15.6 million in O&M costs was related to the integration-related costs related to the merger of between Enbridge Inc. and Spectra Energy.

b) Please explain why Union Gas had additional expenses related to the integration of its parent company with Enbridge Inc.

c) Please explain why any integration costs associated with the merger of Enbridge Inc. and Spectra Energy should be considered utility costs for Union Gas.

Response:

a) Of the $15.6 million increase to O&M, $5.6 million is due to integration costs related to the merger of Enbridge Inc. and Spectra Energy.

b) The combination of the Spectra Energy and Enbridge Inc. Shared Services functions created role redundancies and opportunities for synergy savings. Union had local Shared Services employees that were identified as part of the corporate synergy savings. The resulting severances and related expenses are identified as integration costs.

c) As described above, the combination of Spectra Energy and Enbridge Inc. Shared Services functions resulted in role redundancies and opportunities for synergy savings. The role reductions and synergies will result in ongoing cost savings for Union of approximately $3.7 million annually, which will be reflected in utility earnings, subject to sharing with ratepayers. As the cost savings will flow through utility earnings to the benefit of ratepayers, the costs associated with generating these savings should also flow through utility earnings.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 3, page 10

Question:

Please confirm that the allocation of the Panhandle Reinforcement Project costs are based on the continued use of an aggregate allocator for the Panhandle and St. Clair system and not on a separate basis for the Panhandle and St. Clair systems.

Response:

Confirmed.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 3, page 11

Question:

When would Union require a decision in this application if it were to dispose of the balances over a six-month period to general service customers beginning October 1, 2018 rather than January 1, 2019?

Response:

Union would require a decision and an approved rate order in this proceeding by the first week of September to dispose of the balances to general service customers over the six-month period beginning October 1, 2018.

Given the existing procedural schedule in this proceeding, a decision within this time period is not possible.

UNION GAS LIMITED

Answer to Interrogatory from
Ontario Greenhouse Vegetable Growers ("OGVG")

Reference: Exhibit A, Tab 1, page 57

Preamble:

Average Investment:

Although the project is under-budget on a cumulative basis, the average investment has increased by $87.858 million over the costs included in 2017 Board-approved rates due to the in-service dates of the facilities. 2017 Board-approved rates were based on an estimate of a November 2017 in-service date, compared to an actual in-service date of July 2017 for Lobo D, September 2017 for Bright C, and October 2017 for Dawn H.

Question:

Please provide calculations for the 2017 Board Approved average investment and the 2017 Actual average investment in a manner that demonstrates how the difference between the estimated and actual in service dates for each of the compressors resulted in a material increase in the average investment calculation.

Response:

Please see Attachment 1.

Attachment 1

All Figures in $MM

2017 Board Approved Gross Plant		**Prior Year**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Average**	**Total 2017 Additions**
Opening Balance	A		107.0	108.5	110.0	119.3	120.6	121.1	121.4	121.5	121.6	121.7	121.7	589.4		
2017 Board Approved Additions**	B		1.5	1.5	9.3	1.3	0.5	0.3	0.1	0.1	0.1	0.0	467.7	18.5		
Closing balance	C=A+B	107.0	108.5	110.0	119.3	120.6	121.1	121.4	121.5	121.6	121.7	121.7	589.4	607.9		**501**
2017 Board Approved Monthly Average	D=(A+C)/2		107.8	109.3	114.7	120.0	120.9	121.3	121.5	121.6	121.7	121.7	355.6	598.7	**178**	

2017 Board Approved Depreciation															
Opening Balance	A		1.6	2.5	3.5	4.4	5.4	6.3	7.2	8.2	9.1	10.1	11.0	11.9	
Depreciation Expense*	B		0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	
Closing balance	C=A+B	1.6	2.5	3.5	4.4	5.4	6.3	7.2	8.2	9.1	10.1	11.0	11.9	12.9	
Average Depreciation	D=(A+C)/2		2.1	3.0	4.0	4.9	5.8	6.8	7.7	8.7	9.6	10.5	11.5	12.4	**7**
Average Investment															**171**

2017 Actual Gross Plant		**Prior Year**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Average**	**Total 2017 Additions**
Opening Balance	A		85	125	126	133	133	134	134	235	281	415	566	568		
Lobo D Additions	B	0	0	0	0	0	0	0	100	1	8	5	1	1		
Bright C Additions	B	60	0	1	7	0	1	0	1	1	125	10	0	2		
Dawn H Additions	B	25	40	0	0	0	0	0	0	44	1	136	1	4		
Closing balance	C=A+B	85	125	126	133	133	134	134	235	281	415	566	568	575		**490**
2017 Actual Monthly Average	D=(A+C)/2		105.0	125.5	129.5	133.0	133.5	134.0	184.5	258.0	348.0	490.5	567.0	571.5	**265**	

2017 Actual Depreciation															
Opening Balance	A		1.3	2.1	2.8	3.6	4.3	5.1	5.8	6.6	7.3	8.1	8.8	9.6	
Depreciation Expense*	B		0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	
Closing balance	C=A+B	1.3	2.1	2.8	3.6	4.3	5.1	5.8	6.6	7.3	8.1	8.8	9.6	10.3	
Average Depreciation	D=(A+C)/2		1.7	2.4	3.2	3.9	4.7	5.4	6.2	6.9	7.7	8.4	9.2	9.9	**6**
Average Investment															**259**
Difference															**88**

* Annual Depreciation Expense divided by 12 months
** Any actual additions to Rate Base before the In-Service date are related to assets put into service in 2016, thus any CapEx is added to rate base in the month it is incurred

UNION GAS LIMITED

Answer to Interrogatory from
School Energy Coalition ("SEC")

Reference: Exhibit A, Tab 1, page 51

Question:

With respect to the Account No. 179-144 Dawn H/Lobo D/Bright C Compressor Station:

a) Please explain how ratepayers benefited from the earlier in-service date.

b) What would the balance in the account have been if the in-service date was November 1, 2017 as originally forecast?

Response:

a) The assets associated with the 2017 Dawn to Parkway capital pass-through project were placed into service when they were deemed used or useful, in accordance with Union's Board-approved capitalization policy.

   The primary benefit to ratepayers is the completion of a significant expansion project ahead of schedule, which ensures the assets are available to provide commercial service in accordance with contractual commitments.

b) Had the in-service date been November 1, 2017, the deferral account balance would have been a credit to ratepayers of $2.243 million, plus applicable interest.

UNION GAS LIMITED

Answer to Interrogatory from
School Energy Coalition ("SEC")

Reference: Exhibit A, Tab 2, page 2

Question:

Union states that the increase in O&M costs relative to 2016 was driven in part by integration-related costs related to the merger between Enbridge Inc. and Spectra Energy.

Please provide the specific amount of integrated related costs in 2017 and provide a detailed breakdown.

Response:

Please see the response at Exhibit B.Staff.16.

UNION GAS LIMITED

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

Reference: 1) Exhibit A, Tab 4, Page 9 of 13
2) Attachment 1, EB-2017-0087, Exhibit B.TCPL.4 a) and e)
3) Exhibit A, Tab 4, Page 10 of 13

Preamble:

In Reference 1, Union states that NEXUS is expected to be delayed to 2018.

In Reference 2 a), Union provides a list of amendments to its NEXUS precedent agreement as part of its 2018 Rates proceeding. In e), Union states that "In all discussions [with NEXUS], a delay post November 1, 2018 has not been contemplated."

In Reference 3, Union states that it secured 60,000 Dth/d of capacity on Vector as a NEXUS contingency for November 1, 2017 through March 31, 2018, and that "Options being evaluated for supply required after March 31, 2018 include contracting for Vector capacity, if available, or sourcing supply at Dawn."

Question:

a) Please provide and summarize any amendments to the Union-NEXUS Precedent Agreement made since August 29, 2017.

b) Please provide the most recent expected in-service date of NEXUS provided to Union. Has Union had any discussions with NEXUS regarding a delay beyond November 1, 2018? If so, please summarize these discussions and any relevant conclusions.

c) Please provide an update on the replacement of the Vector capacity in Reference 3. Has Union entered into any new upstream arrangements since the filing of the Application? If so, please provide details, including term and contract quantity, as well as the landed cost analysis and reasoning behind its decision.

Response:

a) There have been no changes to the information provided in Union's 2018 Rates proceeding (EB-2017-0087) with respect to the Precedent Agreement. Union amended the Service Agreement and Statement of Negotiated Rates in January 2018 to add Clarington as a receipt point for up to 75,000 Dth/day, for a term of four years. Union continues to have an MDQ (maximum daily quantity) of 150,000 Dth/day across all points. This amendment was discussed in the Gas Supply Update at the 2018 Stakeholder Meeting on May 30, 2018.

b) Union has not had any discussions with NEXUS with respect to delays in the in-service date past November 1, 2018. Please also see Exhibit B.VECC.14 a).

c) Please see Exhibit B.VECC.14 b). Union has not purchased transportation capacity to replace the Vector contract (included in Reference 3) that expired on March 31, 2018. Where required, incremental gas has been purchased at Dawn since April.

UNION GAS LIMITED

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

Reference: 1) Exhibit A, Tab 4, Appendix A, Schedule 2, Page 1 of 3

Preamble:

In Reference 1, Union provides a Panhandle 2017-2022 landed cost analysis. The gas supply price information source is "ICF Q4 2016 Base Case". Union specifies the date the landed cost analysis was completed as November 2016.

Question:

a) Please update the Panhandle 2017-2022 landed cost analysis given the following considerations:

   i. Does Union have access to a more recent gas supply price study from ICF or other providers? If so, please update the gas supply assumptions in Reference 1. If not, how often does Union procure updated gas supply price forecasts?

   ii. Please update the foreign exchange assumption.

Response:

a) i. and ii.

The referenced Panhandle capacity meets an operational requirement and the contracting of this capacity is aligned with Union's gas supply principles. Landed cost analyses are prepared to support transportation capacity purchase decisions and negotiations. The analysis is completed with the most recent pricing forecast available at the time. Union typically receives new forecasts from ICF on a quarterly basis.

These contracts were effective November 1, 2017 and the landed cost analysis is not updated after contracts have been executed.

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 1, page 1

Question:

a) Please provide the year-end balance in Account No. 179-107 Spot Gas Variance Account for the years 2013 through 2017. If the account has had a zero or near zero balance in past years please explain why this account should not be closed.

Response:

a) Union will purchase spot gas as required to:
   1. Meet incremental requirements for actual and projected demand (consumption) variances for Union South sales service customers and Union North sales service and bundled DP customers, including load balancing costs for Union North DP customers and to ensure adequate storage balances to maintain system integrity;
   2. For forecast weather variances relative to the February 28 inventory checkpoint and forecast March weather and consumption variances for Union South bundled DP customers (load balancing costs);
   3. For incremental rate 25 sales service activity; and
   4. To manage unaccounted for gas variances.

The costs for spot gas purchases are recovered:
   1. Through the QRAM process in the respective PGVAs for Union South and Union North East if the spot costs are applicable only to sales service customers;
   2. Through the QRAM process in the Spot Gas Variance Account (No. 179-107) for Union North West or if the costs are applicable to sales service and direct purchase customers;
   3. Within the rate class for spot gas costs for incremental Rate 25 sales service activity; and
   4. In the UFG Price Variance Account for spot gas costs to manage unaccounted for gas variances, consistent with the Board's Decision in Union's EB-2015-0010 proceeding.

In addition, in calendar years 2014 and 2015, Union applied for recovery of spot gas costs in the annual deferral disposition proceedings for spot gas costs related to Union South direct purchase load balancing.[1]

[1] EB-2014-0145 and EB-2015-0010

While spot gas purchases were not required in 2016 and 2017, this account is still necessary to record any variances associated with spot gas purchases and load balancing costs as noted above.

Please see Table 1 below for the balance in Account No. 179-107 recovered in prior Deferral Disposition proceedings.

Table 1
Account No. 179-107 Balance Recovered in Deferral Proceedings

Deferral Proceeding	**Account No. 179-107 Balance ($000s)**
2013 (EB-2014-0145)	1,801
2014 (EB-2015-0010)	(1,271)
2015 (EB-2016-0118)	-
2016 (EB-2017-0091)	-
2017 (EB-2018-0105)	-

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 1, page 6, and Exhibit A, Tab 1, Appendix A, Schedule 2

Question:

a) Please provide the earned gross and net revenues from the upstream optimization activities for each of 2013 through 2017.

b) Please provide the forecast optimization revenues approved and embedded in rates for each of the years 2013 through 2017.

Response:

a) The earned gross and net revenues from upstream optimization activities for 2013 through 2017 are provided in Table 1 below:

Table 1
Revenue from Upstream Optimization Activities 2013-2017

Line No.	Particulars ($000's)	2013 Actual Total	2014 Actual Total	2015 Actual Total	2016 Actual Total	2017 Actual Total
		(a)	(b)	(c)	(d)	(e)
1	Gross revenues from Upstream Optimization Activities	29,153	8,718	9,171	5,687	7,129
2	Net revenues from Upstream Optimization Activities	23,747	7,919	7,739	3,358	5,015

b) For each of the years 2013 through 2017, the Board-approved forecast of upstream optimization revenues was $14.918 million. Of that amount, 90% or $13.426 million was credited to ratepayers in rates for each year.

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 1, page 14

Question:

a) Does Union forecast further balances accumulating in the GDAR deferral account from 2018 onward? If yes please explain what new balances are expected to accrue.

b) Subsequent to the recovery of the current GDAR related capital cost please explain why this account should not be closed.

Response:

a) At this time, Union does not know of changes to the Gas Distribution Access Rule ("GDAR") that would require the recording of additional balances in the GDAR deferral account.

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

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 1, page 15

Question:

a) What is the purpose of Account 179-120? That is, has Union made the transition to IFRS accounting standards and if not does it plan on making this change?

Response:

a) The IFRS Conversion Costs Deferral Account No. 179-120 was established to record the difference between the costs included in rates as approved by the Board and the actual incremental one-time administrative costs incurred to convert accounting policies and processes from the then current compliance with Canadian Generally Accepted Accounting Principles ("Canadian GAAP") to proposed future compliance with International Financial Reporting Standards ("IFRS").

   In 2011, Canadian securities regulators approved Union's election to report the Company's financial statements in accordance with U.S. GAAP instead of IFRS, effective January 1, 2012.

   In May 2018, Canadian securities regulators approved the extension of Union's exemptive relief to continue reporting under U.S. GAAP instead of IFRS until the earliest of: (i) January 1, 2024, (ii) the first day of the financial year that commences if and after Union ceases to have activities subject to rate regulation, and (iii) the effective date prescribed by the International Accounting Standards Board for the mandatory application of a standard within IFRS specific to entities with activities subject to rate regulation.

   The EB-2017-0307 evidence at Exhibit B, Tab 1, p. 25 noted, "Union has recorded the IFRS conversion costs incurred prior to 2013 for recovery from ratepayers. This account was cleared at the end of 2016 and is no longer required." The Board has not yet rendered its Decision in the EB-2017-0306 / EB-2017-0307 proceeding, including a Decision on the deferral and variance accounts that should not continue if the Board grants the Applicants' request for approval of the amalgamation and deferral of rebasing.

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 1, page 20

Question:

a) At B.Staff.10 in Proceeding EB-2017-0091 Union stated that the Parkway West Project had gone into service in November of 2015 and that final costs were forecast to be completed in 2017. Please confirm that other than the 'Heritage House' related costs the $2.6 million in capital expenditures represents all outstanding costs related to this project. If this is not confirmed please describe what outstanding activities require cost recovery in the future.

b) Please provide a forecast of the remaining costs related to the 'Heritage House' issues. Please describe what the nature of these costs and when final resolution is expected.

Response:

a) Not confirmed. Union forecasts approximately $2.6 million of additional capital expenditures for this project:

- $1.7 million for the Heritage Homes
- $0.9 million to correct design deficiencies

b) The remaining forecast of $1.7 million is for upkeep and final resolution in 2019.

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 1, page 20

Preamble:

In its Decision EB-2012-0433 the Board stated:

> *The Board's approval of cost recovery is subject to two important limitations. First, the Board is only pre-approving recovery of costs up to the current estimate of $219 million. None of the parties took issue with Union's cost projection of $219 million for the Parkway West Project and the Board considers the cost projection to be a reasonable estimate in the circumstances. Second, the costs will only be incorporated into rates when the project is completed and in-service. This provides reasonable assurance that ratepayers are not exposed to costs prematurely.*
>
> *No party took specific issue with Union's request for a deferral and variance account, and the Board finds that it is appropriate to use an account to track any difference between the estimated cost and actual cost. The request for a deferral and variance account is granted.*
>
> *The Board wishes to emphasize that any excess costs over and above the pre-approved amount will be examined at Union's next rates application after the completion of the project. As evidence tendered in the proceeding showed, Union has experienced cost overruns on several of its past compressor projects and therefore the Board will be looking to the utility to rigorously control its expenditures on this project*
> (pages 14-15)

At page 12 of the settlement agreement approved by the Board in EB-2017-0091 it states:

> *In its evidence seeking final approval, Union will file evidence regarding the overspending/underspending on the 2015 Dawn Parkway projects and address the Board's expectation for Union to rigorously control its expenditures as noted at page 15 of the Board's January 30, 2014 Decision in EB-2012-0433/EB-2013-0074.*

Question:

a) When does Union intend to file its application seeking to have the prudence of the overspending on this project considered by the Ontario Energy Board?

Response:

a) Please see the response at Exhibit B.Staff.10 c).

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 1, page 53

Question:

a) When did the DawnH/Lobo D/Bright C Compressor projects go into service?

b) What is the forecast of the remaining capital costs for these projects?

Response:

a) Please see the response at Exhibit B.LPMA.7.

b) The total forecast of remaining capital costs for these projects is $48.2 million.

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 1, page 60

Question:

a) When did the Burlington Oakville Pipeline Project go into service?

b) What is the current forecast of the remaining capital costs for this project?

Response:

a) The project went into service in October 2016.

b) The current forecast of the remaining capital costs for this project is $2.6 million.

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 1, page 66

Question:

a) When did the Panhandle Reinforcement Project go into service?

b) What is current forecast of the remaining capital costs for this project?

Response:

a) The project went into service in November 2017.

b) The current forecast of the remaining capital costs for this project is $53.2 million.

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 1, page 64

Question:

a) How was the 2013 Union OEB assessment costs of $2.5 million originally calculated?

b) What would have been the 2013 forecast assessment costs had Union used the current OEB assessment methodology?

c) What is the difference between the former method of the OEB calculating assessment costs to Union Gas and the post 2013 method?

d) Is Union tracking the total change in assessment costs from that built into rates or just those costs due to the change in OEB assessment methodology?

Response:

a) The $2.5M of OEB cost assessment built into rates was forecast based on prior years' assessments.

b) As noted in the response to part a), Union's 2013 Board-approved OEB cost assessment forecast was based on prior years' experience during which the new methodology was not in place. Therefore, it is not possible to calculate how the estimate would have changed based on the current OEB assessment methodology.

   However, had Union been aware of the new OEB assessment methodology at that time, Union's 2013 OEB cost assessment forecast included in rates would have been higher.

c) On February 9, 2016 the Board issued a letter to Regulated Entities subject to the OEB's Cost Assessment notifying stakeholders of changes to the OEB's Cost Assessment Model ("CAM").

   In its letter, the OEB noted that the changes to the CAM may result in material shifts in the allocation of costs.

   Material changes to the CAM noted by the OEB included:
   - Updating the OEB's direct cost allocations (staff time and Market Surveillance Panel cost) to align with the OEB's mandate; and

- Updating of electricity distribution and gas distribution intra-class allocations from a revenue based allocation to a customer number based allocation.

d) Union is tracking the difference between the actual OEB cost assessment charges compared to the OEB cost assessment charges included in rates in accordance with the OEB Cost Assessment Variance Account (Account No. 179-151) accounting order which states: *"To record as a debit (credit) in Deferral Account No. 179-151 any differences between OEB cost assessments currently built into rates, and cost assessments that will result from the application of the new cost assessment model effective April 1, 2016."*

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 2, page 2

Question:

a) Of the OM&A cost increase of $15.6 million what portion are related to the integration and merger of Enbridge Inc. and Spectra?

Response:

a) Please see the response at Exhibit B.LPMA.13.

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 2, Appendix A, Schedule 13

Question:

a) Please explain why the actual benefits paid in 2016 and 2017 are significantly less (60-63k vs 81k) than 2013 Board approved amount.

b) Please explain the reasons for the near doubling of inbound affiliate service costs in 2016 and 2017 as compared to the 2013 Board approved.

Response:

a) Benefit costs include Pension, Flex Benefits and Legislative Benefits. Pension costs are the largest variance driver, with a decrease of $19 million compared to the 2013 Board-approved amount. The decrease in Pension costs is primarily due to strong pension fund returns and less amortization from prior actuarial losses.

b) Please see the response at Exhibit B.EP.6 a), which shows the breakdown of inbound affiliate expenses by functional service from 2013 Board-approved levels to 2017 actuals. Inbound affiliate expenses have increased from $22.0 million to $22.6 million from 2016 to 2017, which represents an increase of less than 3%.

   Union addressed the increase in inbound affiliate expenses from 2013 Board-approved levels to 2016 actuals in its 2016 Deferrals proceeding (EB-2017-0091). Please see Attachment 1.

UNION GAS LIMITED

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

Reference: Ibid, Schedule 13

"Operating and Maintenance Expenditures by Cost Type".

Please explain fully the reasons for the doubling of inbound affiliate services in 2016 actuals over 2013 Board-approved ($22,008,000 vs. $11,888,000).

Response:

The major drivers behind the change in Inbound Affiliate expenses from 2013 Board-approved levels to 2016 actuals are as follows:

Major Variance Drivers ($millions)	**2013 Board - Approved**	**2016 Actual**	**2016 vs. 2013BA Variance**
Foreign Exchange	-	5.1	5.1
IT Affiliate Services			
Data Centre Consolidation	-	2.3	2.3
SAP Enterprise Support	-	2.0	2.0
Supply Chain	0.7	3.1	2.4
Other	11.1	9.5	(1.6)
Inbound Affiliate Expenses	11.8	22.0	10.2

Foreign Exchange
The 2013 Board-approved budget assumed the US dollar was at par with the Canadian dollar. In 2016, the average exchange rate used was US dollar = 1.3285 Canadian dollars. The other variances listed in the table are net of the impact of foreign exchange.

IT Affiliate Services
Data Centre Consolidation – As outlined at Exhibit A, Tab 6, Pages 1-19, in 2015, Union in conjunction with Spectra Energy underwent an enterprise wide consolidation of its data centre

operations. The new structure includes Outbound Affiliate recoveries for Union's provision of services to its affiliates. In 2016, these recoveries totalled $1.3 million.

SAP Enterprise Support – Union moved to enterprise wide SAP support across Spectra Energy. The new structure provides better support to users and is necessary because of Union's extensive use of the SAP system. This structure resulted in higher inbound and outbound charges. In 2016, Union's Outbound Affiliate recoveries totalled $2.0 million for Union's provision of SAP enterprise support service to affiliates.

Supply Chain
Union moved to an enterprise wide Procurement Supply Chain Management service across Spectra Energy. The service provides an integrated approach that allows the organization to leverage procurement spends through enterprise-wide sourcing and consolidation through the use of one vendor across the organization. The new structure includes Outbound Affiliate recoveries for Union's provision of services to affiliates. In 2016, these recoveries totalled $1.0 million.

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 3, pages 2 and 10

Question:

a) Union explains that the allocation methodology for Account 179-156 – the Panhandle Reinforcement Project Costs Deferral Account - is not consistent with past practice. Please explain what is different from the Board approved methodology.

Response:

a) Union's proposed allocation methodology of the Panhandle Reinforcement Project Costs Deferral Account balance is consistent with the cost allocation methodology approved by the Board in Union's Panhandle Reinforcement Project Leave to Construct application (EB-2016-0186). This proceeding is the first time Union is seeking recovery of Panhandle Reinforcement Project costs in this deferral account. Per the Board's Decision and Order, the 2017 net delivery revenue requirement of the Panhandle Reinforcement Project was not included in Union's 2017 rates.

   At Exhibit A, Tab 3, p.2, Union does not explain that the allocation methodology is not consistent with past practice. Union identifies the allocation methodology of this deferral account as not being previously approved by the Board in EB-2017-0091 (Union's 2016 Deferral Account Disposition proceeding), EB-2011-0210 (Union's 2013 Cost of Service proceeding), or in EB-2015-0181 (Union's Dawn Reference Price proceeding) as is the case for the allocation methodologies for other deferral accounts.

UNION GAS LIMITED

Answer to Interrogatory from
Vulnerable Energy Consumers Coalition ("VECC")

Reference: Exhibit A, Tab 4, pages 10-13

Question:

a) What is the current estimated in-service date of the NEXUS transmission line?

b) What are the backstop provisions if the NEXUS transmission line is not in-service by October 31, 2018?

Response:

a) NEXUS notified Union on June 25, 2018 that the project facilities are expected to be placed into service before September 30, 2018 and the projected service commencement date will be October 1, 2018. This timing is further supported by DTE Energy's second quarter earnings presentation that indicated the NEXUS transmission line construction is 80% complete. Given the notice provided by NEXUS and the status of construction, Union continues to expect an October 1, 2018 service commencement date. This is consistent with the expected in-service date noted in Union's July QRAM.

b) Based on the notice provided to Union and current project status, Union does not expect backstop provisions will be required after October 31, 2018. Union will continue to monitor the NEXUS project status and related supply requirements until NEXUS is in-service. Union's DTE/MichCon contingency contract provides 90,000 Dth/day of capacity until the earlier of NEXUS in-service or October 31, 2018. To the extent further backstopping is required, similar alternatives to the NEXUS contingency plan will be considered. Examples include, but are not limited to, services on Vector, MichCon, as well as purchasing supply at Dawn.