July 11, 2017

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

Dear Ms. Walli:

Re: EB-2017-0091 - Union Gas Limited - 2016 Disposition of Deferral Account Balances and 2016 Utility Earnings – Interrogatory Responses

Please find attached Union's responses to the interrogatories for the above proceeding. These responses were filed in the RESS and copes were sent to the Board.

As requested, Union sent a live electronic copy of Exhibit B.FRPO.2, Attachment 1 directly to FRPO, copying the Board. Other parties who wish to receive a copy of the document can contact Union directly.

As per the Board's Procedural Order No. 2 issued June 23, 2017, the Board noted that given Union is not seeking any approval for costs related to moving data centres and the evidence filed by Union at Exhibit A, Tab 6 is sufficient at this time, Union is not required to respond to the list of related interrogatories.

Also in Procedural Order No. 2, the Board stated that it plans to defer consideration of final disposition of Union's 2016 Greenhouse Gas Emissions Impact Deferral Account No. 179-152 ("GGEIDA") filed in this application, but will consider interim disposition. The Board indicated that Union is not required to respond to related interrogatories. Union notes in response to Exhibit B.APPrO.3 and 4 that it requests the 2016 GGEIDA balance be disposed of on an interim basis through this proceeding, and allocated as proposed in the evidence.

If you have any questions concerning this submission please contact me at (519) 436-5473.

Yours truly,

[*Original Signed by*]

Karen Hockin
Manager, Regulatory Initiatives

c.c.: Crawford Smith (Torys)
EB-2017-0091 Intervenors

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Pages 2-3

Union Gas Limited (Union) in its application has noted that the amount of transportation capacity needed to meet average annual demand requirements is less than the capacity to meet design day requirements and therefore a portion of Union's contract capacity is planned to be unutilized.

a) One of the objectives of Union's gas supply plan is to meet design day requirements. Please explain how the amount of transportation capacity is less than the capacity to meet design day requirements considering the objectives of Union's gas supply plan.

b) If the amount of transportation capacity needed to meet average annual demand requirements is less than the capacity to meet design day requirements, how does it lead to a portion of Union's contract capacity to be unutilized?

Response:

a) The amount of transportation capacity held by Union is sufficient to meet design day demand, thereby satisfying the objective of the gas supply plan.

b) The Union North gas supply portfolio plan ensures there is sufficient, but not excess, firm transportation services available to meet the firm design day demand requirements in each delivery area. The full suite of upstream transportation capacity assets (long-haul, short-haul and STS) is first sized to meet the design day demand requirement and is only used in each delivery area when a design day occurs. The amount of supply transported on the upstream capacity needed to meet average annual demand requirements is less than the capacity to meet design day requirements. Since Union is required to contract for transportation services to meet design day demand, there are days when the contracted pipeline capacity is not fully utilized. The unutilized capacity in the Gas Supply Plan is referred to as planned UDC.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1

Union has requested disposition of gas supply, storage and other deferral accounts. The net balance in the deferral accounts requested for disposition is a $45.771 million debit from ratepayers as at December 31, 2016.

a) Please provide a statement confirming whether the balances proposed for disposition are consistent with the account balances reported in the applicant's 2016 RRR filing (2.7.1) and its 2016 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 or that are not disposed of in the OEB's Demand Side Management 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 2016 RRR filing and the 2016 audited financial statements with the following exceptions:

- Certain deferral accounts had true-ups recorded in 2017. For details, please refer to Attachment 1, Column (h).

- As noted in Attachment 1, the balance reported in the 2016 RRR filing and the 2016 audited financial statements for account No. 179-112 GDAR Costs does not agree with the balance proposed for disposition due to including an amount for depreciation related to 2011-2013 capital costs that is expected to be included in 2017 Deferrals.

b) Please see Attachment 1.

c) No.

d) No.

Deferrals Continuity Schedule ($000's)

No.	Account Number	Account Name	Balance at Dec. 31, 2015	2016 True-up to 2015 Balance	Interest on 2015 Balance	2015 Deferrals Disposition	2016 Activity	Interest on 2016 Balance	Balance at Dec. 31, 2016	2017 True-up to 2016 Balance	2016 Total	2016 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	508	-	4	(512)	(2,226)	-	(2,226)	-	(2,226)	(2,226)	-
2	179-108	Unabsorbed Demand Costs (UDC) Variance Account	388	-	3	(391)	2,995	12	3,007	(4)	3,003	3,003	-
3	179-112	Gas Distribution Access Rule (GDAR) Costs	1,155	-	-	(760)	108	-	503	-	503	443	60 [2]
4	179-131	Upstream Transportation Optimization	8,600	-	71	(8,671)	11,646	-	11,646	-	11,646	11,646	-
5	179-132	Deferral Clearing Variance Account	3,061	93	26	(3,180)	235	2	237	-	237	237	-
6	179-133	Normalized Average Consumption	10,776	(229)	87	(10,634)	23,507	125	23,632	-	23,632	23,631	1 [1]
7	179-134	Tax Variance	-	(60)	-	60	(112)	(1)	(113)	(85)	(198)	(198)	-
8	179-135	Unaccounted for Gas (UFG) Volume Variance Account	(4)	4	-	-	5,660	5	5,665	(475)	5,190	5,189	1 [1]
9	179-136	Parkway West Project Costs	(322)	(12)	(3)	337	(1,214)	(3)	(1,217)	(198)	(1,415)	(1,415)	-
10	179-137	Brantford-Kirkwall/Parkway D Project Costs	579	-	4	(583)	(1,799)	(5)	(1,804)	206	(1,598)	(1,598)	-
11	179-138	Parkway Obligation Rate Variance	-	-	-	-	2,861	1	2,862	(40)	2,822	2,822	-
12	179-141	Unaccounted for Gas (UFG) Price Variance Account	(792)	208	(5)	590	(1,201)	(3)	(1,203)	5	(1,198)	(1,199)	1 [1]
13	179-142	Lobo C Compressor/Hamilton-Milton Pipeline Project Costs	(335)	-	(3)	338	2,066	1	2,067	(368)	1,699	1,699	-
14	179-143	Unauthorized Overrun Non-Compliance Account	-	-	-	-	(106)	(1)	(107)	-	(107)	(107)	-
15	179-144	Lobo D/Bright C/Dawn H Compressor Project Costs	-	-	-	-	524	(2)	522	1	523	523	-
16	179-149	Burlington-Oakville Project Costs	-	-	-	-	263	(1)	262	(5)	257	257	-
17	179-151	OEB Cost Assessment Variance Account	-	-	-	-	829	3	832	-	832	832	-
18	179-152	Greenhouse Gas Emission Impact Deferral Account	-	-	-	-	2,233	7	2,240	(8)	2,232	2,232	-

Notes:

[1] Rounding.

[2] This amount represents the remaining depreciation on 2011-2013 capital costs for GDAR activities. This amount, along with interest, return, and current tax, is expected to be filed with 2017 Deferrals.

[3] Amounts in the 'Balance at Dec. 31, 2016' column (g) agree with balances reported in the 2016 RRR filing and the 2016 audited financial statements, with the exception of $1-2 for rounding.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Pages 4-5

The 2016 OEB-approved rates include $5.609 million of Unabsorbed Demand Costs (UDC) associated with 6.3 PJ of planned unutilized pipeline capacity in Union North and no planned unutilized capacity in Union South. The actual unutilized capacity in 2016 was 31.5 PJ. The level of unutilized capacity experienced in 2016 was largely due to planned unutilized capacity and significantly warmer than normal weather that resulted in lower transportation throughput.

a) Please provide reasons for the significant difference between actual unutilized capacity in 2016 and planned unutilized capacity included in rates. Why did Union assign additional planned unutilized capacity for 2016?

b) Please provide actual unutilized capacity for 2013, 2014 and 2015.

Response:

a) The unutilized capacity included in rates is based on the 2013 Cost of Service filing as approved by the Board, updated to reflect the 2014 Board approved Normalized Average Consumption ("NAC") for Union North. The change in UDC in rates was described in Union's 2014 deferral disposition pre-filed evidence (EB-2015-0010 Exhibit A, Tab 1, Page 7 of 39).

   Union's 2013 Board approved rates included UDC of 8.7 PJ for Union North. Union's 2014 Board-approved rates reflect UDC of 6.3 PJ, or 2.4 PJ less than 2013 Board approved rates as a result of the approved NAC adjustment in 2014. No further adjustments have been made to UDC in rates as it relates to the 2016 deferral disposition.

   The unutilized capacity and associated UDC is updated annually through the Gas Supply planning process to reflect updated demand forecasts and design day requirements. The increase in planned unutilized capacity, since the 2013 Cost of Service filing, is primarily driven by an increase in the upstream transportation capacity required to meet design day requirements as discussed in the Gas Supply memorandums filed each year.

   The 2015/16 Gas Supply Plan included 15.5 PJ of planned unutilized capacity and resulting UDC for Union North. The difference between planned UDC of 15.5 PJ and the total unutilized capacity of 31.5 PJ in 2016 is primarily due to significantly warmer than normal weather for Union North and Union South.

b) Please see the response at Exhibit B.CCC.1.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Pages 6-8

With respect to upstream transportation optimization, Union has indicated that revenues were lower due to the elimination of the TransCanada FT-RAM program and warmer weather in 2016.

a) Please provide detailed reasons for the significant decline in revenues from optimization activities apart from the termination of TransCanada's FT-RAM program.

b) Does Union consider this decline to be solely weather related or is there a change in market behaviour due to other reasons?

Response:

a & b) Upstream transportation optimization activity in 2016 was lower than 2015 primarily due to warmer than normal weather, which resulted in fewer optimization opportunities and lower prices for exchange activity. The table below compares the Heating Degree Days (HDDs) in three of Union's delivery areas that typically generate the most exchange activity during the winter period.

Delivery Area	Winter 2015 HDD's (Jan-Mar plus Nov-Dec)	Winter 2016 HDD's (Jan-Mar plus Nov-Dec)	2016 compared to 2015 Warmer/(Colder)
NDA	4,103.6	3,815.7	7.0%
CDA	3,534.3	3,209.7	9.2%
EDA	3,171.4	2,873.8	9.4%

The following table also highlights the number of exchange transactions and average price obtained for those exchanges during 2014, 2015 and 2016.

Year	Number of Exchange Transactions	Average Price Obtained ($ CAD/GJ)
2014	769	$0.43
2015	771	$0.31
2016	598	$0.19

As a result of the warmer than normal weather experienced in 2016, higher prices seen at export points during the winters of 2013/14 and 2014/15 did not materialize, which resulted in fewer transactions and a lower overall realization of exchange prices during the year.

In addition to the warmer than normal weather, a number of changes to upstream transportation occurred during 2016 which impacted upstream transportation optimization activity. On November 1, 2016, Union placed into service an expansion on the Dawn Parkway System. In December 2016, TransCanada placed into service both the King's North Connector Project and the Maple Compressor Upgrade (Station 130) Project while Enbridge placed into service Segment A of the GTA Project (Albion Line) in February 2016, collectively increasing takeaway capacity from Parkway. These expansion projects resulted in increased flows through the previously restricted Parkway to Maple corridor which reduced the demand for Union's exchange services from Dawn and Parkway to more easterly points.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Page 13

The Gas Distribution Access Rule (GDAR) deferral account records the difference between the actual costs required to implement process and system changes to achieve compliance with GDAR and the costs included in rates approved by the OEB. The balance in the GDAR deferral account is a debit from ratepayers of $0.443 million.

a) Are there any GDAR related costs approved by the OEB in rates? If yes, please provide details.

b) Does Union intend to include the revenue requirement related to GDAR costs in proposed rates at the next rebasing? If no, why not?

Response:

a) No GDAR related costs are included in rates.

b) No, Union does not intend to include the revenue requirement related to GDAR costs in proposed rates at the next rebasing. As shown in Table 5 at Exhibit A, Tab 1, the revenue requirement related to the specified GDAR capital costs will be fully recovered in the 2017 Non-Commodity Deferral application, which will be filed in 2018.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Pages 15 and 16
Exhibit A, Tab 2, Page 6

In its application, Union has noted that it did not deliver any Conservation Demand Management (CDM) programs on behalf of electric local distribution companies and was not successful in the Request for Proposal (RFP) process to continue contract services with Hydro One networks.

a) Has Union provided CDM programs to electric utilities other than Hydro One networks in the past?

b) Was the RFP for providing services for a single year or multiple years?

Response:

a) Yes. Union has provided services to Burlington and Halton Hills for the CDM Home Assistance Program.

b) The RFP for providing services was for a period of three years with a potential to extend for an additional term of two, one year terms.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Page 18

In its evidence, Union has described the process of setting the 2016 target NAC and capturing the difference between the target and actual Normalized Average Consumption (NAC) in the deferral account.

a) Please explain how Union accounts for the Loss Revenue Adjustment Mechanism established within DSM programs for calculating NAC.

b) Please confirm that there is no double counting for lost consumption that is compensated to the utility through the Loss Revenue Adjustment Mechanism for implementing Demand Side Management programs, and consumption declines captured in the NAC deferral account. Please provide details of the adjustments to demonstrate that there is no double counting.

Response:

a) Union's NAC deferral account includes all DSM and other efficiency gains in the general service market, eliminating the need for the Lost Revenue Adjustment Mechanism ("LRAM"). Since 2014, the LRAM deferral account applies to contract rate customers only.

b) Confirmed. DSM and other efficiency gains in the general service market are captured in the NAC deferral account. There is no LRAM for general service rate classes.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Pages 23 and 24

For 2016, the actual Normalized Average Consumption (NAC) is less than the target NAC by 185 m^3 for a Rate M1 customer and 227m^3 for a Rate 01 customer.

Please provide the main drivers for the change in the actual NAC for 2016.

Response:

The variance in the NAC deferral account is the difference between the target NAC used to set rates and the actual NAC in the year.

Since 2013, actual NAC has been trending down at an average rate of 1.5% per year.

The declining trend in NAC is driven by a number of factors:

- Efficiency gains due to advancements in the space and water heating industries, particularly in the residential market (e.g. furnace replacement, improved building code related efficiency in new homes and building construction).
- DSM programs promoted by Union and other energy savings initiatives.
- Customer behavior, including comfort desires (thermostat settings).

Actual normalized annual consumption (NAC)

	2013	2014	2015	2016
Rate 01	2,900	2,923	2,779	2,788
Rate 10	168,975	172,516	162,078	159,855
Rate M1	2,768	2,748	2,676	2,667
Rate M2	169,422	167,537	163,129	159,933

Percent change in normalized actual use

	2014	2015	2016	Average annual change in use
Rate 01	0.8%	-4.9%	0.3%	-1.3%
Rate 10	2.1%	-6.1%	-1.4%	-1.8%
Rate M1	-0.7%	-2.6%	-0.3%	-1.2%
Rate M2	-1.1%	-2.6%	-2.0%	-1.9%
		Total Average		**-1.5%**

During the same period target NAC used to set rates was increased. As the target NAC increases and actual NAC decreases the variance in the deferral account will increase.

There is a two-year lag between the target NAC used to set rates and the actual NAC for the year. The NAC target used to set rates is based on using the most recent years actual NAC available at the time rates are set. For example, the target NAC to set 2016 rates was based on 2014 actual NAC normalized for 2016 normal weather. The result was an increase in target NAC for rate setting (rates were lowered), and an increase in the 2016 NAC deferral account.

Approved/target NAC for rate setting

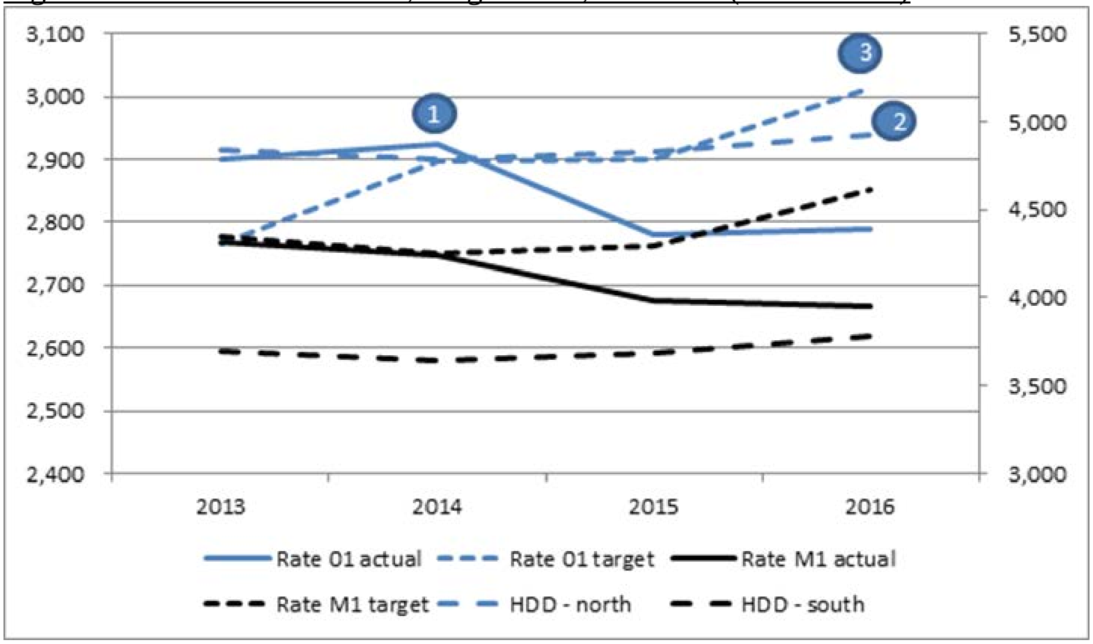
	2013	2014	2015	2016
Rate 01	2,765	2,898	2,901	3,015
Rate 10	157,381	167,443	169,025	177,214
Rate M1	2,778	2,751	2,761	2,852
Rate M2	143,867	165,085	169,121	172,694
HDD – north	4,838	4,782	4,832	4,930
HDD - south	3,695	3,644	3,681	3,780

Percent change in target NAC

	2013 to 2014	2014 to 2015	2015 to 2016
Rate 01	4.8%	0.1%	3.9%
Rate 10	6.4%	0.9%	4.8%
Rate M1	-1.0%	0.4%	3.3%
Rate M2	14.7%	2.4%	2.1%

As per Figure 1, the methodology to set the target NAC for 2016 (3) uses the actual NAC from 2014 (1) and the HDD from 2016 (2). The result was an increase in the target NAC when actual NAC is decreasing which increased the variance recorded in the deferral account.

Figure 1: Trend in Actual NAC, Target NAC, and HDD (2013 – 2016)



UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Page 27, Lines 10-13

Union's actual Unaccounted for Gas (UFG) percentage for 2016 was 0.427% as compared to the 2013 OEB approved UFG percentage of 0.219%.

a) Please provide the actual UFG for the years 2013, 2014 and 2015.

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

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

d) Will Union be filing a UFG study in its next rebasing proceeding?

Response:

a)

Fiscal Year	Actual Annual UFG Percentage	Board Approved UFG Percentage
2007	0.609%	0.454%
2008	0.411%	0.492%
2009	0.637%	0.492%
2010	0.192%	0.492%
2011	0.105%	0.492%
2012	0.210%	0.492%
2013	0.320%	0.219%
2014	0.318%	0.219%
2015	0.174%	0.219%
2016	0.427%	0.219%

b) The variance in the UFG deferral account is the difference between the UFG used to set rates in 2013 and the actual UFG for the year.

The 0.219% UFG percentage used in approved rates was determined using the weighted average of the previous three years actual UFG. At the time 2013 rates were set the most recent three years actual UFG available was 2011 to 2009. The Board approved methodology using a 3:2:1 weighting with the most recent year weighted most heavily. The result was a ratio for UFG in rates influenced heavily by 2011's favourable ratio.

Concern over the ability to manage UFG relative to this new ratio was a factor in the establishment of a deferral account to capture variances in EB-2013-0202.

The calculation of actual UFG for the year is the difference between the total gas available from all sources, and the total gas accounted for as delivery, net interchange, and company use multiplied by the approved weighted average cost of gas (WACOG).

Variances in UFG can result from leakage or other losses, discrepancies in measurement, variations of temperature and/or pressure, as well as the estimate of gas delivered but not yet billed required at the end of each reporting period to report results. On a monthly basis management reviews UFG for reasonableness to ensure estimates are appropriate. The external auditors review the estimation process and calculation of UFG annually to ensure the results are appropriate.

In 2016, the methodology for determining the actual UFG expense of $21 million is consistent with the methodology historically used to calculate actual UFG for the audited Financial Statements, utility rate setting and earnings calculation. The $10 million increase above the amount recovered in rates is primarily driven by a decrease in delivery volume recorded in January 2016 related to estimated consumption recorded in December 2015 with no corresponding offset in the consumption estimates at the end of 2016.

c) Union evaluated physical factors that could have impacted UFG including investigating meter reads between custody and check meters for inconsistencies; explored change in custody transfer meters and new meter stations at Parkway West and Parkway East for any meter bias; and verified measurement related to expansion facilities and commissioning activities. Union is continuing to monitor potential physical contributors to UFG.

   Please see Exhibit B, FRPO.4 a) for UFG reports.

d) No.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Page 28

Union has established the Parkway West Project Costs Deferral Account to track the differences between the actual revenue requirement related to costs for the Parkway West Project and the revenue requirement included in rates.

Is the Parkway West Project complete and in-service? If yes, please provide the in-service date.

Response:

Yes, the Parkway West Project is in-service. The in-service date was November 26, 2015. Final cleanup, resolution of Heritage Houses on site and all permit conditions are forecasted to be completed in 2017.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Page 32, Line 15

In its evidence, Union has indicated that Loss of Critical Unit compressor costs were $4.934 million higher than the costs included in 2016 OEB approved rates.

Please provide the total cost of the compressor and confirm whether the compressor costs including installation were higher than forecast. If yes, please provide detailed reasons for the increase in costs.

Response:

The total cost of the Loss of Critical Unit compressor facility in the Parkway West Project was $78.069 million at December 31, 2016 as noted below. The installed costs of the compressor facility were not higher than the estimated costs of $80.084 million.

LCU Compressor Costs ($000s)

	Board Approved	Actual	Variance	Source
EB-2016-0118 (2015 Deferrals)	79,570	72,621	(6,949)	Page 35, Table 12, Line 8
EB-2017-0091 (2016 Deferrals)	514	5,448	4,934	Page 31, Table 12, Line 8
	80,084	78,069	(2,015)	

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Pages 36 – 39
Union Evidence EB-2013-0074

Union's evidence in the Brantford-Kirkwall/Parkway D Project indicated that the estimated in-service date of the project was Fall 2015.

Please confirm if both the components of the project (pipeline and compressor) have been completed and in-service. If the project is in-service, please provide the in-service dates of the two components.

Response:

Yes, the Brantford-Kirkwall Pipeline Project is in-service. The in-service date was November 24, 2015. The project is complete with the exception of final cleanup (e.g., planting replacement trees) forecasted to be completed in 2017.

Yes, the Parkway D Project is in-service. The in-service date was November 9, 2015. The project is complete with the exception of final cleanup forecasted to be completed in 2017.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Union Evidence EB-2013-0074, Section 1, Page 5, Lines 10-12

In EB-2013-0074, Union indicated that the Brantford-Kirkwall / Parkway D Project would result in economic benefits of $18 million to $28 million annually to ratepayers in Union North.

Please confirm whether Union ratepayers in the North have derived any benefits as a result of the Brantford-Kirkwall / Parkway D Project. If the ratepayers have not received the stated benefits, please provide detailed reasons.

Response:

Confirmed. The Brantford-Kirkwall/Parkway D Projects have provided transportation capacity which, in conjunction with short haul capacity from TransCanada, provides benefits to Union North customers through access to diverse, secure and reliable sources of supply at Dawn. In addition, Union North ratepayers are receiving the benefits of lower transportation charges.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Page 40, Lines 4-5

Union has indicated that compressor costs were $5.586 million higher than the costs included in 2016 Ontario Energy Board (OEB) approved rates.

Please provide the total cost of the compressor and confirm whether the compressor costs including installation were higher than forecast. If yes, please provide detailed reasons for the increase in costs.

Response:

The total cost of the compressor in the Parkway D Project was $90.746 million at December 31, 2016 as noted below. The installed costs of the compressor facility were not higher than the estimated costs of $104.518 million.

Compressor Costs ($000s)

	Board Approved	Actual	Variance	Source
EB-2016-0118 (2015 Deferrals)	104,012	84,654	(19,358)	Page 42, Table 14, Line 4
EB-2017-0091 (2016 Deferrals)	506	6,092	5,586	Page 39, Table 15, Line 4
	104,518	90,746	(13,772)	

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Pages 43-44

In its evidence, Union has noted that the actual cost for the prime contractor for the Brantford-Kirkwall pipeline was significantly higher than the original estimate. In addition, the actual cost for easements was higher than the original estimate.

a) Please explain why the contingency costs for the project were not sufficient to meet the higher contractor and land easements costs.

b) Please provide the estimated and actual prime contractor costs.

Response:

a) There was a significant change in contractor market pricing post application due to competition with Western Canada. As well, historical quantities for rock, sand padding and extraneous haul used during the original estimate were found to be under estimated for during construction. The combination of increased contractor unit prices and quantities were unforeseen at the time of the original estimate and therefore Union's standard feasibility contingency did not cover the increases in actual costs.

   Land easement increases fell within forecast contingency levels

b) In the interests of protecting the competitive bidding process Union has not provided exact dollar costs associated with prime contractor costs. However, prime contractor costs at the time of the estimate (original project filing) were roughly 50% of the project total while prime contractor costs at the time of end of 2016 were roughly 72% of the original project filing total.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Page 44, Lines 4-5

Union has indicated that steel costs were lower at the time of purchase than estimated for the Brantford-Kirkwall pipeline project.

Please list all capital projects that have associated deferral accounts in the application where pipeline costs were lower as a result of lower steel costs and provide the difference from the original estimated costs.

Response:

Brantford-Kirkwall pipeline project was the only project in the application where steel costs were lower at the time of purchase than at the time of filing. The difference from the original estimated costs for Brantford-Kirkwall was approximately 9%.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Page 45, Lines 16-17

With respect to the Parkway Obligation Rate Variance Account, Union notes that on December 22, 2016, TransCanada's Maple facilities were placed in-service reducing Parkway deliveries for the sales service supply portfolio from 58 TJ/day to 28 TJ/day.

How will this change impact the amount to be recovered from ratepayers in 2017 and 2018?

Response:

The reduction to the Parkway deliveries for sales service customers from 58 TJ/d to 28 TJ/d on December 22, 2016 will not impact the PDO costs to be recovered from ratepayers in 2017 or 2018.

Effective January 1, 2017, Union's Parkway deliveries for sales service customers were reduced from the 28 TJ/d following the in-service of TransCanada's Maple facilities to 19 TJ/d. Union is recovering the PDCI costs associated with the 19 TJ/d sales service Parkway deliveries in 2017 rates, as filed in Union's 2017 Cap-and-Trade Compliance Plan (EB-2016-0296) at Exhibit 7, Schedule 2, p.2.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 1, Page 56, Table 20

In its 2017 Dawn Parkway Project (EB-2015-0116) Decision, the OEB approved the establishment of the Dawn H/Lobo D/ Bright C Compressor Project Costs Deferral Account to track the differences between the actual revenue requirement related to costs for the project and the revenue requirement included in rates.

Union has provided a table showing the total revenue requirement for 2016. In the calculation, Union has used a long-term debt rate of 4.0%. However, in all other projects (Parkway West, Brantford-Kirkwall/Parkway D, Lobo C Compressor/Hamilton-Milton Pipeline and Burlington-Oakville), the long-term debt rate ranges from 3.36% to 3.82%. Why has Union used a long-term debt rate of 4.0% for the Dawn H/Lobo D/Bright C Compressor project?

Response:

Union has utilized 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.

2015 In-Service Projects (Parkway West, Brantford-Kirkwall/Parkway D)

The long term debt rate of 3.82% is based on the actual average rate for long term debt that was issued in 2015 and is used to calculate the debt portion of the utility required return for projects that went into service in 2015.

2016 In-Service Projects (Lobo C Compressor/Hamilton-Milton Pipeline, 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 Project (Dawn H/Lobo D/Bright C Compressor)

Union has maintained the long term debt rate of 4.0% that was estimated at the time of preparing the 2017 Dawn-Parkway Project (EB-2015-0116) application. Union will adjust the long term rate used to calculate the utility required return in 2017 based on the actual average rate of long term debt issued in 2017. The adjustment will be reflected as part of Union’s 2017 annual non-commodity deferral account disposition application to be filed in 2018. At that time Union will also true-up the 2016 deferral balance to account for the change in the long term debt rate.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 2, Page 4

Union has provided the utility earnings calculations and identified the items that have been excluded for arriving at utility earnings subject to sharing with ratepayers if the return on equity exceeds a certain threshold.

a) Did Union incur any costs related to the merger of Enbridge Inc. and Spectra Energy? If yes, please provide the costs for 2016.

b) If merger costs are included in the calculation to determine utility earnings subject to sharing with ratepayers, please provide a revised calculation excluding merger costs.

Response:

a) Yes, Union incurred $55,260 in employee expenses related to the Spectra Energy and Enbridge Inc. merger in 2016. The costs are related to travel expenses for Union employees assigned to work on merger-related matters.

b) Please see Attachment 1. The exclusion of $55,260 in employee expenses from 2016 utility earnings has no impact on earnings sharing.

UNION GAS LIMITED
Earnings Sharing Calculation
Calendar Year Ending December 31, 2016

Line No.	Particulars ($000s)	2016 (a)	Unregulated Storage (b)	Adjustments (c)		2016 Utility (d)=(a)-(b)+(c)
	Operating Revenues					
1	Gas Sales	1,529,204	-	(14,668)	i	1,514,537
2	Transportation	182,195	(488)	-		182,683
3	Storage	95,598	87,095	-		8,503
4	Other	20,768	-	(4,237)	ii	16,530
5		1,827,765	86,607	(18,905)		1,722,253
	Operating Expenses					
6	Cost of gas	716,827	1,715	(14,668)	i	700,444
7	Operating and maintenance expenses	414,496	13,410	(3,283)	iii	397,803
8	Depreciation	239,080	10,679	-		228,401
9	Other financing	-	-	985	iv	985
10	Property and other taxes	71,199	1,635	-		69,564
11		1,441,601	27,439	(16,910)		1,397,197
	Other					
12	Gain / (Loss) on sale of assets	(624)	(624)	-		-
13	Other / Huron Tipperary	-	-	-		-
14	Gain / (Loss) on foreign exchange	1,592	39	(394)	v	1,159
15		967	(585)	(394)		1,159
16	Earnings before interest and taxes	387,132	58,583	(2,389)		326,215
17	Income taxes					4,398
18	Total utility income subject to earnings sharing					321,817
	Less debt and preference share return components					
19	Long-term debt					161,809
20	Unfunded short-term debt					(1,800)
21	Preferred dividend requirements					2,597
22						162,606
	Less shareholder portions of:					
23	Net short-term storage revenue (after tax)					553
24	Net optimization activity (after tax)					247
25						800
26	Earnings subject to sharing					158,411
27	Common equity					1,713,030
28	Return on common equity (line 26 / line 27)					9.25%
29	Benchmark return on common equity + 100 basis points					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
	Merger cost	55
		3,283

iv Facility fees and customer deposit interest

v Foreign exchange gain on bank balances

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 2, Appendix A, Schedules 5 and 10

Union has provided weather normalized throughput volume by service type and rate class for 2015 and 2016. The system sales volume for Rate 25 shows a significant decline in 2016 as compared to 2015 (2015 – 93,474, 2016 – 45,558 10^3m^3)

Please provide reasons for the significant decline in Rate 25 throughput volume for 2016 considering that the number of Rate 25 customers has increased in 2016 over 2015, from 31 to 39.

Response:

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

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

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 2, Appendix A, Schedule 13, Line Item 15

Schedule 13 provides the actual Operations and Maintenance expenses by cost type for the years 2015 and 2016.

For the line item “Donations”, please confirm that there are no political donations included in this cost type for 2016. If yes, please provide the amount representing political donations.

Response:

Political donations of $0.047 million are included in the 2016 “Donations” amount. All donations included on line 15 of Schedule 13 are removed from Utility Expense through the Non-Utility Earnings Adjustment on line 30.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 2, Appendix D, Page 8

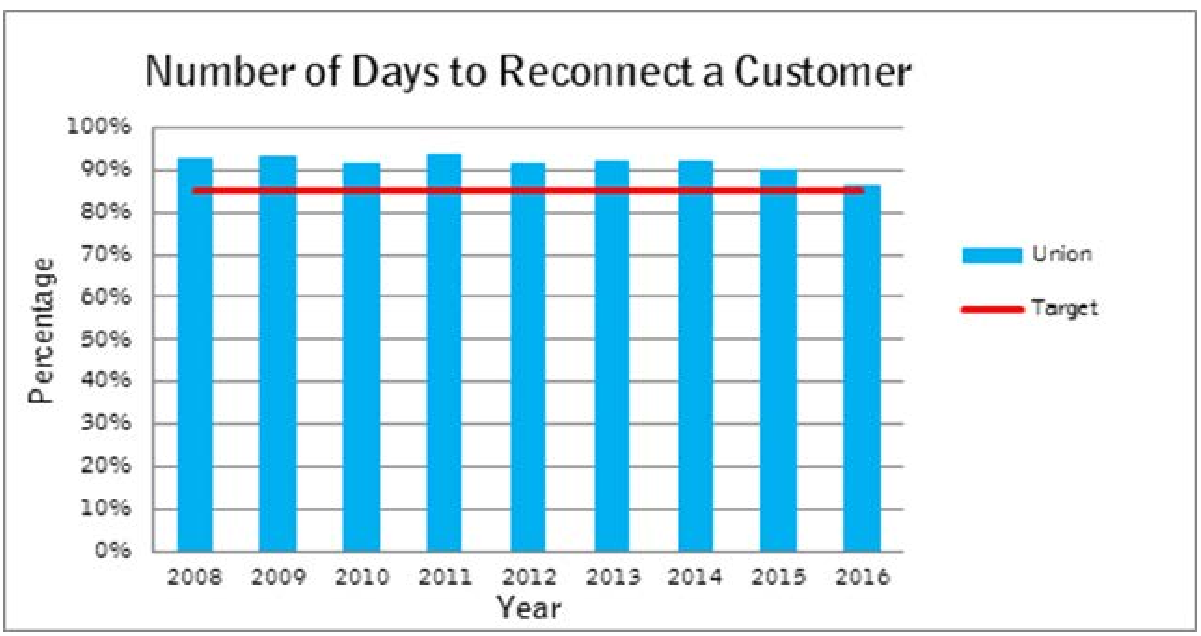
The OEB approved minimum standard for reconnecting customers is 85% of customers reconnected within two business days of bringing their accounts into good standing. The performance of Union for the month of February 2016 was 71%.

Please provide reasons as to why Union was unable to meet the minimum standard.

Response:

As illustrated below, Union's historical Reconnection Response Time results have been steady around 92%, however in 2015 they dropped to 90.1% and in 2016 they dropped to 86.2%. Union began to investigate in early 2016, and recently identified the cause of the downward trend (as noted below). Union corrected a work coding issue and the results are now accurate based on the Service Quality Requirements ("SQR") definition. 2017 YTD results are 94.81%.

Due to a procedural change in 2015, a work code in the billing system used to track this SQR was used in error for unrelated instances. As a result, they should not have been included in the measurement of this SQR since they are unrelated to reconnection of accounts that have been brought into good standing.



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

Given Union's past performance, and the actions taken, Union expects the *'Number of Days to Reconnect a Customer'* will exceed the 85% target in 2017.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 3

Union has proposed the allocation of 2016 deferral account balances between the different rate classes.

Does the change to the Dawn Reference Price and creation of new delivery areas impact the logical allocation of account balances in any of the deferral accounts that Union is seeking to dispose of in this application? If yes, please provide details.

Response:

No. There is no impact to the disposition of 2016 Deferrals, as Union introduced the Dawn Reference Price and Union North West and East delivery zones effective January 1, 2017.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 3, Pages 10-11
Tab 3, Appendix A, Schedule 3

Union provided general service bill impacts on page 10 of Tab 3 and in a table in Appendix A / Schedule 3. The bill impacts for Rate M1 and Rate 01 stated on pages 10 and 11 of Tab 3 are different from that stated in Appendix A, Schedule 3 (M1 – \$13.34 and \$13.61 and Rate 01 – \$35.06 and \$35.56). Union has proposed to dispose of the net 2016 deferral account balances prospectively over a six-month period beginning October 1, 2017.

a) Please reconcile the two rate impacts (Tab 3 pages 10-11 and Appendix A, Schedule 3) and provide reasons for the difference.

b) Please provide the estimated monthly bill impact for a typical residential customer (North and South) assuming the deferral account balances are disposed of over a one year period.

Response:

a) The correct general service bill impacts are provided at Exhibit A, Tab 3, Appendix A, Schedule 3. The general service bill impacts described at Exhibit A, Tab 3, pp. 10-11 should be updated to agree with Tab 3, Appendix A, Schedule 3. The updated bill impacts are described below.

   General Service bill impacts are presented at Tab 3, Appendix A, Schedule 3. For a Rate M1 sales service residential customer in Union South with annual consumption of 2,200 m^3, the charge for the period October 1, 2017 to March 31, 2018 is \$13.61. This \$13.61 charge consists of a delivery-related charge of \$9.66 (line 13, column (c)) and a commodity-related charge of \$3.95 (line 14, column (c)). For a bundled direct purchase residential customer the charge is \$9.66.

   For a Rate 01 sales service residential customer in Union North with annual consumption of 2,200 m^3, the charge for the period October 1, 2017 to March 31, 2018 is \$35.56. This \$35.56 charge consists of a delivery-related charge of \$22.37 (line 1, column (c)) and a gas transportation-related charge of \$13.19 (line 3, column (c)). For a bundled direct purchase residential customer the charge is \$35.56.

b) Please see Attachment 1 for a calculation of the estimated monthly bill impacts for a typical residential customer with annual consumption of 2,200 m^3 assuming a twelve month disposition period beginning October 1, 2017.

UNION GAS LIMITED
Typical Residential Customer Bill Impacts Assuming a Twelve Month Disposition Period

Line No.	Particulars	Rate Component	Deferral Balance for Disposition ($000's) (1)	Forecast Volume (10^3m^3) (2)	Unit Rate for Prospective Recovery/(Refund) (cents/m^3)	Volume (m^3) (3)	Annual Bill Impact ($)	Estimated Monthly Bill Impact ($)
			(a)	(b)	(c) = (a/b*100)	(d)	(e) = (c x d) / 100	(f) = (e / 12)
1	Rate 01	Delivery	10,048	981,216	1.0241	2,200	22.53	1.88
2		Commodity	-	-	-	2,200	-	-
3		Transportation	5,927	981,216	0.6040	2,200	13.29	1.11
4			15,975	981,216	1.6281		35.82	2.99
5	Sales Service						35.82	2.99
6	Direct Purchase Bundled T						35.82	2.99
7	Rate M1	Delivery	13,603	3,039,105	0.4476	2,200	9.85	0.82
8		Commodity (4)	5,284	2,767,018	0.1795	2,200	3.95	0.33
9					0.6271		13.80	1.15
10	Sales Service						13.80	1.15
11	Direct Purchase						9.85	0.82

Notes:
(1) Exhibit A, Tab 3, Appendix A, Schedule 2, pp.1-3, column (a).
(2) Forecast volume for the period October 1, 2017 to September 30, 2018.
(3) Annual consumption for a typical residential customer for the period October 1, 2017 to September 30, 2018.
(4) Rate M1 commodity unit rate for prospective recovery/refund equal to the total Union South gas supply commodity weighted-average unit rate.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Reference: Exhibit A, Tab 4, Page 14, Lines 13-21

The evidence states that in late April 2016, Vector was able to offer capacity for June 2017 through October 2017 due to a delay in the start date of contracts underpinning their Rover/NEXUS projects.

a) Please provide an update on the NEXUS project and explain how a delay may impact Union's gas supply plan.

b) Has Union developed any contingency plans to address the probable delay of the completion of the NEXUS project?

c) Please provide the list of open seasons providing competing supplies that Union did not participate in under the expectation of receiving supplies from NEXUS.

Response:

NEXUS continues to target an in-service date of Q4 2017. However, Union has been proactively planning for a possible delay which could be as late as Q1 2018 consistent with guidance provided by Enbridge in their First Quarter 2017 Financial Results Webcast and Conference call on May 11, 2017.

(https://www.enbridge.com/~/media/Enb/Documents/Investor%20Relations/2017/2017_ENB_Q1_Transcript.pdf - page 16)

a) It is Union's understanding that NEXUS does not yet have FERC approval to proceed with construction as it awaits a certificate of public convenience and necessity from the Federal Energy Regulatory Commission (FERC).

   The Gas Supply planning process identifies the upstream transportation, supply purchases and storage assets required to serve sales service and bundled direct purchase customers' annual, seasonal and design day gas delivery requirements. A new Gas Supply Plan has been developed which will establish the Gas Supply requirements for the upcoming gas year (November 1, 2017 through October 31, 2018). The results of this plan will be included in the Gas Supply Memorandum, which will be filed as part of the 2018 Rates proceeding.

   At the time the Gas Supply Plan was being generated Union had not received formal notice of a delay in the NEXUS project, and as a result a November 1, 2017 in-service date was assumed. The impact of potential delays will impact Union's implementation of the Gas

Supply plan (see (b) below), and will be addressed in the Future Trends section of the 2017/2018 Gas Supply Memorandum.

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

In the event that NEXUS is not in-service November 1, 2017, Union has considered the following options:

- Continue to hold 60,000 dth/day of DTE/MichCon capacity until NEXUS capacity is in-service. This contract expiry is tied to the earlier of the NEXUS in-service date or October 31, 2018.
- Bid for released capacity on Vector from Chicago
- Purchase additional DTE/MichCon capacity
- Purchase supply at Dawn
- Secondary market options
- A combination of some or all of the above

Union will continue to assess all available transportation options. Union's evaluation will be based on our gas supply principles which are designed to ensure customers receive secure, diverse gas supply at a prudently incurred cost. The principles are as follows:

- Ensure secure and reliable gas supply to Union's service territory;
- Minimize risk by diversifying contract terms, supply basins and upstream pipelines;
- Encourage new sources of supply as well as new infrastructure to Union's service territory;
- Meet planned peak day and seasonal gas delivery requirements; and,
- Deliver gas to various receipt points on Union's system to maintain system integrity.

c) Union continually assesses its transportation and gas supply needs using an overall portfolio approach adhering to our Gas Supply planning principles. As such, Union continues to encourage new sources of supply as well as new infrastructure to Union's service territory, part of an overall longer term strategic viewpoint.

Several projects have been proposed to bring Marcellus and Utica natural gas to Dawn through Michigan, including NEXUS, ETP Rover, ANR East, and through Niagara, including expansion of the Tennessee Gas Pipeline and National Fuel Gas systems in upstate New York. Each of these pipeline projects require long term contracting commitments to support capital investment, including major Greenfield pipeline projects such as NEXUS and ETP Rover. Union committed to the NEXUS project in 2012 as an anchor shipper. Generally, initial expression of interest was solicited for these types of pipeline projects through project-specific open seasons.

Once Union committed to the NEXUS project for 150,000 DTH/day for a fifteen year term, Union has remained committed to the project which will bring supply from the Marcellus and Utica formations in the Appalachian Basin to Dawn. Clearly, Union did not look to duplicate its NEXUS capacity through participation in other open seasons.

Generally, however, Union maintains an uncommitted position in our gas supply portfolio which represents supply requirements that are not allocated to any upstream pipeline capacity. This uncommitted position is not contractually bound and allows Union flexibility to secure additional upstream transportation capacity as warranted. Union will, as part of an ongoing process, evaluate the portfolio to ensure it meets the needs identified in the Gas Supply Plan. This includes monitoring the impacts of in-service delays for new transportation projects and evaluating all available transportation alternatives. Union's position on the NEXUS pipeline does not limit Union in seeking alternatives to fill all or a portion of that uncommitted position.

Specifically, TransCanada recently conducted a Long Term Fixed Price ("LTFP") open season from Empress to Dawn that could commence as early as November 1, 2017. Union did not participate in this LTFP open season as the offering required a long term commitment (up to ten years) which would reduce the flexibility of the portfolio and Union already has access to the Empress supply source today which means that diversity of supply is not enhanced. Although Union did not participate in the LTFP open season, Union expects to purchase natural gas from LTFP shippers at Dawn as part of the uncommitted position in the gas supply portfolio.

UNION GAS LIMITED

Answer to Interrogatory from
Association of Power Producers of Ontario ("APPrO")

Account No. 179-135 Unaccounted for Gas ("UFG") Volume Deferral

Reference: Exhibit A, Tab 1, Page 27; Exhibit A, Tab 3, Page 3.

Preamble: Union's UFG increased from 0.219% in 2015, to 0.427% in 2016.

Union is seeking to recover a portion of the costs over the threshold amount, associated with an increase in UFG volumes. Union also proposes to allocate the deferral balances in proportion to the 2013 Board approved allocation methodology.

a) Please explain the 2013 Board approved allocation methodology.

b) Given the current operating conditions, does Union believe that there is a more equitable allocation methodology to allocate these variances? Please explain in full and if Union believes that there is a more equitable allocation of UFG, please explain the methodology and the impact to all rate classes.

c) Please provide UFG volumes and throughput volumes by rate class for each of the last 5 years.

d) Please provide a description of the various changes in metering that occurred in and around Parkway and Kirkwall over the last several years, including whether any of the meters are bi-directional and provide custody transfer measurement in each direction.

e) Please provide Union's view if any of these metering changes could have contributed to the increase in UFG volumes. Please roughly quantify the impact of these metering changes on UFG volumes (estimates would be sufficient).

f) Have any meter witness tests or other internal metering checks resulted in unusual accuracy results?

g) Does Union have any explanation of the reasons for the significant increase in UFG percentage in 2016?

h) In light of the doubling of UFG since 2015, what increased measures has Union implemented to reduce the amount of UFG in the future.

i) Does Union plan any further measures to manage and reduce UFG?

Response:

a &b) Union's 2013 Board-approved allocation of UFG costs is based on 2013 storage and transmission volumes. Union allocates the UFG costs functionalized to storage in proportion to in-franchise injection and withdrawal volumes by rate class. Union allocates the UFG costs functionalized to transmission in proportion to ex-franchise transportation volumes and in-franchise delivery and transportation volumes by rate class.

An alternative allocation for the UFG Volume Variance deferral account is to apply the Board-approved allocation methodology to the 2016 storage and transmission volumes. Please see Attachment 1 for the allocation to rate classes using 2016 storage and transmission volumes and the variance from the proposed allocation.

c) Please see Attachment 2 for throughput volumes. Please see the table below for UFG Volumes for each of the last 5 years.

UFG Volumes
(10^3m^3 converted from GJs using the respective years Heat Value)

2012	2013	2014	2015	2016
68,690	**113,997**	**97,109**	**54,408**	**131,588**

d) Parkway West:

Union Gas built and commissioned three stations at Parkway West in December 2015:

- TCPL Parkway West, custody transfer measurement. The station is bi-directional and has five 20" ultrasonic meter runs. No changes have been made at the station after commissioning.
- Enbridge Parkway West, custody transfer measurement. The station is unidirectional (export to Enbridge) and has six 20" ultrasonic meter runs. No changes have been made at the station after commissioning.

- Enbridge Parkway West EGT, custody transfer measurement. The station is bi-directional and has six 20” ultrasonic meter runs. No changes have been made at the station after commissioning.

Parkway East:

Union’s TCPL Parkway East station was upgraded and commissioned in October 2014. The upgrade included replacement of obsolete ultrasonic measurement (one 42” ultrasonic meter and three 20” ultrasonic meters) with five 20” bidirectional ultrasonic meter runs. At that time, TCPL remained the custody transfer measurer. Union Gas became the custody transfer measurer in December 2016. No changes have been made at the station after commissioning.

Kirkwall:

Union’s Kirkwall station was upgraded and commissioned in January 2013. The objective of the upgrade was to redirect the gas flow in case of importing the gas to make the station bi-directional. Measurement has not been upgraded and no changes have been made at the station after commissioning. This station includes custody transfer measurement.

e) While metering variance accounts for a significant portion of total Unaccounted for Gas (“UFG”), Union cannot confirm any specific contribution metering changes has to the increase in UFG. Attachment 1 at Exhibit B.FRPO.4 identifies sources of UFG.

f) Union’s technicians continue the practice of witnessing tests at custody transfer sites owned by interconnecting companies. No unusual accuracy results have been identified. Internal metering checks also have not indicated any unusual accuracy results.

g) Please see the response at Exhibit B.Staff.9 b).

h) Please see the response at Exhibit B.Staff.9 c).

i) Union will continue to monitor all potential contributors to UFG.

UNION GAS LIMITED
Alternate Allocation of UFG Volume Variance Deferral Account
Based on 2016 Actual Storage and Transmission Volumes

Line No.	Particulars	Proposed Allocation ($000) (1)	Alternate Allocation ($000)	Variance ($000)
		(a)	(b)	(c) = (b-a)
1	Rate M1	612	620	7
2	Rate M2	203	262	59
3	Rate M4	83	105	22
4	Rate M5	111	43	(68)
5	Rate M7	31	106	75
6	Rate M9	13	16	3
7	Rate M10	0	0	0
8	Rate T1	86	92	6
9	Rate T2	655	806	151
10	Rate T3	54	58	4
11	Total Union South	1,848	2,107	259
12	Rate M12	2,352	1,942	(411)
13	Rate M13	20	13	(7)
14	Rate M16	41	37	(4)
15	Rate C1	718	903	185
16	Total Ex-Franchise	3,131	2,895	(237)
17	Rate 01	143	124	(19)
18	Rate 10	48	46	(2)
19	Rate 20	18	17	(1)
20	Rate 100	0	0	0
21	Total Union North	210	187	(23)
22	Total	5,189	5,189	-

Notes:
(1) Exhibit A, Tab 3, Appendix A, Schedule 1, line 17.

UNION GAS LIMITED
Weather Normal Throughput Volume by Service Type and Rate Class
Year Ended December 31

Line No.	Particulars (10^6m^3)	Actual 2012 (g)	2013 (h)	2014 (i)	2015 (j)	2016 (k)
	General Service					
1	Rate M1 Firm	2,915	2,923	2,944	2,889	2,914
2	Rate M2 Firm	1,114	1,140	1,172	1,189	1,227
3	Rate 01 Firm	930	931	956	939	948
4	Rate 10 Firm	354	348	354	344	354
5	Total General Service	5,312	5,342	5,427	5,361	5,442
		-	-	-	-	-
	Wholesale - Utility (2)	-	-	-	-	-
6	Rate M9 Firm	58	63	67	67	72
7	Rate M10 Firm	0	0	0	0	0
8	Total Wholesale - Utility	58	64	67	67	72
		-	-	-	-	-
	Contract (2)	-	-	-	-	-
9	Rate M4	429	475	484	457	471
10	Rate M7	142	172	392	428	474
11	Rate 20 Storage	-	-	-	-	-
12	Rate 20 Transportation	653	651	536	541	565
13	Rate 100 Storage	-	-	-	-	-
14	Rate 100 Transportation	1,913	1,927	1,711	1,398	1,366
15	Rate T-1 Storage	-	-	-	-	-
16	Rate T-1 Transportation	5,025	453	471	443	447
17	Rate T-2 Storage	-	-	-	-	-
18	Rate T-2 Transportation	-	4,241	4,305	4,369	4,213
19	Rate T-3 Storage	-	-	-	-	-
20	Rate T-3 Transportation	239	274	289	263	250
21	Rate M5	469	524	259	209	194
22	Rate 25	207	215	187	144	117
23	Rate 30	-	-	(0)	-	-
24	Total Contract	9,077	8,933	8,634	8,252	8,097
		-	-	-	-	-
25	Total	14,448	14,338	14,128	13,679	13,612
	Ex-Franchise Throughput (10^6m^3) (3)					
	Transportation (Throughput)					
26	M12 Long Term Transportation	15,905	14,662	11,678	11,904	11,446
27	M12X Long Term Transportation	1,205	2,149	2,312	2,395	2,723
28	C1 Long Term Transportation	1,507	2,415	2,665	3,550	4,984
29	C1 Short Term Firm Transportation	3,727	4,503	2,565	2,478	1,392
30	C1 Short Term Interruptible Transportation	877	1,453	478	497	215
31	Throughput for UFG Calculation	23,220	25,182	19,697	20,824	20,760

Note:
(1) The impact of weather normalization for rates M1, M2, 01, and 10 is calculated based on the weather normalization methodology in place for each respective year.
(2) Union's contract and wholesale classes are not weather normalized.
(3) Converted from GJ's using the respective monthly Heat Values

UNION GAS LIMITED

Answer to Interrogatory from
Association of Power Producers of Ontario ("APPrO")

Account No. 179-136 Parkway West Project Costs

Reference: Exhibit A, Tab 1, Pages 28-36.

Preamble: Project-to-date capital costs for the Parkway West Project are shown in Table 13 to be more than $8.571m over forecast. Specifically, Table 13 shows that $228.0 million in capital costs have been incurred to-date, while only $219 million was approved in EB-2012-0433.

In approving the Parkway West project in EB-2012-0433, the Board said (**emphasis added**):

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.

a) Please confirm that the Parkway West Project "is completed and in-service" within the meaning of EB-2012-0433.

b) Union included Table 13 "for additional reference only."

i. Please confirm that Union is not seeking recovery of any capital costs in this Application in excess of the $219 million approved in EB-2012-0433.

ii. Please confirm when Union believes it would be appropriate for the Board to assess the prudence associated with the $8.571 million over-expenditure in accordance with the principles established in EB-2012-0433.

iii. Please provide a full and complete description of any and all "rigorous" cost control measures that Union used to manage the Parkway West Project capital costs as directed by the Board in EB-2012-0433.

a. Did Union undertake competitive procurements for each aspect of the Parkway West Project? If no, please explain why ratepayers should be expected to pay a premium above competitively tendered pricing?

iv. For each cost control measures referred to in the response above, please explain in detail the specific measures that were implemented.

v. Please explain what other steps, if any, Union took to manage and minimize capital costs associated with the Parkway West Project in a manner that maximizes value for ratepayers

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Response:

a) The Parkway West Project went into service November 26, 2015. Final cleanup, resolution of Heritage Houses on site and all permit conditions are forecasted to be completed in 2017.

b)

i)-ii) Union is seeking recovery of the deferral account balance relating to the actual revenue requirement for 2016 compared to the forecast revenue requirement included in 2016 rates. The deferral balance is primarily driven by the capital costs and therefore Union believes the Board is assessing prudence associated with the capital spend in this proceeding.

iii) Cost control for the materials, building and equipment are implemented in real time when the actual Purchase Orders are issued and any variances are managed within the contingency amounts.

For the cost controls of construction and labour, the cost control managers review and reconcile the timesheets and invoices on a bi-weekly basis. Further monthly review is completed by the cost control coordinators and Project Managers (PMs) and forecasts are updated as required.

Service Request Orders (“SRO”) are issued for all labour with a value as negotiated with the vendor. Invoices cannot exceed the approved amount of the SRO. All change notices have to approved by management.

Cost control managers track all construction and scope change notices. Approval of all changes are required by Management.

A monthly financial report is prepared and reviewed with Finance and Senior Management.

All actual costs are confirmed through SAP reporting to ensure accuracy for cost tracking.

a. All major material and equipment have gone through the Procurement Competitive Bid process.

iv) Please see iii) above.

v) Union used the same foundational tools to manage the Parkway West Project as used for all Union’s capital projects included in this application, namely Brantford-Kirkwall/Parkway D Project, Lobo C Compressor/ Hamilton-Milton Pipeline Project, Lobo D/Bright C/Dawn H Compressor Project and the Burlington-Oakville Project. Union Gas managed and minimized capital costs associated with the Parkway West Project by practicing sound design and project execution methodologies which include monitoring the construction premium time associated with the project schedules.

UNION GAS LIMITED

Answer to Interrogatory from
Association of Power Producers of Ontario ("APPrO")

Account No. 179-152 Greenhouse Gas Emissions Impact Deferral Account

Reference: Exhibit A, Tab 1, Pages 66-78.

Preamble: Union is seeking recovery of $2.232 million from ratepayers for cost impacts of government regulations related to greenhouse gas emissions. Those costs include 13.5 FTEs that were allocated to incremental work associated with cap-and-trade compliance obligations.

In EB-2016-0300, Enbridge Gas Distribution Inc. ("Enbridge") forecasted its GHG compliance obligation of 21.1 million tonnes of CO2e (Exhibit B, Tab 3, Schedule 1 at page 5). Enbridge proposed meeting this obligation by more efficiently utilizing existing staff. Enbridge proposes to hire a total of 7 incremental FTEs.

a) What is Union's forecasted compliance obligation (in tonnes of CO2e) for 2017?

b) Please indicate whether Union has taken any steps to more efficiently utilize existing resources prior to hiring any incremental FTEs associated with cap-and-trade? If yes, please explain what steps were taken?

c) Please explain how the options available to Union to meet its cap-and-trade compliance obligations are different from, or similar to, the options available to Enbridge.

Response:

As per the Board's Procedural Order No. 2, the Board indicated that while it will be deferring final disposition of Union's 2016 Greenhouse Gas Emission Impact deferral account balance, it would consider whether the balance should be disposed of on an interim basis in this proceeding. Given that costs were incurred in 2016, Union's position is that these costs should be disposed of on an interim basis through this proceeding rather than delaying to future applications.

Union filed evidence in support of this deferral balance however, as per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

Answer to Interrogatory from
Association of Power Producers of Ontario ("APPrO")

Account No. 179-152 Greenhouse Gas Emissions Impact Deferral Account ("GGEIDA")

Reference: Exhibit A, Tab 1, Pages 66-78.

Preamble: On June 21, 2016, APPrO made the following submissions in the Board's Consultation to Develop a Regulatory Framework for Natural Gas Distributors' Cap and Trade Compliance Plans (EB-2015-0363) (emphasis added):

"**At any rate, adjustments that occur must only occur prospectively, i.e., variances must be rolled forward to be included in future periods. There cannot be any "one-time" adjustments or true ups representing past variances and customer activity.** Generators make the commercial decision to operate based on their marginal operating costs. If a cost is restated after the fact, it is no longer a marginal operating cost but a "one-time" fixed cost. Ontario's current electricity market structure makes it difficult to recover this type of cost and therefore goes against the intent of the C&T program as it does not provide the appropriate price signal to the consumer. Any variances must be included in, or rolled forward, for computing and establishing the new rates for future periods. **This is especially important for settlement of contracts between the IESO and generators which underpinned the significant investments in the electricity sector in order to reduce its carbon footprint.**"

The Board incorporated APPrO's feedback directly into the Report of the Board, *Regulatory Framework for the Assessment of Costs of Natural Gas Utilities' Cap and Trade Activities*, EB-2015-0363 dated September 26, 2016 (the "**Framework**") at Section 6.2.1 (emphasis added):

"The OEB also believes that deferral account balances should be apportioned between customer-related and facility-related obligations and, **to avoid any market distortions, the balances should be administered on a prospective basis, not a retroactive basis**."

a) Please describe Union's proposed disposition methodology for the GGEIDA.

b) For the GGEIDA and referencing the Framework, is Union proposing a "one-time" retroactive adjustment or a forward looking prospective adjustment?

c) Did Union consider the market distortions that would be created for natural gas fired generators by a one-time retroactive disposition, as identified by the Independent Electricity System Operator in its May 19, 2017 submissions in EB-2016-0296/EB-2016-0300?

d) Please explain to the Board panel what market distortions Union is aware of that might arise under Union's proposed disposition methodology?

e) Please explain what alternative disposition approaches are available to Union to mitigate those market distortions?

f) Please explain whether, for each of these alternative approaches, they could be implemented in a way to ensure that Union is held whole under such a disposition approach?

g) Please identify any other factors which the Board should be aware of when considering any alternative approaches? Please provide evidence to quantify each such factor based on actual data, to the extent available.

Response:

As noted at Exhibit B.APPrO.3, Union requests that the Board approve the disposition of the Greenhouse Gas Emission Impact deferral account (No. 179-152) on an interim basis, with the balance allocated as proposed in evidence at Exhibit A, Tab 3, pp. 9-10. To the extent there are any changes to the allocation as a result of a future Board decision on final disposition, changes will be dealt with at that time.

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, p3; Account 179-108, Unabsorbed Demand Costs ("UDC")

Please explain why UDC was experienced in Union South. How often has this occurred over the last ten years?

Response:

As indicated at page 5 of Exhibit A, Tab 1, the level of unutilized capacity experienced in 2016, incremental to the planned unutilized capacity, was primarily due to significantly warmer than normal weather which resulted in lower demand and transportation throughput. Warmer weather than normal was experienced in both Union North and Union South. Please see the response at Exhibit B.LPMA.1 a) for drivers for UDC other than warmer than normal weather.

In the 10 years between 2006 and 2015 inclusive, Union South had variances from plan resulting in unplanned UDC costs seven out of ten years. Please see the following chart that shows the UDC costs experienced in each year.

Year	Net South UDC Costs Incurred ($000's)	Proceeding Reference
2006	486	EB-2007-0598
2007	381	EB-2008-0034
2008	12	EB-2009-0052
2009	8	EB-2010-0039
2010	227	EB-2011-0038
2011	0	EB-2012-0087
2012	2,387	EB-2013-0109
2013	0	EB-2014-0145
2014	0	EB-2015-0010
2015	1,445	EB-2016-0118

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Appendix A, Schedule 2; Account 179-131, Upstream Transportation Optimization

Please account for the substantial difference between the $14.918 million Board approved optimization revenue in rates, and the relatively small recovery of only $3.358 million in net revenue from such optimization, aside from the elimination of TCPL's FT-RAM ($5.800 million). Please provide a calculation including numbers of exchanges and gas prices realized in the exchanges.

Response:

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

UNION GAS LIMITED

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

Reference: Ibid, p.8; Account 179-70; Tab 1, Appendix A, Schedule 3

a) What are the definitions of short-term storage and short-term firm peak storage, respectively?

b) Can short-term storage be either firm or interruptible? Please explain.

c) Please provide an explanation of, and the breakdown of, revenues and costs for each of the components of the account, other than storage, including Gas Loans, Enbridge LBA, Supplemental Balancing Services, shown on p8.

d) Please explain the shape of the storage curve shown at p11.

e) Please provide a copy of the Union/EGD LBA.

f) What US/CDN exchange value has been used in the graph; over what periods of time?

Response:

a) Short-Term Storage is the title of the account and represents all activity that occurs with the excess Utility space (such as off-peak storage, balancing, etc.). Short-Term Firm Peak Storage is storage that is sold for less than 2 years and allows the purchaser to maintain a balance in their storage account through October 31st.

b) Short-Term Storage can be sold on either a firm or interruptible basis.

c) Gas loans represent revenue earned when shippers withdraw or borrow gas from Union's utility storage and repay it at a later date. The Enbridge LBA is a fee paid by Enbridge to Union to balance gas at interconnection points between Union and Enbridge. Supplemental Balancing Services are fees paid to Union for shippers' inventory balancing requirements.

   Please refer to Exhibit A, Tab 1, Appendix A, Schedule 3 for a breakdown of revenue and costs.

   The costs are not assigned to Storage, Supplemental Balancing Services, Gas Loans, and Enbridge LBA. The O&M costs are calculated based on the revenue requirement of 11.3 PJ of board approved excess in-franchise storage capacity. The UFG costs are based on short-term volumes in proportion to total volumes. The Compressor Fuel costs are based on short-term storage activity in proportion to total actual storage activity.

d) The graph shown on page 10 of the pre-filed evidence provides a representation of the price of one-year peak storage based on the market price of gas at Dawn. While the actual price of storage that Union receives may vary from the information shown, the graph provides support for the average price Union obtained in selling the C1 Short-Term Firm Peak Storage during the year.

e) Please see Attachment 1.

f) The graph is showing prices in US$/MMBtu and no foreign exchange rate has been applied.

uniongas

UNION MASTER COPY

October 23, 2001

The Consumers' Gas Company Limited
500 Consumers Road
Willowdale, Ontario
M2W 1P8

Attention: Mr. Frank Brennan

Dear Frank:

Re: The Limited Balancing Agreement Between Union Gas Limited ("Union") and The Consumers' Gas Company Limited ("Consumers") dated November 1, 1997 (the "Contract").

Pursuant to the Contract dated November 1, 1997, Union and Consumers, at the Lisgar and Parkway Consumers Interconnect Points, have agreed to amend the Contract effective September 1, 2001, as follows:

1. Delete Section 10 (a) and (b) and replace with the following:

"Unless Union and Consumers otherwise mutually agree in writing:

(a) Utilizing telemetry estimates, Union shall adjust the operations of the Union System and Consumers shall adjust the operations of the Consumers System as necessary in order to minimize the Daily Imbalance (as defined in Paragraph 14 (a)) at the Interconnection Points on each gas day to within the greater of plus or minus 2.0% of Confirmed Nominations or plus or minus 2.0% of the average of Confirmed Nominations for the previous thirty days or 2111 gigajoules (the "Maximum Daily Imbalance"); and

(b) Union shall adjust the operations of the Union System and Consumers shall adjust the operations of the Consumers System as necessary such that the Accumulated Imbalance (as defined in Paragraph 14 (b)) trends towards zero, but in any event does not exceed the greater of plus or minus 4.0% of Confirmed Nominations or plus or minus 4% of the average of Confirmed Nominations for the previous thirty days or 4221 gigajoules (the "Maximum Accumulated Imbalance")."

In all other respects, the Contract as herein modified and amended is hereby ratified and confirmed.

Kindly acknowledge your agreement with the foregoing by signing and returning both copies to Union.

Yours truly,

UNION GAS LIMITED

Larry Denver

Larry E. Denver
Manager, Marketing and Sales
Storage and Transportation

APPROVED FOR EXECUTION
LEGAL
REGULATORY
FINANCE
OPERATIONS
SALES & MRKTG.
LD

UNION GAS LIMITED

Accepted and Agreed to
this 28 day of November, 2001

THE CONSUMERS' GAS COMPANY LIMITED

F. Brennan

FRANK BRENNAN
DIRECTOR
ENERGY POLICY & ANALYSIS

e:\contracts\ugl\consgas\limited balancing agreement amendment # 1 unionqas centragas

VIA COURIER

November 27, 1997

The Consumers' Gas Company Limited,
500 Consumers Road,
Willowdale, Ontario.
M2J 1P8

Attention: Mr. George Dann

Dear George:

Re: Limited Balancing Agreement ("LBA") between Union Gas Limited ("Union") and The Consumers' Gas Company Limited ("Consumers") date as of November 1, 1997.

This letter confirms our agreement that the LBA will be duly executed by Consumers' forthwith and that the LBA will be implemented immediately.

It is also mutually acknowledged that the terms and conditions may not be 100% achievable today, therefore, both Union and Consumers' commit to comply fully with the LBA as soon as reasonably possible.

Additionally, both Union and Consumers' agree that the new charges for daily and cumulative imbalances in the LBA that form part of the Union rate hearing will not be effective until April 1, 1998.

Yours truly,

UNION GAS LIMITED
Per:

John A. Korol, P. Eng.
Manager, Gas Control

UNION MASTER COPY

LIMITED BALANCING AGREEMENT

THIS AGREEMENT made as of the 1st day of November, 1997.

B E T W E E N :

UNION GAS LIMITED, a company incorporated under the laws of the Province of Ontario having its head office in the City of Chatham

hereinafter referred to as "UNION"

- and -

THE CONSUMERS' GAS COMPANY LIMITED, a company incorporated under the laws of the Province of Ontario, having its head office in the City of Toronto

hereinafter referred to as "CONSUMERS'"

WITNESSETH THAT:

WHEREAS Union owns and operates a natural gas transmission and storage system in Southwestern Ontario ("Union's System");

AND WHEREAS Consumers' owns and operates a natural gas local distribution system in the Province of Ontario ("Consumers' System");

AND WHEREAS Consumers' and Union are parties to Firm Transportation Service Contracts with each other ("FTCs") which include delivery points at the interconnections between Union's System and Consumers' System commonly known as Lisgar and Parkway-Consumers' (the "Interconnection Points");

AND WHEREAS the evolution of the gas industry and, in particular, the TransCanada Pipelines Limited ("TCPL") introduction of balancing fees require greater correspondence between nominated volumes and actual volumes at the Interconnection Points;

AND WHEREAS Union may enter into, transportation service contracts with shippers ("Union's Shippers") whereby Union will receive from Union's Shippers, at points on Union's System which may include the Interconnection Points, quantities of gas which are nominated by Union's Shippers and confirmed for redelivery by Union to Union's Shippers at other points on Union's System, which may include the Interconnection Points;

AND WHEREAS Consumers' may enter into, agreements with shippers ("Consumers' Shippers") who are also Union's Shippers whereby Consumers' will receive from Consumers' Shippers, at points on Consumers' System which may include the Interconnection Points, quantities of gas which are nominated by Consumers' Shippers and confirmed for redelivery by Consumers' to Consumers' Shippers at other points on Consumers' System, which may include the Interconnection Points;

AND WHEREAS Union, as operator of the Union System and Consumers' as operator of the Consumers' System, propose to balance and rectify those variations between themselves so that the Confirmed Nominations (as defined herein) of gas are balanced at the Interconnection Points daily and over time.

NOW THEREFORE Union and Consumers' (Collectively the "Parties" and each a "Party"), in consideration of the covenants and agreements contained herein, covenant and agree as follows:

1. On or before 1630 hours Eastern Time ("ET") on each day immediately prior to the gas day for which transportation services are to be rendered on the Union System and on the Consumers' System, Union shall provide to Consumers', by telecopy or such other means as may subsequently be agreed to by the Parties, a statement summarizing nominations for gas quantities at the Interconnection Points for the subject gas day (the "Confirmation Report").

   The Confirmation Report shall state the following:

   a) Nominations on Union's System which are to be supplied to or by, as the case may be, those of Consumers' and Consumers' Shippers that are receiving or delivering gas at the Interconnection Points on such gas day (the "Nominating Shippers"); and

   b) The Imbalance Make-up nomination, if established pursuant to Paragraph 16.

2. Upon receipt by Consumers' of the Confirmation Report, Consumers' will identify any discrepancies between the nominations on Consumers' System by the Nominating Shippers and the corresponding amounts nominated for receipt from or delivery to Union's System and Union and Consumers' shall use reasonable and good faith efforts to resolve any such nomination discrepancies. Consumers' shall thereafter promptly advise Union as to whether Consumers' accepts or rejects, as the case may be, any or all of the nominations shown on the Confirmation Report.

   Any advice that Consumers' is accepting or rejecting the Confirmation Report will include the information referenced in paragraphs 2, 3, 4 and 5 herein, and shall be sent to Union by telecopy or such other means as may be agreed to by Union and Consumers' (the "Consumers' Reply Confirmation Report") by the later of 1730 hours ET or one hour after receipt by Consumers' of the Confirmation Report. If the Consumers' Reply Confirmation Report indicates a discrepancy between the nomination on Consumers' System by a Nominating Shipper and the corresponding nomination on the Confirmation Report, Consumers' shall be deemed to have rejected the Confirmation Report insofar as it relates to such Nominating Shipper, and Sections 4 and 5 will apply. If Consumers' fails to submit a Consumers' Reply Confirmation Report within the above-described timeframe, or no discrepancy exists between the subject nominations, Consumers' shall be deemed to have accepted the Confirmation Report insofar as it relates to the relevant Nominating Shipper.

3. If Consumers' accepts all or, pursuant to Section 4, part of the Confirmation Report, the Consumers' Reply Confirmation Report shall confirm the nominations on Consumers' System for each of (i) the Imbalance Make-up, and (ii) the Nominating Shippers (individually, a "Confirmed Nomination" and collectively, the "Confirmed Nominations").

4. If Consumers' rejects a nomination shown on the Confirmation Report then the Confirmed Nomination on the Union System and the Consumers' System at the Interconnection Points for the subject Nominating Shipper for the subject gas day shall be that volume which is equal to the lessor of:

   a) the nomination by such shipper on the Consumers' System; and

   b) the nomination by such shipper on the Union System as set forth in the Confirmation Report.

   The Imbalance Make-up nomination on any day when Consumers' rejects a Confirmation Report will remain in effect as agreed to by the Parties pursuant to Paragraph 16.

5. The Consumers' Reply Confirmation Report will, inter alia, indicate those Nominating Shippers on the Consumers' System with a lower nomination on the Consumers' System than stated in the Confirmation Report. If a lower nomination is reported on the Consumers' Reply Confirmation Report, Union will submit to Consumers' a revised Confirmation Report incorporating this lower nomination value, which revised Confirmation Report must be submitted to Consumers' by the later of 18:00 ET or one half hour after receipt by Union of the Consumers' Reply Confirmation Report.

6. After the Confirmation Report has been accepted or revised as set out above, the nominations shown on the Confirmation Report can only be changed if Consumers' and Union agree to the change. Once such an agreement is reached, the agreed change will be conditional upon delivery of a revised Confirmation Report by Union to Consumers' and these agreed nominations will replace (as applicable) the previous Confirmed Nominations.

7. On or before the third banking day after the end of each calendar month, Union will provide to Consumers', by telecopy or such other means as may be agreed to by Union and Consumers', a statement summarizing the daily Confirmation Reports for the immediately preceding calendar month (the "Monthly Allocation Statement"). For the purposes of this Agreement a "banking day" shall mean a day on which the main branch of the Toronto-Dominion Bank in Toronto, Ontario and the downtown branch of the Canadian Imperial Bank of Commerce in Chatham, Ontario, are open for the conduct of regular business.

8. Each gas day, without reducing or eliminating the effect of any provision of this Agreement, Union and Consumers' shall use reasonable and good faith efforts to ensure that the volume of gas that crosses at the Interconnection Points on that gas

day is as close as possible to the Confirmed Nominations as set out in paragraphs 3, 4, 5 and 6 at the Interconnection Points for the gas day.

9. As soon as practical each day, Union shall provide Consumers' with an estimate of the volume of gas that flowed at the Interconnection Points on the previous gas day which is as accurate as is reasonably possible.

10. Unless Union and Consumers' otherwise mutually agree in writing:

a) Utilizing telemetry estimates, Union shall adjust the operations of the Union System and Consumers' shall adjust the operations of the Consumers' System as necessary in order to minimize the Daily Imbalance (as defined in Paragraph 14(a)) at the Interconnection Points on each gas day to within the greater of plus or minus 2.0% of Confirmed Nominations or 28.0 10^3m^3 (the "Maximum Daily Imbalance"); and

b) Union shall adjust the operations of the Union System and Consumers' shall adjust the operations of the Consumers' System as necessary such that the Accumulated Imbalance (as defined in Paragraph 14(b)) trends towards zero, but in any event, does not exceed the greater of plus or minus 4.0% of the average of Confirmed Nominations for the previous thirty days or 56.0 10^3m^3 (the "Maximum Accumulated Imbalance").

Union may limit the maximum variances set out above if operational circumstances require Union to protect system integrity or to ensure that all Union firm obligations are met. However, no charges as set out in Section 15 of this Agreement will be applied to Consumers' for Daily and Accumulated Imbalances which are within the maximums set out in (a) and (b) above. If the Daily Imbalance for any gas day exceeds, or is projected to exceed, the Maximum Daily Imbalance, or if the Accumulated Imbalance exceeds, or is projected to exceed, the Maximum Accumulated Imbalance, or if the Daily Imbalance would result in exceeding any variance otherwise agreed to by the Parties, Union and Consumers' immediately that same day shall do any one or more of the following in order to keep the total volumes delivered for that day within the applicable variances set forth above: (x) cause their respective shippers to submit revised nominations to be confirmed in accordance with the procedure in Paragraphs 1 through 6 above (the "Revised Nominations"), (y) adjust their operations, and/or (z) agree upon a revised Imbalance Make-up nomination pursuant to Paragraph 16.

11.

a) Nothing herein contained shall obligate Union to provide delivery pressure at the Interconnection Points in excess of the minimum delivery pressure which Union is obligated to provide to Union's Shippers (the "Minimum Delivery Pressure"), nor to reduce the delivery pressure below the Minimum Delivery Pressure.

b) In addition, at all times that Union is maintaining the Minimum Delivery Pressure, or such other pressure that Consumers' may request of Union and that Union agrees to provide, Union will be deemed to be operating Union's System in conformity with the requirements of this Agreement.

12.

a) If a capacity constraint occurs on Union's System which results in a curtailment of volumes through the Interconnection Points, then Union shall determine, in its sole discretion but not in breach of a contractual obligation, the reallocation amongst Union's Shippers of the volumes through the Interconnection Point and that reallocation shall be immediately communicated to Consumers'.

b) If a capacity constraint occurs on Consumers' System which results in a curtailment of volumes through the Interconnection Points, then Consumers' shall determine, in accordance with its own transportation agreements, the reallocation amongst Consumers' Shippers of the volumes through the Interconnection Point and that reallocation shall be immediately communicated to Union.

c) All reallocations pursuant to this Paragraph 12 shall be confirmed in accordance with the provisions of Paragraphs 1 through 6 above by the Party making the reallocation to the other Party, and shall constitute Revised Nominations.

13.

a) The actual volume of gas that flowed at the Interconnection Points for each day (the "Actual Volume") will be determined in cubic meters and communicated by Union to Consumers' as soon as possible, but not later than three banking days after the end of the month. The Actual Volume shall be determined by Union in accordance with Union's General Terms and Conditions.

b) For Union's allocation purposes, the volume utilized in calculating the amounts payable by each of Union's Shippers in respect of gas delivered at the Interconnection Points shall be the Confirmed Nomination or Revised Nomination, as the case may be, for each Union Shipper.

c) For Consumers' allocation purposes, the volume utilized in calculating the amounts payable by each of Consumers' Shippers in respect of gas received at the Interconnection Points shall be the Confirmed Nomination or Revised Nomination, as the case may be, for each Consumers' Shipper.

14. a)

i) Each day, the Actual Volume minus the Confirmed Nominations or Revised Nominations, as the case may be, whether positive or negative shall be the Gross Imbalance.

ii) On any day the excess, if any, of the Actual Volume over the greater of Confirmed/Revised Nominations or 102% of the FTC's Contract Demand, shall be Unauthorized Overrun, and the terms and conditions (including fees and penalties) then existing in the FTC shall apply.

iii) Each day, the Gross Imbalance minus any Unauthorized Overrun, if any, for such day shall be the Daily Imbalance.

b) Each day, all Daily Imbalances will be added together on an ongoing basis, with such sum defined as the accumulated imbalance (the "Accumulated Imbalance").

c) Daily Imbalances and Accumulated Imbalances shall be subject to the restrictions set out in Section 10 of this Agreement and shall be handled and eliminated in accordance with the terms of this Agreement.

15.

a) With respect to the volumes within the contractually allowed parameters of the FTCs, the parties acknowledge that during the term of this Agreement, Union may charge cumulative or daily fees or penalties equivalent to the fees or penalties which TCPL may charge for similar imbalances between nominated and actual volumes to and from the TCPL System under Article XXII (as amended or succeeded from time to time) of TransCanada Pipeline's Transportation Tariff, or such other fee or penalty approved by the Ontario Energy Board, for imbalances between Actual Volumes and Confirmed Nominations, either on the basis of overrun calculations or the difference between daily authorized and allocated volumes in accordance with the following paragraphs 15(b) and 15(c) (collectively referred to as "Balancing Service Fees").

b) On each day, Union shall deem any part of a Daily Imbalance that exceeds the Maximum Daily Imbalance to have been delivered under Consumers' FTC for the purpose of determining Balancing Service Fees. For the purpose of calculating such Balancing Service Fees, Consumers' daily contract quantity under Consumers' FTC shall be deemed to be the net sum of all Confirmed Nominations or Revised Nominations, as the case may be, for all transportation service provided at the Interconnection Points on that day. No Balancing Service Fees shall be applied on that portion of a variance or imbalance which is less than the Maximum Daily Imbalance, as defined herein.

c) On each day, Union shall deem any part of an Accumulated Imbalance that exceeds the Maximum Accumulated Imbalance to have been delivered under Consumers' FTC for the purpose of determining Balancing Service Fees. For the purpose of calculating such Balancing Service Fees, Consumers' daily contract quantity under Consumers' FTC shall be deemed to be the net sum of all Confirmed Nominations or Revised Nominations, as the case may be, for all transportation service provided at the Interconnection Points on that day. No Balancing Service Fees shall be applied on that portion of a variance or imbalance which is less than the Maximum Accumulated Imbalance, as defined herein.

16. The Parties agree to eliminate each Accumulated Imbalance in as short a period of time as possible through agreeing upon and thereafter nominating (pursuant to Paragraphs 1 to 5 hereof), delivering and/or receiving, as the case may be, a daily imbalance make-up volume (the "Imbalance Make-up"). Failure to agree entitles Union to transfer each Accumulated Imbalance to Consumers' FTC and to re-nominate Consumers' FTC to eliminate each Accumulated Imbalance over time.

17. This Agreement shall be effective commencing the date noted above, and shall expire at the end of all such Consumers' FTC's with an Interconnection Point as a point of delivery. Any Daily Imbalance or Accumulated Imbalance remaining upon termination or expiry shall be eliminated within thirty (30) days of the termination or expiry of this Agreement, or within such longer period of time as may be mutually agreed to by the Parties. All agreements to eliminate Daily Imbalances and Accumulated Imbalances which are in effect at the termination or expiry of this Agreement shall remain in effect and be binding upon the Parties hereto until the completion of those agreements. Failure to agree entitles Union to transfer the Daily Imbalances and Accumulated Imbalances to Consumers' FTC and to re-nominate Consumers' FTC to eliminate the Daily Imbalances and Accumulated Imbalances over time. Once all Daily Imbalances and Accumulated Imbalances have been eliminated after the issuance of a termination or expiry notice, this Agreement shall terminate without the requirement of further notice to or from one Party to the other Party.

18. It is the intention of the Parties to perform their obligations under this Agreement in good faith in an on-going effort to balance the actual flow of gas with the nominated flow of gas through the Interconnection Points on a daily and cumulative basis. In furtherance of this intention, Consumers' covenants and agrees that it will not use this Agreement as a means to loan gas from or park gas on Union's System for the benefit of Consumers' or Consumers' Shippers.

19. Consumers will nominate in accordance with the M-12 Rate Schedule filed with the Ontario Energy Board.

20. This Agreement shall be subject to the laws of the Province of Ontario and is subject to the rules, regulations and orders of any Canadian or Provincial regulatory or legislative authority as may from time to time exercise lawful jurisdiction.

21. This Agreement and all agreements entered into pursuant hereto shall enure to the benefit of, and be binding upon the Parties hereto and their respective successors and assigns.

22. Time is of the essence of this Agreement.

23. No waiver by either Union or Consumers' of any one or more defaults by the other in the performance of any provision of this Agreement shall operate or be construed as a waiver of any continuing or future default or defaults whether of a like or different character, or a waiver of the Parties' obligation to eliminate a Daily Imbalance and an Accumulated Imbalance.

24. This Agreement constitutes the entire agreement of the parties hereto with respect to Daily Imbalances and Accumulated Imbalances as they may arise from time to time following the date first indicated at the commencement of this Agreement, and shall not be changed, modified or varied except by instrument in writing duly executed by the Parties hereto.

IN WITNESS WHEREOF the parties hereto have executed this Agreement.

UNION GAS LIMITED
Per:

Vice President

Assistant Secretary

APPROVED FOR EXECUTION
LEGAL
REGULATORY
FINANCE
OPERATIONS
SALES & MRKTG.

CONTENTS APPROVED | FORM APPROVED

THE CONSUMERS' GAS COMPANY LIMITED
Per:

GEORGE DANN
DIRECTOR
GAS SUPPLY SERVICES

ALLEN J. MACLURE
DIRECTOR, TRANSPORTATION CONTRACTING

ann\larry\consumers\#6 limited balancing agreement
23 Jan 98

uniongas

UNION MASTER COPY

October 23, 2001

The Consumers' Gas Company Limited
500 Consumers Road
Willowdale, Ontario
M2W 1P8

Attention: Mr. Frank Brennan

Dear Frank:

Re: The Limited Balancing Agreement Between Union Gas Limited ("Union") and The Consumers' Gas Company Limited ("Consumers") dated November 1, 1997 (the "Contract").

Pursuant to the Contract dated November 1, 1997, Union and Consumers, at the Lisgar and Parkway Consumers Interconnect Points, have agreed to amend the Contract effective September 1, 2001, as follows:

1. Delete Section 10 (a) and (b) and replace with the following:

   "Unless Union and Consumers otherwise mutually agree in writing:

   (a) Utilizing telemetry estimates, Union shall adjust the operations of the Union System and Consumers shall adjust the operations of the Consumers System as necessary in order to minimize the Daily Imbalance (as defined in Paragraph 14 (a)) at the Interconnection Points on each gas day to within the greater of plus or minus 2.0% of Confirmed Nominations or plus or minus 2.0% of the average of Confirmed Nominations for the previous thirty days or 2111 gigajoules (the "Maximum Daily Imbalance"); and

   (b) Union shall adjust the operations of the Union System and Consumers shall adjust the operations of the Consumers System as necessary such that the Accumulated Imbalance (as defined in Paragraph 14 (b)) trends towards zero, but in any event does not exceed the greater of plus or minus 4.0% of Confirmed Nominations or plus or minus 4% of the average of Confirmed Nominations for the previous thirty days or 4221 gigajoules (the "Maximum Accumulated Imbalance")."

In all other respects, the Contract as herein modified and amended is hereby ratified and confirmed.

Kindly acknowledge your agreement with the foregoing by signing and returning both copies to Union.

Yours truly,

UNION GAS LIMITED

Larry Denver

Larry E. Denver
Manager, Marketing and Sales
Storage and Transportation

APPROVED FOR EXECUTION
LEGAL
REGULATORY
FINANCE
OPERATIONS
SALES & MRKTG. LD

UNION GAS LIMITED

Accepted and Agreed to
this 28 day of November, 2001

THE CONSUMERS' GAS COMPANY LIMITED

F. Brennan

FRANK BRENNAN
DIRECTOR
ENERGY POLICY & ANALYSIS

e:\contracts\ugl\consgas\limited balancing agreement amendment # 1

UNION GAS LIMITED

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

Reference: Ibid, p.14; Account 179-112

Why are the Resources (Salary & Expenses) classified as capital costs?

Response:

Salaries and expenses are included in the capital costs as these costs were directly incurred in order to implement the amendments to GDAR based on the Board's Notices of Amendments to a Rule described at Exhibit A, Tab 1, p.13. As a result, these costs were directly capitalized to the project and included in the annual revenue requirement calculation.

UNION GAS LIMITED

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

Reference: Ibid, p.16; Account 179-132

Why recover a 2015 deferral account balance in 2017, rather than 2016 ESM?

Response:

The disposition of 2014 non-commodity deferral account balances (EB-2015-0010) occurred from Oct. 1, 2015 to March 31st, 2016. As the total amount of the under-recovery was not known until 2016, it is included in the Deferral Clearing Variance Account with the other 2016 deferral balances proposed for disposition.

The intent of the deferral account is to eliminate gains or losses to the ratepayers or shareholders arising from volume variances. Flowing gains or losses through earnings does not achieve this objective.

UNION GAS LIMITED

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

Reference: Ibid, p.27, Table 9

Please provide the actual calculation used to determine the account balance of $0.197 in Table 9.

Response:

To calculate the 2016 Tax Variance Deferral Account balance related to HST changes, Union reviewed transactions from January 1 to December 31, 2016 for purchases subject to the input tax credit ("ITC") recapture reduction. These purchases include specified meals and entertainment costs, specified road vehicles and related fuel costs, specified energy costs, specified telecommunications costs, and compressor fuel costs.

The ITC recapture was reduced by 25% for transactions that occurred in the first half of 2016 and by 50% for transactions that occurred in the second half of 2016. For each of the specified purchases mentioned above, these percentages and the associated savings were tracked separately in the general ledger and Union's working papers based on the timing of when the purchases were made.

Table 1 below provides the actual calculation used to derive the total 2016 net savings of $0.394 million, of which $0.197 million (50% of the net savings) is to be shared with ratepayers in accordance with the approved accounting order for the Tax Variance Deferral Account (Deferral Account No. 179-134). As explained at Exhibit B.LPMA.5a), there was no HST savings for compressor fuel in 2016.

Table 1
Calculation - 2016 Net Savings from the Impact of HST Changes

Line No.	Particulars ($ millions)	2016 Net Savings
1	Meals and Entertainment	0.048
2	Road Vehicles and Related Fuel	0.023
3	Energy	0.182
4	Telecommunications	0.132
5	Total O&M Savings	0.385
6	Revenue Requirement on Capital Savings	0.009
7	Compressor Fuel Savings	-
8	Total Savings	0.394
9	50% Sharing with Ratepayers	**0.197**

UNION GAS LIMITED

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

Reference: Ibid, p.27

a) Why did the UFG percentage almost double over the period 2013-2016, to 0.427% from Board-approved 0.219%?

b) Why should ratepayers be required to pay for such a large increase in UFG? Did not the 0.219% represent the parties' agreement as to what was a reasonable percentage level?

Response:

a) Please see the response at Exhibit B.Staff.9 b).

b) As part of the EB-2013-0202 Incentive Rate Mechanism ("IRM") Settlement Agreement, Union established the UFG Volume Deferral Account. The Y factor treatment of UFG volume variances was established to limit both the shareholder and ratepayers risk to a symmetrical dead-band of +/- $5 million around amounts built into rates. Please see Attachment 1 from the IRM Settlement Agreement (EB-2013-0202, pp. 17-18) for the parties' agreement.

6.5 Unaccounted for Gas Volume Variances

The total cost of UFG is comprised of two elements: a percentage of throughput volume that determines the UFG volume, and the Board-approved weighted average cost of gas (“WACOG”). Changes to WACOG and the corresponding impact on the total cost of UFG using the Board-approved UFG volume are captured in Union’s Quarterly Rate Adjustment Mechanism (“QRAM”).

The Board has approved a total cost of $14.7 million for UFG in 2013 base rates (EB-2011-0210) calculated by multiplying the Board-approved total UFG volume of 70,253 10^3m^3 by the gas cost of $210.506/ 10^3m^3 (the cost of gas used in Union’s January 1, 2013 QRAM). The parties agree that total UFG cost changes resulting from a difference between the UFG volume included in rates and the actual UFG volume will be recorded in a new UFG Volume Deferral Account. The amount to be recorded in the UFG Volume Deferral Account will be calculated using the most recent Board-approved WACOG. The amount of the UFG Volume Deferral Account to be cleared to customers will be subject to a symmetrical dead-band of $5 million, with amounts within such dead-band being to Union’s account only. This means that for 2014 UFG, a volume variance less than $9.7 million and greater than $19.7 million will be subject to deferral. To illustrate, if the volume variance is $25.7 million, $6 million would be deferred and recovered from ratepayers.

The parties agree that Union will include the amounts in the UFG Volume Deferral account in its annual application to the Board to dispose of the balances in the non-commodity deferral accounts in accordance with the provision above.

The draft UFG accounting order can be found at Appendix F.

The following parties agree with the settlement of this issue: APPrO, BOMA, CCC, CME, Energy Probe, FRPO, IGUA, Kitchener, LPMA, OAPPA, SEC, Union, VECC

The following parties take no position: Six Nations, TCPL

6.6 Major Capital Additions

The parties agree to Y factor treatment for major capital projects that meet the criteria in sections (i) through (viii) below. If the two major facility expansion projects set out below meet the criteria and are approved by the Board in their respective leave to construct applications and, provided they continue to meet the requisite criteria, the net delivery revenue requirement impacts of those projects will be treated as Y-factors in each year of the IRM term beginning with the first year that each project comes into service:

1. The facilities included in the Parkway West Project as that term is used in EB-2012-0433. The current forecast of the net delivery revenue requirement impacts are shown in Appendix G. Rate recovery would, assuming the current forecast of 2015 as the in-service year, commence with rates effective January 1, 2015;
2. The facilities included in the Brantford-Kirkwall Pipeline and Parkway D Compressor Station Projects as those terms are used in EB-2013-0074. The current forecast of the net delivery revenue requirement impacts is shown in Appendix G. Rate recovery would, assuming the current forecast of 2016 as the in-service year, commence with rates effective January 1, 2016.

UNION GAS LIMITED

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

Reference: Ibid, p.40, line 6

Please explain what is meant by, and show the impact on 2016 compressor capital, of "timing of finalizing the contractor costs".

Response:

Cost savings and schedule initiatives were included in the contract with the main contractor which started work in prior years. Final settlement of these initiatives did not occur until 2016.

The impact to the 2016 capital costs was $0.961 million for the Parkway D project.

UNION GAS LIMITED

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

Reference: Ibid, p.41, line 5

Please explain the "remediation of commissioning legacy issues" referred to in that line. Please show the costs of the remediation, the nature of the problem, including the reason the compressor was out of service for two months, and the calculation of the anticipated reduction of maintenance costs. What was the offsetting loss of throughput due to the compressor failure?

Response:

The remediation cost of the commissioning legacy issue was approximately $0.750 million. The nature of the problem consisted of damage to the compressor inlet screen resulting in investigation and cleaning of compressor internals. There was no loss of throughput as the Loss of Critical Unit compressor (Parkway West) was available for service if required during the time the Parkway D compressor was out of service.

UNION GAS LIMITED

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

Reference: Ibid, p.41, line 19

What was the original debt rate used? How did the reduction to 3.82% come about?

Response:

Please see the response at Exhibit B.Staff.18.

UNION GAS LIMITED

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

Reference: Ibid, p.43

"The actual cost for the prime contractor for the Brantford-Kirkwall pipeline was significantly higher than the original estimate."

What was the original estimate and the actual cost? Why was the actual cost so much higher? Please provide details.

Response:

Please see the response at Exhibit B.Staff.15.

UNION GAS LIMITED

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

Reference: Ibid, p45, line 16; Parkway Delivery Obligation Rate Variance Account 179-138

a) Please explain why the Union South service portfolio was reduced in two steps, on December 22, 2016, and January 1, 2017.

b) Please explain the link between the completion of TCPL's Maple Facilities and the reduction of Union's sales service portfolio from 58 to 19 TJ/day.

Response:

a & b) In February of 2014 Union was awarded short haul firm transportation service in TransCanada Pipeline's 2016 New Capacity Open Season. This new capacity was targeted to be in service for November 1, 2016 and would eliminate the need for Union to hold long haul capacity from Empress to Union CDA. The facilities build underpinning this capacity build was referred to as the TransCanada Maple Facilities.

The majority of Union's long haul contracts that were to be turned back to TransCanada had October 31 expiry dates. These end dates aligned with the planned in-service date of the TransCanada Maple Facilities (November 1, 2016). Since Union relied on the existing long haul capacity to meet its firm obligations to customers in Union North, Union and TransCanada agreed to align the start date of the new short haul contracts and the turn back of existing long haul capacity to preserve access to firm services in the event of construction delays.

Union's new short haul contracts underpinned by TransCanada's Maple Facilities went into service on December 22, 2016, as did the planned reduction in long haul contracts with October 31 expiry dates. This resulted in the reduction from 58 TJ/day to 28 TJ/day of long-haul contracts.

While the majority of Union's contracts that were to be turned back to TransCanada had October 31 expiry dates, two contracts had a December 31 expiry date. TransCanada agreed to allow automatic turnback of these contracts as well, but the turnback was to occur at the later of the in-service date of the TransCanada Maple Facilities and December 31, 2016. This resulted in the second reduction of long-haul capacity from 28 TJ/day to 19 TJ/day effective January 1, 2017.

Summary of Sales Service Allocated Capacity – Empress to Union CDA

Date	Balance/(Reduction)	Explanation
November 1, 2016	58 TJ/day	
December 22, 2016	28 TJ/day / (30 TJ/day)	Turnback of Oct 31 expiries
January 1, 2017	19 TJ/day / (9 TJ/day)	Turnback of Dec 31 expiries

UNION GAS LIMITED

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

Reference: Ibid, p51, line 3; Account 179-142, Lobo C Compressor/Hamilton-Milton Pipeline Project

What is the link between the Pipelines being put into service in 2015, and "contingencies not being required"?

Response:

The Board-approved estimate included costs in 2016 but the majority of the Lobo C pipeline work and expenditures were completed in 2015 in order to have the facilities available for the 2015/2016 winter operating season. This resulted in lower than budgeted material and contingency costs in 2016.

UNION GAS LIMITED

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

Reference: Ibid, p51, line 20

"Pipelines costs for Hamilton-Milton Pipeline were $46.271 million lower than the costs included in 2016 Board-approved rates."

Please provide a breakdown of the cost differential of $46.271 million into each of the components listed in the first paragraph of p.52.

Response:

Line No.	Particulars ($000s)	Variance
1	Mitigation Risks	(26,898)
2	Temporary Land Use	(14,310)
3	Contingency	(3,273)
4	Interest During Construction	(1,790)
5	Total Variance	(46,271)

UNION GAS LIMITED

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

Reference: Ibid, p60; 179-149

In these capital projects, and others discussed in the filing, actual costs are often less than Board-approved. In most of the cases, one factor in the difference is that contingencies contained in the forecasts were not fully utilized.

Please discuss any impacts on cash flow, debt levels, earnings, or other financial data, of the fact that contingency amounts remained all or in part unused. For example, are you making decisions based on forecast costs which include forecast contingencies which are not used? Are you overcapitalized as a result? What is the amount of utilized contingency for each of the major pipeline and compressor projects in the last several years, relative to the forecast contingency in the relevant leave to construct application or rates case?

Response:

Unutilized contingency amounts have little impacts on earnings, cash flow and debt levels. Earnings are impacted to the extent that the revenue requirement may be lower in a given year due to less funds being capitalized than forecasted in rates for that year. The deferral account will true-up the revenue requirement for this difference each year. With respect to cash flows and debt levels, there is normally a several year lag between when the capital requirements of the project are forecasted (including the contingency) and the actual work is completed. Decisions on cash flow and actual financing requirements are made on an on-going basis based on the most current information available which would include an evaluation of contingency use, and as a result, no overcapitalization has occurred.

For the Parkway Compressor Projects (Parkway West,/Parkway D) approximately $22 million of the $36 million in forecasted contingencies were required to offset increased material, labour and permitting costs.

The entire forecasted contingency of approximately $15 million was required for the Brantford-Kirkwall Pipeline Project due to contractor market costs and historically high land values.

It is expected that approximately $48 million of the $65 million of contingencies for the Lobo C/Hamilton-Milton Pipeline project will remain unutilized. Also, it is expected that none of the approximately $20 million in contingencies budgeted for the Burlington-Oakville project will be utilized.

It is too early in the project life cycle to make a determination on the utilization of contingencies for the 2017 in-service date projects.

UNION GAS LIMITED

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

Reference: Ibid, p62; 179-149 – Burlington Oakville Project Costs

Please explain the sentence "2016 Board-approved rates reflected that Infrastructure Ontario and Hydro One land rights can be charged up to 150% of the appraised value for land rights while actual costs were less". Please explain the significance of that option.

Response:

In past project negotiations with Infrastructure Ontario and Hydro One ("Hydro"), Union was advised that Hydro's practice for consideration of permanent easements were typically assessed at 150% of the appraised value of the land. For this specific project Union was advised by Hydro that due to the overall length and area of land rights requested and the much higher appraised value of the land, that they would not follow their standard practice. As a result the consideration for the land rights was much less than what was originally estimated.

UNION GAS LIMITED

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

Reference: Ibid, p.63

a) Please itemize the elements of cost reduction of $31.147 million of the NPS 20 pipeline costs, set out in the first paragraph of p63.

b) Is the "change order allowance" part of contingency, or a separate forecast item? How is it calculated? What change order allowance was used in this case? What change order allowance is typically used in capital projects for each of pipelines, compressors, valve headers, other capital projects?

Response:

a)

Line No.	Particulars ($000s)	Variance
1	Temporary Land Use	(8,270)
2	Interest During Construction	(764)
3	Inclement Weather	(1,486)
4	Change Orders	(665)
5	Contingency	(13,326)
6	Other	(6,636)
7	Total Variance	(31,147)

b) Change order allowance is a separate forecast item that has historically been included within the estimated costs for the prime contractor. The change order allowance used on projects varies based on the scope of the project. In this case the change order allowance used was 3% of prime contractor costs. The typical change order allowance ranges at the time of filing from 3% to 10% of the prime contractor costs.

UNION GAS LIMITED

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

Reference: Ibid, p.64, line 16

Is the "utility required return" the return on the project or an overall utility return? Please explain.

Response:

The utility required return is the return specific to the Burlington-Oakville Pipeline Project. The utility required return represents the financing costs (debt and equity) associated with the capital investment for this project.

The 2016 actual utility required return for the Burlington Oakville Project is $0.854 million. This amount is comprised of debt costs of $0.342 million based on a debt rate of 3.36% and 64% long-term debt in Union's capital structure, and a return on equity of $0.512 million based on Union's Board-approved return on equity of 8.93% and deemed equity of 36%. Please also see Exhibit A, Tab 1, Page 61, Table 22, note 2.

UNION GAS LIMITED

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

Reference: Ibid, p69, p71, Table 25 - 179-152 – GGEIDA

"The FTE count ramped up through the calendar year of 2016 as the Cap-and-Trade related responsibilities increased at Union and the requirements evolved."

Please advise when each of the 13.5 roles started to work on cap and trade month by month in 2016, and show over what period the costs allocated to each employee were incurred and aggregated to equal the $1.682 million salary and wages amount.

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Ibid, p72

When did Union begin to report GHG results to the Ontario government? How many FTEs were employed during the previous registry work prior to the passage of the Act and the revised reporting regulation (O.R. 143/16)? How do the new requirements, as a result of the new legislation/regulation, differ from the previous ongoing GHG reporting requirements? Why are three additional roles required over and above existing personnel? What functions will each of the three roles perform?

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 2, p.1, Table 1

Please show the calculation supporting the Distribution Margin for each of 2016 and 2015, which shows the increase of $12 million in 2016 over 2015. Please show the contribution of each of rate increases, warmer weather, and gas costs.

Response:

Table 1
Distribution Margin - Variance

Line No.	Particulars ($ millions)	2016 vs 2015
1	Rate Increases	14
2	Growth	11
3	Gas Costs	1
4	Weather	(14)
		12

UNION GAS LIMITED

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

Reference: Ibid, p7

a) Please explain why the compressor fuel in 2016 compared to 2013 Board-approved, while the 2014 or 2015 actuals lower, and show in each case, the number of degree days above and below normal for the actual 2014 and 2015. Please advise what is the impact (in basis points) of each 1% change in heating degree days increase on the achieved ROE.

b) Please confirm that in 2016, for a 1% increase or decrease in ROE requires a change in utility income of $25 million (approximately).

c) Please provide the actual depreciation in 2016, 2015, 2014, 2013, 2012 Board-approved.

Response:

a) Union is unclear what the evidence reference for this question is.

   The actual compressor fuel for 2014-2016 was less than 2013 Board-approved fuel. The main attributing factor was the lower level of transmission volumes required to flow easterly from Dawn, decreasing Dawn-Parkway fuel requirements from the 2013 Board-approved fuel forecast. The major shift was the reversal of flows at Kirkwall as imports are received. When Union's 2013 forecasted compressor fuel costs were approved, Kirkwall was an export point on Union's Dawn-Parkway transmission system.

   Please see the response at Exhibit B.LPMA.3 c) for heating degree day actuals and weather normal for 2014-16. A 1% change in heating degree days for 2016 has the effect of changing Union's actual ROE by approximately 9 basis points.

b) For 2016, a change in ROE of 100 basis points would require a change in pre-tax earnings subject to sharing of approximately $23.3 million, or after-tax earnings subject to sharing of approximately $17.1 million.

c)

Table 1
Depreciation Expense

Line No.	Particulars ($000's)	2012 Actual	2013 Board-approved	2013 Actual	2014 Actual	2015 Actual	2016 Actual
1	Depreciation	200,864	196,091	192,957	200,368	212,219	228,401

UNION GAS LIMITED

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

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

Please explain the financial impact of the tax shield (2016 Income Tax is $4.398 million, on a pre-tax income of $326.1 million, due to timing difference) on utility cash flow, debt levels, earnings, dividends, and any other relevant financial indices.

Response:

Lower income tax expenses in 2016 had no material impact on utility cash flow, debt levels, earnings, or dividends.

The pre-tax income of $326.1 million noted above is before interest and utility permanent timing differences. As shown at Exhibit A, Tab 2, Appendix A, Schedule 14, Line 4, column (c) utility income after interest and utility permanent timing differences is $170.0 million.

Generally, the benefit associated with the tax shield is built into rates at the time of re-basing or is refunded to customers through a deferral mechanism such as the capital pass-through deferral accounts.

For example, the $53 million increase in the Capital Coat Allowance (CCA)/Depreciation differential from 2013 Board-approved levels to 2016 actuals (Exhibit A, Tab 2, Appendix A, Schedule 14, Lines 5 and 6) is due largely to Union's capital pass-through projects, which generate a tax shield in the early years of the project as the CCA rates exceed the depreciation rates. Ratepayers receive this benefit through the capital pass-through mechanism as the revenue requirement built into Board-approved rates is reduced by the amount of the tax shield.

UNION GAS LIMITED

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

Reference: Ibid, Schedule 6

Please confirm that the total throughput volumes shown in the tables are not weather normalized, as compared to the volumes shown on Schedule 5, which are weather normalized.

Response:

Confirmed.

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
Building Owners and Managers Association ("BOMA")

Reference: Ibid, Schedule 14

Please provide full explanation for the lines Other (66,185), Gas Cost Deferrals (66,185), Deferred Tax on Gas Cost Deferrals (20,766), and Deferred Tax Drawdown (12,819).

Response:

The *other* amount of $(66,185) consists of the following utility timing differences:

Item	($000's)
Deduction for capitalized overheads	(41,635)
Interest during construction	(11,743)
Deduction for disposal costs capitalized	(8,239)
Vehicle deprecation capitalized	(3,044)
Eligible capital expenditures	(1,667)
Other	143
Total	(66,185)

The *Gas Cost Deferral and Other* of $78,363 represents debits recorded in the regulated deferral account balances during 2016. For income tax purposes, these debits reduce taxable income resulting in a $20,766 ($78,363 x 26.5%) decrease to current tax expense (embedded in line 12). This amount, however, is entirely offset by the $20,766 *Deferred Tax on Gas Costs Deferrals* expense included in line 13. It is calculated by multiplying the change in the deferral balance with the future tax rate ($78,363 x 26.5%). The future tax rate, in this circumstance, is equal to the current rate (26.5%).

The $12,819 deferred tax drawdown represents the Board approved reversal of the pre-1997 deferred tax liability. The reversal as well as the corresponding reduction in customer's rates started in 1999 and will be complete by December 2018.

UNION GAS LIMITED

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

Reference: Ibid, Schedule 18

Please explain fully the Accumulated deferred income taxes (29,493) (line 14) on Schedule 18. Please show the relationship of these numbers to the tax items noted in paragraph 26 above.

Response:

The $29,493 in accumulated deferred income taxes represents the average of the monthly averages of the pre-1997 deferred tax liability. The January 1, 2016 balance was $38,457 which represents three years remaining on the annual drawdown of $12,819 ($12,819 x 3). The December 31, 2016 balance was $25,638 which represents two years remaining on the annual drawdown of $12,819 ($12,819 x 2). The deferred tax drawdown ends on December 31, 2018.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 3, Schedule 2, p4

a) Please provide the one-time adjustment amount for each of:

   i. average M4 customer

   ii. small M4 customer

   iii. large M4 customer

   iv. average T1 customer

   v. average rate 20 customer.

b) Please provide the two dates in which the surcharge will be collected.

Response:

a) Please see Attachment 1 for the calculation of the one-time adjustment for each of the requested customer profiles.

b) Union is proposing to dispose of the net 2016 deferral account balances for general service customers prospectively from October 1, 2017 to March 31, 2018. For the contract rate in-franchise and ex-franchise customers, Union is proposing to dispose of the net 2016 delivery-related deferral account balances as a one-time adjustment with the October 2017 bills customers will receive in November 2017.

   If approval of the application is not received in time to accommodate the proposed disposition timing, Union will propose to dispose of the balances as part of the next QRAM application following the date of approval.

UNION GAS LIMITED
Calculation of the One-Time Adjustment for Requested Customer Profiles

Line No.	Particulars	Rate Component	Unit Rate for One-Time Adjustment (cents/m^3) (1)	Volume/ Demand	Billing Units	Bill Impact ($)
		(a)	(b)	(c)	(d)	(e) = (b*c)/100
1	Average Rate M4	Delivery	0.0363	6,438	10^3m^3	2,337
2	Small Rate M4	Delivery	0.0363	875	10^3m^3	318
3	Large Rate M4	Delivery	0.0363	12,000	10^3m^3	4,356
4	Average Rate T1	Delivery	0.0432	11,566	10^3m^3	4,996
5	Average Rate 20	Delivery	0.0202	9,000	10^3m^3	1,818
6		Transportation (2)	12.0868	37	10^3m^3/d	4,472
7		Total				6,290

Notes:
(1) Exhibit A, Tab 3, Appendix A, Schedule 2, pp. 4-5, column (e).
(2) Rate 20 transportation one-time adjustment is applicable to sales service and bundled transportation customers only.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 6, p1

Please provide information on Cyrus One, which demonstrates its financial condition, size, reputation in the industry, etc. Please provide a copy of the RFP.

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Ibid, p11

The evidence states that addition to computer hardware will be required in 2017. What does the 20% Union growth factor refer to, and over what period of time is growth forecast to be 20%?

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Ibid, p15

The evidence (ix) states that:

> *"The modest cost increase disappears after the costs to implement have been amortized (in 5 years)."*

Please provide the calculation which supports this statement.

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Ibid, p13

Given Union's estimated 32% share of the technology use, in selecting the site for the two data centres, was consideration given to putting one of the sites in Ontario to take advantage of currency difference? If not, why not?

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Ibid, p16

What Union's share (32%) of costs, the largest of any of Spectra's other units' shares. What were the other units and their shares? Will the share remain the same over the life of the current arrangement? Will there be further "rationalization" as a result of EGD acquiring Spectra?

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Ibid, p16

Do either of the Lebanon or Carrolton sites have flood risk or hurricane risk? How are these managed?

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Ibid, p17

What is the duration of the 100% power and cooling guarantees? What exceptions are there to the guarantee? What is the extent of the force majeure clause? Please provide a copy of the Agreement.

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pp. 3-4

Please provide a schedule setting out the actual UDC incurred and the amounts collected in rates for each year 2013-2016. For each year please explain the reasons variances.

Response:

The actual unutilized capacity for 2013-2016, associated UDC costs incurred and primary drivers as noted in each respective proceeding are provided below.

Year (case #)	Unutilized Capacity (PJ)	Net UDC Costs Incurred ($000's)	UDC Collected in Rates ($000's)	Net UDC Recovery ($000's) Debit/(Credit)	Primary Drivers
2013 (EB-2014-0145)	0.64	(103)	(9,760)	(9,947)	Demand variances and return to system
2014 (EB-2015-0010)	0.0	(230)	(5,338)	(5,629)	Colder than normal weather and demand variances
2015 (EB-2016-0118)	13.4	6,027	(5,629)	388	Planned unutilized capacity and late season weather variances
2016 (EB-2017-0091)	31.5	8,466	(5,475)	3,003	Planned unutilized capacity and warmer than normal weather

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, p.17

Given the significant variances related to NAC does Union believe that the methodology for determining the target NAC should be changed going forward? If so, how could it be improved? If not, why not?

Response:

As part of the settlement agreement in Union's 2015 annual deferral account disposition (EB-2016-0118), Union agreed to conduct and file a study in its 2019 cost of service application assessing the continued appropriateness of its methodology for determining the NAC, including in particular the extent to which its current methodology properly reflects:

- The forecast impact of ongoing structural changes in general service customer gas consumption; and
- The forecast impact of DSM savings

This study will evaluate all drivers included in the NAC calculations, including weather and the calculation method for the annual Target NAC.

Union is currently conducting the NAC study and plans to file the study as part of its 2019 cost of service application.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, p.69

Please provide a detailed job description for each of the 13.5 incremental FTEs. How many of the 13.5 are new to the Union organization?

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 2, p.6

Union has removed $139,000 from operating and maintenance expenses related to CDM costs incurred in 2015 to close its program with Hydro One. Did Union incur any CDM costs in 2016? If so, what were those amounts?

Response:

No.

UNION GAS LIMITED

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

Please indicate whether the merger between Spectra and Enbridge impacted Union's costs or revenues in 2016. If it did, please explain how.

Response:

Please see the response at Exhibit B.Staff.19. Revenues were not impacted for 2016.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Page 19, Table 6
Exhibit A, Tab 1, Appendix A Schedule 7
EB-2016-0118 Exhibit A, Tab 1, Page 23, Table 6
Exhibit B., Energy Probe. 2

Preamble: The 2016 target NAC for each rate class was approved by the Board in Union's 2016 Rates proceeding (EB-2016-0116). The 2014 actual NAC, weather normalized using the 2016 weather normal, was used to determine the 2016 target NAC.

a) Please provide a Schedule showing *as applicable,* for the Rate Classes in Table 6 the following for 2011-2016

- 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 6 year graphical trend analysis of Normalized NAC for the 4 rate classes in Table 6. (Similar format as last year's EP IRR except separate lines for North and South)

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 there is evidence indicating structural changes may be required to the forecast models

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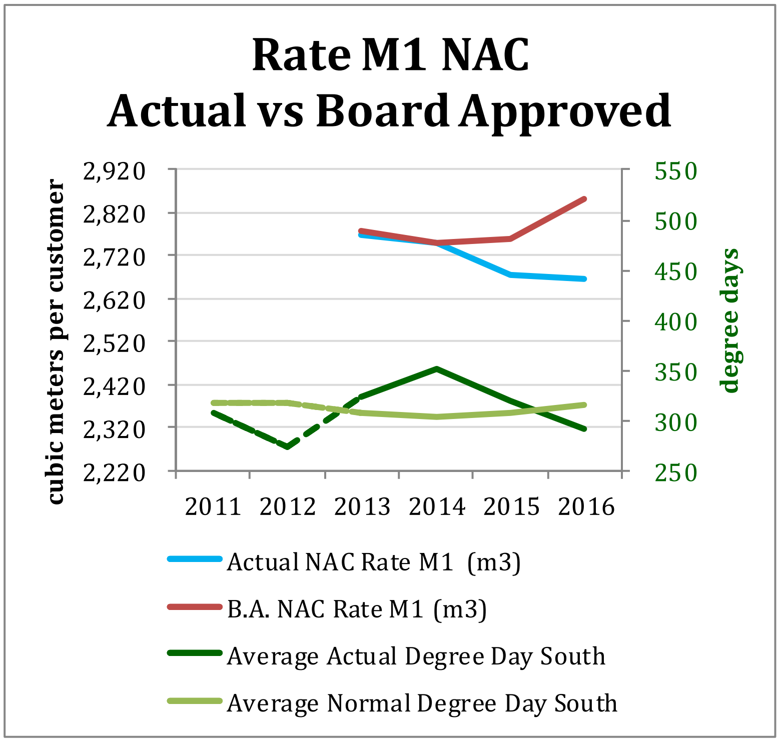
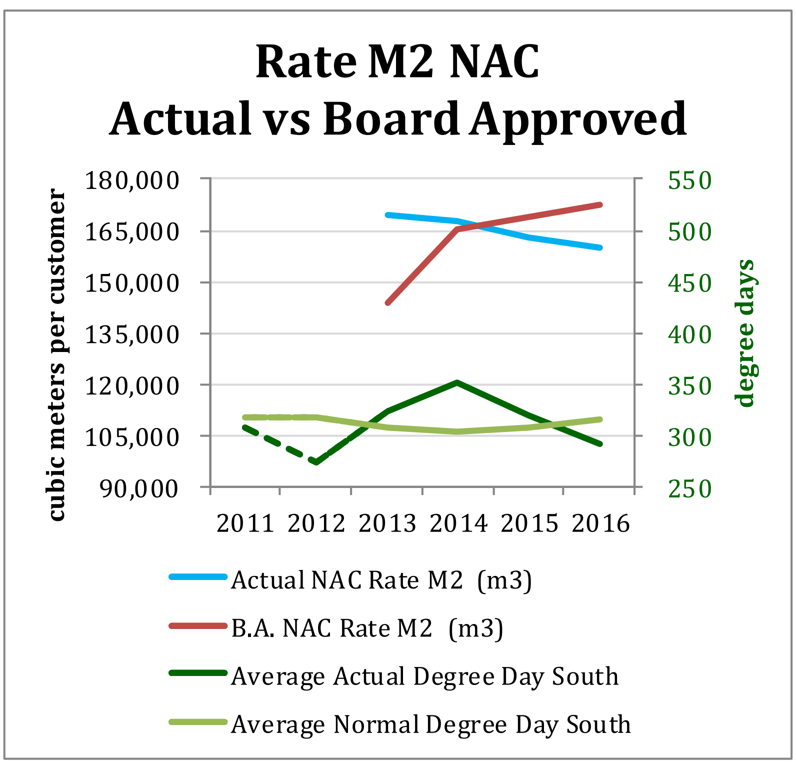
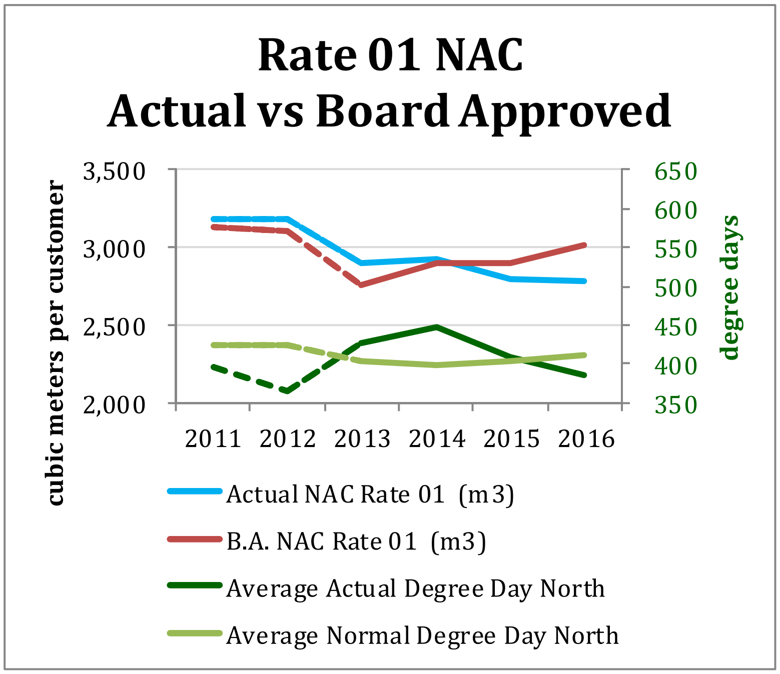
Response:

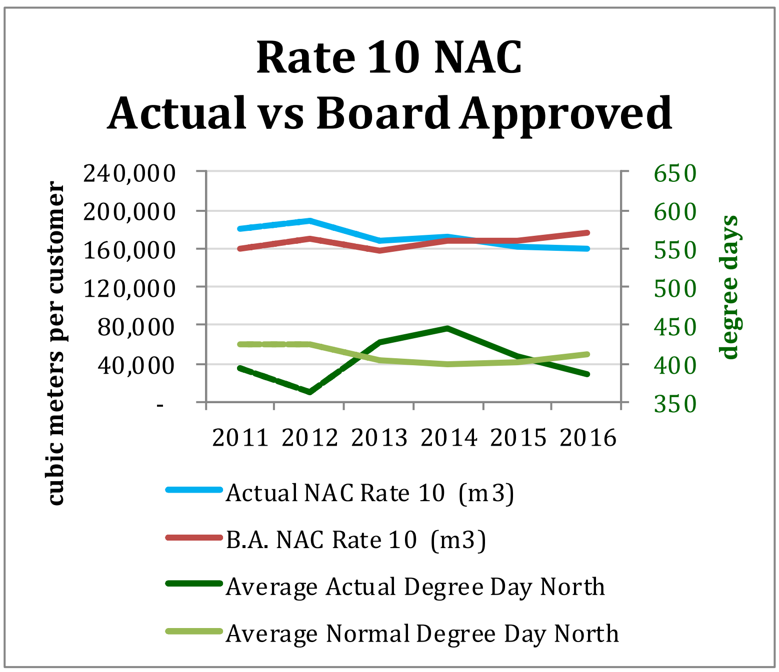
a) Please see Attachment 1.

b-c) Charts are provided below. Please note that the dotted lines for years 2011 and 2012 indicate that the data corresponds to the 2008-2012 IR frameworks.









d) When looking at historical NAC levels, there is an obvious trend that overall NAC is declining in all rate classes. Notwithstanding the overall NAC trend, in any given year NAC can increase relative to the 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 and water heating industries as well as

DSM programs promoted by Union and other energy savings initiatives. Other factors reflected in the NAC variance include the comfort level desired and other customer behaviours.

e) Please see the response at Exhibit B.CCC.2.

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

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*

UNION GAS LIMITED

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

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

a) Please provide a more detailed explanation of the variance in Rate M1 Storage costs.

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

Response:

a) As described at Exhibit A, Tab 1, page 20-21, to determine the change in storage requirements for each general service rate class due to NAC variances, Union calculated the NAC volume variance between its 2016/2017 Gas Supply Plan and the 2013 Board-approved volumes, multiplied by the 2013 Board-approved number of customers and applied the aggregate excess storage allocation methodology.

The aggregate excess methodology is based on the difference between each general service rate classes' total winter consumption (November 1 through March 31) and its average daily consumption for the year multiplied by the number of days in the winter.

For Rate M1, the NAC volume variance was a decrease of 3.12 PJ. In the summer months, the NAC volume variance was a decrease of 2.30 PJ (59,278 10^3m^3), while the NAC volume variance in the winter months was a decrease of 0.82 PJ (21,056 10^3m^3). As a result, the difference between total winter consumption and the average daily consumption increased, which increases Rate M1's storage requirements. In other words, as it relates to NAC, winter consumption as a proportion of the rate class' total annual consumption increased and accordingly, Rate M1 required additional storage.

Please see Table 1 below for the calculation of the Rate M1 NAC volume variance of 3.12 PJ by month. Please see the response at Exhibit B.LPMA.4, Attachment 1 for the aggregate excess storage calculation resulting in 0.47 PJ increase in Rate M1 storage related to NAC volume variances.

Table 1
Calculation of the Rate M1 NAC Volume Variance

Line	Month	2016/2017 Gas Supply Plan (m^3/customer)	2013 Board-approved (m^3/customer)	NAC Change (m^3 per customer)	NAC Change Allocation	Board-approved customers	NAC Volume Variance (10^3m^3)	NAC Volume Variance (PJ)
		(a)	(b)	(c) = (a) - (b)	(d)	(e)	(f) = (c) x (e) / 1000	(g) = (f) x 38.81 / 1,000,000
1	Apr	226	238	-12		1,042,203	-12,102	
2	May	118	123	-5		1,043,838	-5,064	
3	Jun	66	69	-3		1,043,360	-3,263	
4	Jul	66	67	-1		1,044,840	-544	
5	Aug	63	67	-4		1,045,099	-3,665	
6	Sep	68	80	-12		1,046,214	-12,746	
7	Oct	142	163	-21		1,046,704	-21,894	
8	Total Summer	750	807	-57	74%		-59,278	-2.30
9	Nov	271	276	-5		1,049,233	-5,322	
10	Dec	418	424	-6		1,052,271	-6,128	
11	Jan	494	498	-3		1,052,461	-3,566	
12	Feb	435	433	3		1,053,700	2,692	
13	Mar	373	381	-8		1,055,215	-8,732	
14	Total Winter	1,992	2,012	-20	26%		-21,056	-0.82
15	**Grand Total**	**2,742**	**2,819**	-77	**100%**	**12,575,138**	-80,334	-3.12

b) Please see Table 2 below.

Table 2
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

UNION GAS LIMITED

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

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

a) Please explain and show the year over year increase of $21 million in DSM program costs in 2016 relative to 2015.

b) Show the allocation of this increase to each rate class.

Response:

a) The $21 million increase in DSM program cost is due to an increase in the Board approved budget. The main increases were in the Home Reno Rebate, Commercial & Industrial Prescriptive, Commercial & Industrial Custom, and Home Weatherization Programs. Below is a summary of the changes the DSM Decision and Order (EB-2015-0029/EB-2015-0049) released by the Board:

Approved Annual DSM Budgets

Utility	2014 (Actuals)	2015	2016	2017	2018	2019	2020	2015-2020 Total
Union	33,713,172	33,988,000	56,821,373	58,570,073	63,272,305	63,268,773	64,349,541	340,270,066

b) The allocation of 2016 DSM actual costs of $46.0 million by rate class is currently not available and will be included as part of the 2016 DSM Deferral Account Disposition proceeding.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 2, Page 5 -DSM Incentive

Preamble: Other revenue includes the revenue recorded for the DSM Incentive of $4.237 million. The DSM Incentive amount is an incentive to the company to encourage it to actively pursue DSM activities. To ensure that the full amount of the DSM Incentive accrues to the company and that the incentive is maintained, the DSM Incentive revenue is removed from the earnings sharing calculation.

a) Is the amount of the DSM Incentive based on Audited Results and for which year?

b) Has the amount been approved by the DSM Audit Committee?

c) Please provide the Results and calculation(s) provided to the Audit Committee and/or Auditors

---

Response:

a) The $4.237 million DSM Incentive amount is based on Union's unaudited claim from 2016 DSM programs. Union is not proposing to dispose of DSM related deferral account balances in this proceeding. Union will file its DSM deferral account evidence following the completion of the 2016 audit of program results, which will reflect audited DSM Incentive and Lost Revenue Adjustment amounts.

b) As outlined in the current DSM Framework and the Board's letter of August 21, 2015, regarding the 2015-2020 Demand Side Management Evaluation Process of Program Results (EB-2015-0245), the audit process is now overseen by the Board and carried out by a third party Evaluation Contractor ("EC") with input and advice from the Evaluation Advisory Committee ("EAC"). The utilities no longer have respective DSM Audit Committees.

   The audit of the gas utilities' 2015 DSM program results being overseen by the Board is still underway. Based on information shared with the EAC, the Board indicated the process would not be completed until later in the 3rd quarter of 2017. As a result of this delay, ratepayers will be subject to disposition of 2015 deferral balances in 2018.

   The audit of 2016 DSM programs will not commence until the 2015 audit has been completed. As such, the Board, the EC and the EAC have not reviewed or provided comments or opinions on 2016 results. It is Union's view that delaying disposition of 2015 deferrals to

2018 is inefficient. Union will consider ways in which the evaluation timeline can be improved in its 2015 DSM Deferral evidence.

c) In a letter dated March 15, 2017, the Board revised the deadline for the gas utilities to file their respective 2016 Draft Evaluation Reports to one month after receipt of the final 2015 DSM Audit Results Report. This one month turn-around will enable the gas utilities to ensure the 2016 draft results incorporate relevant findings and calculations from the 2015 audit. As stated in part b) above, the timeline for completion of this 2015 Final DSM Results Report is managed by the OEB in consultation with the EC.

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 & 22
EB-2016-0118 Exhibit B. Energy Probe 4, Attachment 1, Pages 1 and 2.

a) Please update the second Referenced Schedules for Affiliate Revenue and Expenses for 2016.

b) Please provide the drivers for the changes in Outbound Affiliate services 2015-2016.

c) Please indicate how the 2016 changes in Affiliate Services affect Utility Income and Earnings Sharing calculations for 2016.

d) Please provide a specific breakout of affiliate Revenue and costs related to IT showing at a high level costs from 2013-2017 and specifically impact of data centre consolidation.

Response:

a) Please see Attachment 1.

b) The main driver that contributes to the increase in Outbound Affiliate Services from 2015 to 2016 is:

- $0.5 million higher due to Union Gas providing Internal Audit services to Spectra affiliates.

c) The increase in net Affiliate Services expense of $1.608 million (the net of changes in Inbound and Outbound services) decreases utility earnings subject to sharing.

d) Please see Attachment 2.

Union Gas Limited
Affiliate Revenue
($000's)

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

* $1.832 Million in 2013 SAP Enterprise Support revenue initially booked in 2014 as a true-up / adjustment; reallocated back to 2013 (Per EB-2015-0010 Union Settlement Proposal and Draft Rate Order, Section 21. Earnings Sharing, Page 15)

Union Gas Limited
Affiliate Expenses
($000's)

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

* $2.287Million in 2013 SAP Enterprise Support expenses initially booked in 2014 as a true-up / adjustment; reallocated back to 2013 (Per EB-2015-0010 Union Settlement Proposal and Draft Rate Order, Section 21. Earnings Sharing, Page 15)

IT Affiliate Services

Expense	**2013**	**2014**	**2015**	**2016**
		($000)		
IT Services-Other	5,046	5,403	5,882	5,364
Data Centre Consolidation				
Leases	-	-	2,063	1,893
Cost to Implement	-	-	-	703
Labour & O/H	-	-	-	781
	5,046	5,403	7,945	8,741

Revenue	**2013**	**2014**	**2015**	**2016**
		($000)		
IT Services - Other	5,509	5,670	4,661	4,497
Data Centre Consolidation				
Labour & O/H	-	-	1,430	1,313
	5,509	5,670	6,091	5,810

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, page 34; Exhibit A, Tab 2, Page 2; Exhibit A, Tab 2 Appendix B, Schedule 1 column (d), lines 19 and 28

Preamble**:** Actual ROE is determined using utility earnings calculated in the last reference above, divided by deemed common equity at 36% of actual utility rate base. The allowed 2016 ROE is 9.24%.

a) What was Union's average long term debt rate for 2016?

b) What is Union's normalized actual return on equity for 2016?

c) What is the Normalized ROE *excluding adjustments*?

d) What is the actual X factor in 2016 compared to forecast?

Response:

a) Union's average long-term debt rate for 2016 is 5.12%. This can be found at Exhibit A, Tab 2, Appendix A, Schedule 4, Line 1.

b) Union's weather normalized return on equity for 2016 is 9.78%. Please see Attachment 1.

c) Union's weather normalized return on equity excluding any adjustments for 2016 is 9.88%. Please see Attachment 2.

d) Union's 2016 Board-approved X factor was 1.19%, which represents 60% of the inflation factor of 1.99%. The resulting price cap index used in setting 2016 rates was 0.80% (1.99% - 1.19%).

   In order for the 2016 weather normalized return on equity to equal 8.93%, the X factor would have had to be 3.37%, or 169% of the inflation factor. The resulting price cap index would have been (1.38%).

UNION GAS LIMITED
Weather Normalized Earnings Sharing Calculation
Calendar Year Ending December 31, 2016

Line No.	Particulars ($000s)	2016	Unregulated Storage	Adjustments		2016 Utility
		(a)	(b)	(c)		(d)=(a)-(b)+(c)
	Operating Revenues					
1	Gas Sales	1,529,204	-	(14,668)	i	1,514,537
2	Transportation	182,195	(488)	-		182,683
3	Storage	95,598	87,095	-		8,503
4	Other	20,768	-	(4,237)	ii	16,530
5		1,827,765	86,607	(18,905)		1,722,253
	Operating Expenses					
6	Cost of gas	716,827	1,715	(14,668)	i	700,444
7	Operating and maintenance expenses	414,496	13,410	(3,228)	iii	397,858
8	Depreciation	239,080	10,679	-		228,401
9	Other financing	-	-	985	iv	985
10	Property and other taxes	71,199	1,635	-		69,564
11		1,441,601	27,439	(16,910)		1,397,252
	Other					
12	Gain / (Loss) on sale of assets	(624)	(624)	-		-
13	Other / Huron Tipperary	-	-	-		-
14	Gain / (Loss) on foreign exchange	1,592	39	(394)	v	1,159
	Remove impact of weather	-	-	12,400		12,400
15		967	(585)	12,006		13,559
16	Earnings before interest and taxes	387,132	58,583	10,011		338,560
17	Income taxes					7,684
18	Total utility income subject to earnings sharing					330,876
	Less debt and preference share return components					
19	Long-term debt					161,809
20	Unfunded short-term debt					(1,800)
21	Preferred dividend requirements					2,597
22						162,606
	Less shareholder portions of:					
23	Net short-term storage revenue (after tax)					553
24	Net optimization activity (after tax)					247
25						800
26	Earnings subject to sharing					167,470
27	Common equity					1,713,030
28	Return on common equity (line 26 / line 27)					9.78%
29	Benchmark return on common equity + 100 basis points					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
Weather Normalized Earnings Sharing Calculation Excluding Adjustments
Calendar Year Ending December 31, 2016

Line No.	#REF!	2016 (a)	Unregulated Storage (b)	Adjustments (c)	2016 Utility (d)=(a)-(b)+(c)
	Operating Revenues				
1	Gas Sales	1,529,204	-	-	1,529,204
2	Transportation	182,195	(488)	-	182,683
3	Storage	95,598	87,095	-	8,503
4	Other	20,768	-	-	20,768
5		1,827,765	86,607	-	1,741,158
	Operating Expenses				
6	Cost of gas	716,827	1,715	-	715,112
7	Operating and maintenance expenses	414,496	13,410	-	401,086
8	Depreciation	239,080	10,679	-	228,401
9	Other financing	-	-	-	-
10	Property and other taxes	71,199	1,635	-	69,564
11		1,441,601	27,439	-	1,414,162
	Other				
12	Gain / (Loss) on sale of assets	(624)	(624)	-	-
13	Other / Huron Tipperary	-	-	-	-
14	Gain / (Loss) on foreign exchange	1,592	39	-	1,553
	Remove impact of weather	-	-	12,400	12,400
15		967	(585)	12,400	13,952
16	Earnings before interest and taxes	387,132	58,583	12,400	340,949
17	Income taxes				8,317
18	Total utility income subject to earnings sharing				332,632
	Less debt and preference share return components				
19	Long-term debt				161,809
20	Unfunded short-term debt				(1,800)
21	Preferred dividend requirements				2,597
22					162,606
	Less shareholder portions of:				
23	Net short-term storage revenue (after tax)				553
24	Net optimization activity (after tax)				247
25					800
26	Earnings subject to sharing				169,226
27	Common equity				1,713,030
28	Return on common equity (line 26 / line 27)				9.88%
29	Benchmark return on common equity + 100 basis points				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)				-
					-

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 6, DATA CENTRE CONSOLIDATION

Preamble**:** During 2013 Spectra identified an opportunity to consolidate data centres to realize the benefits that a co-location data centre service provider could provide and take advantage of the economies of scale and scope created by a combined entity the size of Spectra. These benefits would not be available to any Spectra business unit acting on their own as they would not be big enough to obtain favourable commercial terms from the best co-location data centre service providers.

a) Please provide the Business Case Summary for the Consolidation of the Data Centre.

b) If not provided in the above, please summarize/list the reasons for Union determining that the Spectra Solution was the most optimum and cost effective for Union, including assessment of other options such as consolidation in Chatham/Dawn or other location.

c) Please provide estimates of the annual Costs and benefit to Union from consolidation.

d) Please provide estimates of the annual Costs and Benefit to Spectra/Enterprise from consolidation.

e) With reference to the Table on Page 12 regarding 2016 costs, please explain what services and costs (outbound) Union provided to Spectra and what Services and costs (Inbound) Union received from Spectra. How were the costs from third parties allocated between Union and the Spectra Enterprise? Please provide details.

f) With reference to Union's 2014 Data Centre costs shown at Page 14, line 12 ff, please provide an estimate of the Annual Revenue Requirement updated to 2016 and compare this with the annual Revenue Requirement for the Consolidated Data Center.

g) Spectra has sold Union to Enbridge and how will the 2017/2018 arrangements for Data Centre Management be modified/Updated? Specifically, how will Union/Enbridge proceed and what are the cost Implications?

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Page 16 and Appendix A, Schedule 6

Preamble: Lines 11-15 read: "*The deferral account balance is a debit from ratepayers of $0.235 million plus interest of $0.002 million, for a total of $0.237 million. This balance represents an under-recovery of the Board approved deferral account balances in EB-2015-0010 (Union's 2014 Deferral Account Disposition). Please see Tab 1, Appendix A, Schedule 6, p. 1 for a summary of the applicable deferral account balances by application.*"

A view of the schedule provides a breakdown of the allocations to Delivery and Gas Supply Commodity/Transportation. We would like to understand this request better.

a) Please provide the specific deferral accounts and there approved dispositions that are being aggregated and allocated into the respective categories and the principles or evidence that supports that approach.

Response:

The Board-approved prospective recovery of $645,000 to be collected from ratepayers referenced at EB-2017-0091, Exhibit A, Tab 1, Appendix A, Schedule 6, Page 2, line 16, column (e) can be found in the EB-2015-0010, Union Draft Rate Order filed August 17, 2015. Please see Table 1 and Attachments 1 to 3.

Table 1

EB-2017-0091, Exhibit A, Tab 1, Appendix A, Schedule 6, Page 2 of 2				**EB-2015-0010, Union Draft Rate Order**
Line No.	Particulars	Rate Class	Forecast Recovery/(Refund) ($000)	Reference
General Service for Prospective Recovery/(Refund) - Delivery				
1	Small Volume General Service	01	(1,743)	Rate Order, Appendix D, Page 1 of 6, Line 1
2	Large Volume General Service	10	(820)	Rate Order, Appendix D, Page 1 of 6, Line 2
3	Small Volume General Service	M1	1,451	Rate Order, Appendix D, Page 1 of 6, Line 3
4	Large Volume General Service	M2	(836)	Rate Order, Appendix D, Page 1 of 6, Line 4
			(1,948)	
General Service for Prospective Recovery/(Refund) - Gas Supply Transportation				
6	Small Volume General Service	01	227	Rate Order, Appendix D, Page 2 of 6, Line 1
7	Large Volume General Service	10	(23)	Rate Order, Appendix D, Page 2 of 6, Line 2
			204	
Prospective Recovery/(Refund) - Gas Supply Commodity				
9	Small Volume General Service	M1	2,067	Rate Order, Appendix D, Page 3 of 6, Line 1
10	Large Volume General Service	M2	297	Rate Order, Appendix D, Page 3 of 6, Line 2
11	Firm Com/Ind Contract	M4	14	Rate Order, Appendix D, Page 3 of 6, Line 3
12	Interruptible Com/Ind Contract	M5	18	Rate Order, Appendix D, Page 3 of 6, Line 4
13	Special Large Volume Contract	M7	(8)	Rate Order, Appendix D, Page 3 of 6, Line 5
14	Small Wholesale	M10	-	Rate Order, Appendix D, Page 3 of 6, Line 6
			2,388	
			645	

The specific deferral accounts that are being aggregated can also be found in the Union Draft Order in the Working Papers, Schedule 1, Page 1, a copy of which is attached as Attachment 4.

The OEB accepted the Draft Rate Order as filed in its Decision and Rate Order dated August 27, 2015 (Page 2, EB-2015-0010, Decision and Rate Order, August 27, 2015).

UNION GAS LIMITED
General Service Unit Rates for Prospective Recovery/(Refund) - Delivery
2014 Deferral Account Disposition

Line No.	Particulars	Rate Class	2014 Deferral Balances ($000's) (a)	2014 Earnings Sharing Mechanism ($000's) (b)	Deferral Balance for Disposition ($000's) (c) = (a+b)	Forecast Volume (10^3m^3) (1) (d)	Unit Rate for Prospective Recovery/(Refund) (cents/m^3) (e) = (c/d)*100
1	Small Volume General Service	01	(403)	(1,340)	(1,743)	756,529	(0.2304)
2	Large Volume General Service	10	(614)	(206)	(820)	244,726	(0.3351)
3	Small Volume General Service	M1	4,377	(2,926)	1,451	2,308,240	0.0629
4	Large Volume General Service	M2	(393)	(443)	(836)	884,479	(0.0946)

Notes:
(1) Forecast volume for the period October 1, 2015 to March 31, 2016.

UNION GAS LIMITED
General Service Unit Rates for Prospective Recovery/(Refund) - Gas Supply Transportation
2014 Deferral Account Disposition

Line No.	Particulars	Rate Class	2014 Deferral Balances ($000's)	2014 Earnings Sharing Mechanism ($000's)	Deferral Balance for Disposition ($000's)	Forecast Volume (10^3m^3) (1)	Unit Rate for Prospective Recovery/(Refund) (cents/m^3)
			(a)	(b)	(c) = (a+b)	(d)	(e) = (c/d)*100
1	Small Volume General Service	01	227	-	227	756,529	0.0301
2	Large Volume General Service	10	(23)	-	(23)	243,229	(0.0094)

Notes:
(1) Forecast volume for the period October 1, 2015 to March 31, 2016.

UNION GAS LIMITED
Unit Rates for Prospective Recovery/(Refund) - Gas Supply Commodity
2014 Deferral Account Disposition

Line No.	Particulars	Rate Class	2014 Deferral Balances ($000's) (a)	2014 Earnings Sharing Mechanism ($000's) (b)	Deferral Balance for Disposition ($000's) (c) = (a+b)	Forecast Volume (10^3m^3) (1) (d)	Unit Rate for Prospective Recovery/(Refund) (cents/m^3) (e) = (c/d)*100
1	Small Volume General Service	M1	2,067	-	2,067	2,030,085	0.0935
2	Large Volume General Service	M2	297	-	297	495,823	0.0935
3	Firm Com/Ind Contract	M4	14	-	14	19,586	0.0935
4	Interruptible Com/Ind Contract	M5	18	-	18	7,869	0.0935
5	Special Large Volume Contract	M7	(8)	-	(8)	-	0.0935
6	Small Wholesale	M10	(0)	-	(0)	232	0.0935

Notes:
(1) Forecast sales service volumes for the period October 1, 2015 to March 31, 2016.

UNION GAS LIMITED
Allocation of 2014 Deferral Account Balances

Line No.	Particulars	Acct No.	Union North: Rate 01 ($000's)	Union North: Rate 10 ($000's)	Union North: Rate 20 ($000's)	Union North: Rate 100 ($000's)	Union North: Rate 25 ($000's)	Union South: M1 ($000's)	Union South: M2 ($000's)	Union South: M4 ($000's)	Union South: M5A ($000's)	Union South: M7 ($000's)	Union South: M9 ($000's)	Union South: M10 ($000's)	Union South: T1 ($000's)	Union South: T2 ($000's)	Union South: T3 ($000's)	Union South: Bundled DP ($000's)	Union South: M12 ($000's)	Union South: M13 ($000's)	Union South: Excess Utility ($000's)	Union South: C1 ($000's)	Union South: M16 ($000's)	Total (1) ($000's)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)
	Gas Supply Related Deferrals:																							
1	Spot Gas Variance Account	179-107	-	-	-	-	-	(1,313)	(265)	(11)	(3)	(8)	-	(0)	-	-	-	-	-	-	-	-	-	(1,601)
2	Spot Gas Variance Account - Load Balancing for Union South DP	179-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	322	-	-	-	-	-	322
3	Unabsorbed Demand Cost (UDC) Variance Account	179-108	(3,781)	(1,401)	(497)	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	(5,680)
4	Gas Supply Review Consultant Costs	179-128	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Upstream Transportation Optimization	179-131	4,009	1,379	478	-	119	3,380	563	25	21	-	-	0	-	-	-		-	-	-	-	-	9,973
6	Total Gas Supply Related Deferrals		227	(23)	(20)	-	119	2,067	297	14	18	(8)	-	(0)	-	-	-	322	-	-	-	-	-	3,014
	Storage Related Deferrals:																							
7	Short-Term Storage and Other Balancing Services	179-70	494	129	35	2	-	1,117	375	121	2	44	14	0	103	760	98		-	-	-	-	-	3,295
	Delivery Related Deferrals:																							
8	Unbundled Services Unauthorized Storage Overrun	179-103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Gas Distribution Access Rule (GDAR) Costs	179-112	174	-	-	-	-	576	-	-	-	-	-	-	-	-	-		-	-	-	-	-	750
10	Carbon Dioxide Offset Credits	179-117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Average Use Per Customer	179-118	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	IFRS Conversion Costs	179-120	49	4	4	3	1	124	12	4	5	1	0	0	3	9	1		23	0	-	0	0	244
13	Conservation Demand Management	179-123	(30)	(10)	(8)	(14)	-	(84)	(31)	(13)	(22)	(7)	-	-	(15)	(21)	-	-	-	-	-	-	-	(255)
14	Preparation of Audited Utility Financial Statements	179-129	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
15	Normalized Average Consumption (NAC)	179-133	(966)	(720)	-	-	-	963	(1,372)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(2,095)
16	Tax Variance	179-134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
17	Unaccounted for Gas Volume Variance	179-135	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	
18	Parkway West Project Costs	179-136	(127)	(18)	(15)	(12)	(4)	(293)	(42)	(11)	(11)	(3)	(0)	(0)	(8)	(32)	(3)	-	105	(0)	(4)	(1)	(0)	(479)
19	Parkway Obligation Rate Variance	179-138	3	1	0	0	-	1,974	665	201	17	91	34	1	110	678	229	-	536	-	-	162	4	4,707
20	Energy East Pipeline Consultation Costs	179-139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	Total Delivery-Related Deferrals		(897)	(743)	(18)	(23)	(3)	3,260	(769)	182	(11)	82	34	1	91	634	227	-	664	(0)	(4)	161	3	2,872
22	Total 2014 Storage and Delivery Disposition (Line 7 + Line 21)		(403)	(614)	16	(21)	(3)	4,377	(393)	303	(9)	126	48	1	194	1,394	325	-	664	(0)	(4)	161	3	6,167
23	Total 2014 Deferral Account Disposition (Line 6 + Line 22)		(176)	(636)	(4)	(21)	116	6,444	(96)	317	9	118	48	1	194	1,394	325	322	664	(0)	(4)	161	3	9,181
24	2014 Earnings Sharing (2)		(1,340)	(206)	(146)	(113)	(40)	(2,926)	(443)	(110)	(93)	(38)	(7)	(0)	(76)	(338)	(45)		(1,555)	(1)	-	(11)	(2)	(7,492)
25	Grand Total (Line 23 + Line 24)		(1,515)	(843)	(150)	(134)	76	3,518	(539)	207	(84)	79.45	41	1	118	1,057	280	322	(891)	(1)	(4)	150	1	1,689

Notes:
(1) EB-2015-0010, Rate Order, Exhibit A, Tab 1, Appendix A, Schedule 1.
(2) EB-2015-0010, Rate Order, Exhibit A, Tab 2, Appendix B, Schedule 1.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Page 19 and LPMA Interrogatory #3 (submitted June 13, 2017)

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

Supplemental to the questions asked in LPMA #3, please provide the monthly forecasted and actual hearting 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:

Please see Attachment 1.

		January	February	March	April	May	June	July	August	September	October	November	December	Total
	2016 Normal Weather (HDD)													
	South	703	646	535	323	149	34	7	12	79	253	425	615	3,780
	North	890	793	663	418	218	76	29	44	144	345	538	772	4,930
	2016 Actual Weather (HDD)													
	South	673	587	453	389	145	29	3	1	44	210	351	626	3,510
	North	821	791	616	491	202	80	18	17	94	304	441	753	4,628
	Variance to 2016 Normal (HDD)													
	South	-29.7	-59	-83	65	-4	-5	-4	-12	-35	-43	-74	12	-271
	North	-69	-2	-47	73	-16	4	-11	-27	-50	-41	-97	-19	-302
	%													
	South	-4%	-9%	-15%	20%	-3%	-14%	-61%	-95%	-44%	-17%	-17%	2%	-7%
	North	-8%	0%	-7%	18%	-7%	5%	-39%	-61%	-35%	-12%	-18%	-3%	-6%
	2014 Actual Weather (HDD)													
	South	825	753	684	352	142	20	21	17	97	249	494	568	4,221
	North	989	859	814	474	219	67	47	48	161	331	622	730	5,361
	Variance to 2016 Normal (HDD)													
	South	122	107	149	29	-7	-14	14	5	18	-4	69	-46	-441
	North	100	66	151	56	1	-9	17	5	17	-14	84	-42	-430
	%													
	South	17%	17%	28%	9%	-5%	-42%	201%	43%	23%	-2%	16%	-8%	-12%
	North	11%	8%	23%	13%	0%	-12%	59%	10%	12%	-4%	16%	-5%	-9%
	Leap Year Factor	1.00	1.04	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	
	Tobbaco	-	-	-	-	-	-	-	-	-	-	-	-	
	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	
	Tobbaco	-	-	-	-	-	-	-	-	-	-	-	-	
	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	
	2016 Actual Average Use per Customer (m3)													
Rate M1	Residential	382	321	261	215	98	69	49	49	50	96	186	335	2,111
	Commercial	1,352	1,227	956	739	290	159	142	163	111	342	794	1,187	7,462
	Tobbaco	-180	527	533	1,028	127	-35	255	1,029	5,152	1,083	387	4,158	14,063
	Industrial	1,665	2,019	1,805	1,071	368	91	148	99	129	396	1,324	3,136	12,251
Rate M2	Residential	7,464	5,383	7,093	-33,949	3,114	2,354	922	1,153	1,436	5,575	5,853	-14,905	-8,507
	Commercial	20,558	16,652	17,872	13,862	7,608	3,979	3,207	3,463	4,140	10,690	14,290	17,562	133,882
	Tobbaco	3,561	2,358	2,072	7,224	1,438	-6	1,701	5,795	33,257	15,015	-6,732	23,934	89,616
	Industrial	34,743	32,000	27,360	22,049	13,521	10,733	9,267	10,528	11,983	17,769	23,526	37,011	250,490
Rate 01	Residential	404	338	291	212	99	52	37	40	46	114	203	337	2,173
	Commercial	1,497	1,410	1,151	716	309	171	151	129	155	403	774	1,394	8,260
Rate 10	Commercial	18,104	18,514	14,373	10,901	6,429	4,328	3,411	3,587	4,056	8,134	11,510	18,414	121,759
	Industrial	46,250	55,438	40,814	39,189	30,183	23,879	21,288	20,237	23,358	30,700	36,985	50,041	418,361
	Industrial CIA	249,331	243,367	196,397	173,009	96,902	57,058	54,922	61,516	48,795	97,494	164,248	262,786	1,705,825
Total Rate M1		456	392	317	256	112	76	56	58	57	115	233	407	2,535
Total Rate M2		22,579	18,919	18,921	15,005	8,477	5,027	4,204	4,693	5,958	11,952	15,484	20,930	152,150
Total Rate 01		495	428	362	254	116	62	47	48	55	138	250	424	2,678
Total Rate 10		21,941	22,786	17,453	13,905	8,720	5,985	4,978	5,106	5,600	10,289	14,487	22,663	153,911
	2014 Actual Average Use per Customer (m3)													
Rate M1	Residential	481	422	380	213	101	65	53	56	58	113	257	338	2,537
	Commercial	1,835	1,678	1,519	767	313	163	148	153	173	394	1,110	1,349	9,601
	Tobbaco	441	324	556	1,015	535	18	77	1,343	7,688	4,157	-3,648	2,527	15,033
	Industrial	3,886	3,751	3,128	1,337	357	22	65	177	132	635	1,842	2,340	17,671
Rate M2	Residential	9,111	7,204	8,803	4,041	3,134	1,481	1,006	3,473	6,290	8,647	8,606	5,099	66,894
	Commercial	24,208	22,355	23,178	14,127	8,541	5,291	3,844	4,267	4,951	10,413	20,197	21,236	162,608
	Tobbaco	1,257	3,404	1,870	6,121	3,089	249	322	7,693	45,106	31,145	-22,624	9,622	87,253
	Industrial	45,398	46,162	38,592	22,682	15,145	10,431	11,407	10,873	12,923	20,825	34,115	32,220	300,773
Rate 01	Residential	470	377	374	239	133	55	47	46	60	132	281	344	2,559
	Commercial	1,941	1,614	1,558	977	454	178	160	161	187	473	1,123	1,424	10,249
Rate 10	Commercial	23,977	20,373	18,702	13,634	8,459	4,743	4,151	4,387	5,083	9,969	17,803	18,942	150,224
	Industrial	42,636	49,169	40,466	22,774	22,502	19,407	21,181	23,586	24,676	29,428	47,067	46,494	389,388
	Industrial CIA	254,487	238,944	224,280	152,645	91,986	57,351	52,923	55,972	79,572	111,080	187,414	218,193	1,724,845
Total Rate M1		593	525	473	258	118	72	60	65	71	137	322	420	3,114
Total Rate M2		27,504	25,920	25,537	15,497	9,595	6,088	5,110	5,502	7,112	12,638	21,763	22,932	185,199
Total Rate 01		596	484	475	302	161	66	57	56	71	161	353	436	3,216
Total Rate 10		28,630	25,489	22,930	16,294	10,577	6,464	5,925	6,293	7,341	12,381	21,589	22,986	186,900
	2016 Actual NAC (m3)													
Rate M1	Residential	399	352	308	180	100	69	49	49	50	113	223	328	2,221
	Commercial	1,405	1,335	1,106	637	295	159	142	163	122	389	928	1,167	7,850
	Tobbaco	-180	527	533	1,028	127	-35	255	1,029	5,152	1,083	387	4,158	14,063
	Industrial	1,721	2,171	2,050	995	372	91	148	99	129	447	1,499	3,096	12,820
Rate M2	Residential	7,786	5,912	8,366	-28,404	3,197	2,354	922	1,153	1,436	6,577	7,003	-14,633	1,669
	Commercial	21,371	18,116	20,659	11,942	7,742	3,979	3,207	3,463	4,593	12,186	16,712	17,270	141,239
	Tobbaco	3,561	2,358	2,072	7,224	1,438	-6	1,701	5,795	33,257	15,015	-6,732	23,934	89,616
	Industrial	35,916	34,421	31,071	20,486	13,668	10,733	9,267	10,528	11,983	20,070	26,634	36,541	261,318
Rate 01	Residential	435	339	311	184	104	52	37	40	46	126	241	345	2,261
	Commercial	1,610	1,414	1,229	626	324	171	151	129	170	442	916	1,426	8,608
Rate 10	Commercial	19,478	18,565	15,343	9,538	6,735	4,328	3,411	3,587	4,432	8,914	13,614	18,840	126,784
	Industrial	49,182	55,568	43,184	36,763	31,017	23,879	21,288	20,237	23,358	33,343	42,110	50,903	430,831
	Industrial CIA	265,137	243,939	207,803	162,297	99,581	57,058	54,922	61,516	48,795	105,888	187,006	267,313	1,761,255
Total Rate M1		475	429	371	216	115	76	56	58	58	134	277	400	2,667
Total Rate M2		23,436	20,512	21,776	13,200	8,610	5,027	4,204	4,693	6,326	13,558	17,979	20,614	159,933
Total Rate 01		533	429	387	221	122	62	47	48	56	152	296	434	2,788
Total Rate 10		23,543	22,846	18,593	12,401	9,080	5,985	4,978	5,106	5,951	11,250	16,968	23,155	159,855
	2016 Target NAC (m3)		leap year adj											
Rate M1	Residential	412	376	298	196	106	65	53	56	58	115	223	365	2,537
	Commercial	1,588	1,515	1,223	715	322	163	148	153	164	399	977	1,445	9,601
	Tobbaco	441	335	556	1,015	535	18	77	1,343	7,688	4,157	-3,648	2,527	15,033

	Industrial	3,428	3,445	2,576	1,293	363	22	65	177	132	642	1,660	2,465	17,671
Rate M2	Residential	7,791	6,419	6,915	3,717	3,271	1,481	1,006	3,473	6,290	8,783	7,455	5,502	66,894
	Commercial	20,950	20,190	18,660	13,181	8,786	5,291	3,844	4,267	4,712	10,545	17,775	22,749	162,608
	Tobbaco	1,257	3,525	1,870	6,121	3,089	249	322	7,693	45,106	31,145 -	22,624	9,622	87,253
	Industrial	40,049	42,398	31,780	21,935	15,411	10,431	11,407	10,873	12,923	21,071	30,741	33,939	300,773
Rate 01	Residential	425	363	310	214	133	55	47	46	60	136	247	362	2,559
	Commercial	1,761	1,555	1,296	881	452	178	160	161	182	488	991	1,497	10,249
Rate 10	Commercial	21,747	19,633	15,556	12,292	8,434	4,743	4,151	4,387	4,940	10,289	15,715	19,918	150,224
	Industrial	39,237	47,870	34,423	21,682	22,464	19,407	21,181	23,586	24,676	30,279	42,609	48,264	389,388
	Industrial CIA	234,200	232,629	190,789	145,322	91,827	57,351	52,923	55,972	79,572	114,293	169,661	226,497	1,724,845
Total Rate M1		509	470	374	238	123	72	60	65	70	139	280	452	2,852
Total Rate M2		23,941	23,535	20,692	14,604	9,839	6,088	5,110	5,502	6,920	12,788	19,224	24,451	172,694
Total Rate 01		540	466	394	271	160	66	57	56	70	166	310	459	3,015
Total Rate 10		26,053	24,630	19,178	14,876	10,549	6,464	5,925	6,293	7,209	12,768	19,171	24,097	177,214

	2016 Actual Customers (at December)													
Rate M1	Residential	1,008,016	1,008,561	1,009,504	1,011,110	1,013,277	1,014,069	1,015,899	1,016,181	1,017,856	1,017,095	1,020,113	1,022,260	12,173,941
	Commercial	78,302	78,320	78,404	78,363	78,066	77,921	77,908	77,753	77,765	77,839	78,426	78,833	937,900
	Tobbaco	550	551	548	556	568	549	569	582	575	576	571	578	6,773
	Industrial	3,845	3,835	3,827	3,837	3,800	3,801	3,798	3,800	3,800	3,784	3,808	3,826	45,761
Rate M2	Residential	16	16	159	17	11	15	16	17	18	17	18	17	337
	Commercial	6,212	6,267	6,197	6,240	6,360	6,389	6,256	6,222	6,209	6,212	6,284	6,161	75,009
	Tobbaco	161	163	160	152	153	158	140	128	132	129	129	125	1,730
	Industrial	1,304	1,309	1,313	1,299	1,321	1,320	1,311	1,297	1,290	1,298	1,311	1,305	15,678
Rate 01	Residential	309,168	309,432	309,684	309,939	310,121	310,637	311,338	311,341	311,762	312,326	313,826	314,579	3,734,153
	Commercial	28,093	28,164	28,059	28,067	28,227	28,192	28,151	28,110	28,100	28,110	28,215	28,367	337,855
Rate 10	Commercial	2,043	2,078	2,206	2,179	2,036	2,031	2,033	2,055	2,031	2,040	2,047	2,037	24,816
	Industrial	126	130	130	133	131	131	128	128	128	130	131	132	1,558
	Industrial CIA	21	21	21	20	21	20	22	21	20	20	21	21	249
Total Rate M1		1,090,713	1,091,267	1,092,283	1,093,866	1,095,711	1,096,340	1,098,174	1,098,316	1,099,996	1,099,294	1,102,918	1,105,497	13,164,375
Total Rate M2		7,693	7,755	7,829	7,708	7,845	7,882	7,723	7,664	7,649	7,656	7,742	7,608	92,754
Total Rate 01		337,261	337,596	337,743	338,006	338,348	338,829	339,489	339,451	339,862	340,436	342,041	342,946	4,072,008
Total Rate 10		2,190	2,229	2,357	2,332	2,188	2,182	2,183	2,204	2,179	2,190	2,199	2,190	26,623

	2014 Actual Customers (at December)													
Rate M1	Residential	981,876	982,800	983,539	984,492	987,185	986,764	988,836	989,866	991,168	991,815	993,052	995,647	11,857,040
	Commercial	77,644	77,318	77,825	77,688	77,674	77,447	77,316	77,284	77,038	77,287	77,578	78,064	930,163
	Tobbaco	603	602	611	607	597	591	590	586	590	585	586	588	7,136
	Industrial	4,030	4,041	4,011	3,984	3,986	3,987	3,969	3,949	3,959	3,962	3,961	3,990	47,829
Rate M2	Residential	5	5	5	6	6	6	6	6	6	6	6	8	71
	Commercial	5,411	5,888	5,479	5,554	5,572	5,574	5,571	5,552	5,678	5,613	5,563	5,575	67,030
	Tobbaco	131	136	123	124	136	140	137	140	135	138	139	133	1,612
	Industrial	1,194	1,193	1,219	1,230	1,225	1,218	1,228	1,222	1,230	1,217	1,211	1,224	14,611
Rate 01	Residential	297,379	297,702	297,853	298,200	298,471	298,698	299,396	299,779	300,246	301,527	302,531	303,618	3,595,400
	Commercial	27,967	28,021	27,917	28,002	27,949	27,907	27,884	27,816	27,802	27,934	27,992	28,162	335,353
Rate 10	Commercial	1,863	1,844	1,970	1,881	1,873	1,856	1,863	1,879	1,865	1,878	1,886	1,866	22,524
	Industrial	119	119	119	120	121	121	118	118	118	121	124	130	1,448
	Industrial CIA	31	31	31	31	31	32	32	31	30	25	24	23	352
Total Rate M1		1,064,153	1,064,761	1,065,986	1,066,771	1,069,442	1,068,789	1,070,711	1,071,685	1,072,755	1,073,649	1,075,177	1,078,289	12,842,168
Total Rate M2		6,741	7,222	6,826	6,914	6,939	6,938	6,942	6,920	7,049	6,974	6,919	6,940	83,324
Total Rate 01		325,346	325,723	325,770	326,202	326,420	326,605	327,280	327,595	328,048	329,461	330,523	331,780	3,930,753
Total Rate 10		2,013	1,994	2,120	2,032	2,025	2,009	2,013	2,028	2,013	2,024	2,034	2,019	24,324

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Page 19 and LPMA Interrogatory #3 (submitted June 13, 2017)

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

Please provide all studies Union has undertaken by its own staff or consultants that demonstrate that this estimation of normalized annual volumes is appropriate for the purposes of comparing actual volumes to target NAC's and determining volume variances that result in a true-up of recovery for normal weather in the year of determination.

Response:

Please see the response at Exhibit B.CCC.2.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Pages 27-28 and EB-2016-0296 Exhibit B.FRPO.3 Attachment 1

Preamble: We would like to understand better the reasons behind the substantial increase in UFG.

Please provide the IR response addressing UFG from EB-2016-0296.

a) Please provide any additional internal reports generated for the Steering Committee or individual(s) responsible for UFG that address levels of UFG in 2016.

b) Please provide the impact of Storage Adjustments on the level of UFG.

c) How much cost was allocated to non-utility storage and how was it determined?

d) Is the $20.969M total for UFG net of the cost allocated to non-utility storage?

Response:

Please see Attachment 1.

a) Please see Attachments 2 and 3.

b) Union's 2016 year end "storage adjustment" resulted in a favourable variance or decrease to UFG volume by 200,000 GJs or $976,200 when multiplied by the October 2016 Approved Reference Price.

c) Allocation to non-utility storage is determined by calculating the 2016 actual unregulated long term storage activity as a percentage of total billed volumes subject to UFG. In 2016 this represented a cost of $2,530,583.

d) Yes the $20.969M total for UFG is net of the cost allocated to non-utility storage.

Unaccounted For Gas – Executive Summary

The following is an executive summary of the observations, recommendations and potential opportunities from the 2015 UFG Project. The goal of this project was to bring greater visibility to UFG, through education and identify opportunities to improve: communication, budgeting and overall processes as they relate to UFG. The key deliverables of the project are:

- Benchmarking – further investigate benchmarking with intent to determine "normal" amounts of UFG in the industry
- Education - develop education materials to include factors influencing UFG loss and volatility
- Financial – budget/financial reporting to support opportunities for 2016-2018, 2019 COS
- Accountabilities – clarity around roles and responsibilities
- Communication/Reporting – development of key information/messaging tools for targeted audiences (e.g. ULG, etc.)

Opportunities Identified

- UFG surveys have been sent to the CGA and AGA (Finance/Measurement Committee)
  - CGA and AGA surveys have been issued with results expected in Q1 2016
- Quarterly reporting of UFG (Finance)
  - An executive summary level dashboard has been created for broad based communication
- Opportunities to reduce volatility (Finance/Customer Care)
  - Investigate moving customers with a seasonal load, not captured in the consumption forecast, to a billing cycle that removes them from the unbilled estimate process (e.g. cycles 1,2, 19 or 20)
  - Use this information to improve the accuracy of the forecast
- Budget Methodology / Accounting Treatment (Finance / Regulatory)
  - Revisit in advance of the 2019 COS budget with consideration to:
    - Alternate approaches to budgeting
    - How best to reflect historic storage adjustments
    - All UFG volume variances being subject to deferral

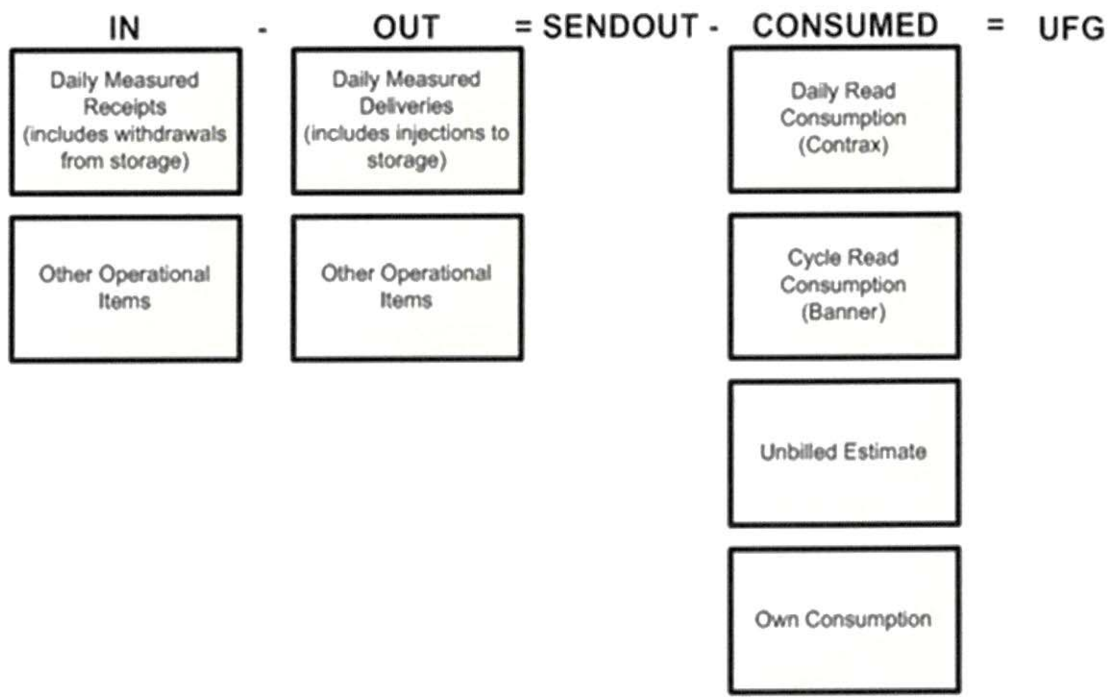
Future Considerations

A key point of consideration in the future will be the relationship between UFG and Cap & Trade. The current UFG Steering Committee of Paul Rietdyk, Wendy Zelond and Mark Isherwood will continue to share joint accountability for UFG until the Cap & Trade relationship is understood and a single accountable person is identified.

What is UFG and Why Do We Care About It?

UFG losses are a common phenomenon in the natural gas industry. Distribution companies normally experience average losses of 1% of throughput with a range from 0% to +4%; transmission companies 0.3% to 0.5% of throughput. Union's historical average is 0.4% (2001-2014). In comparison, Union's UFG budget as a percentage of throughput is 0.2% for years 2014-2019.

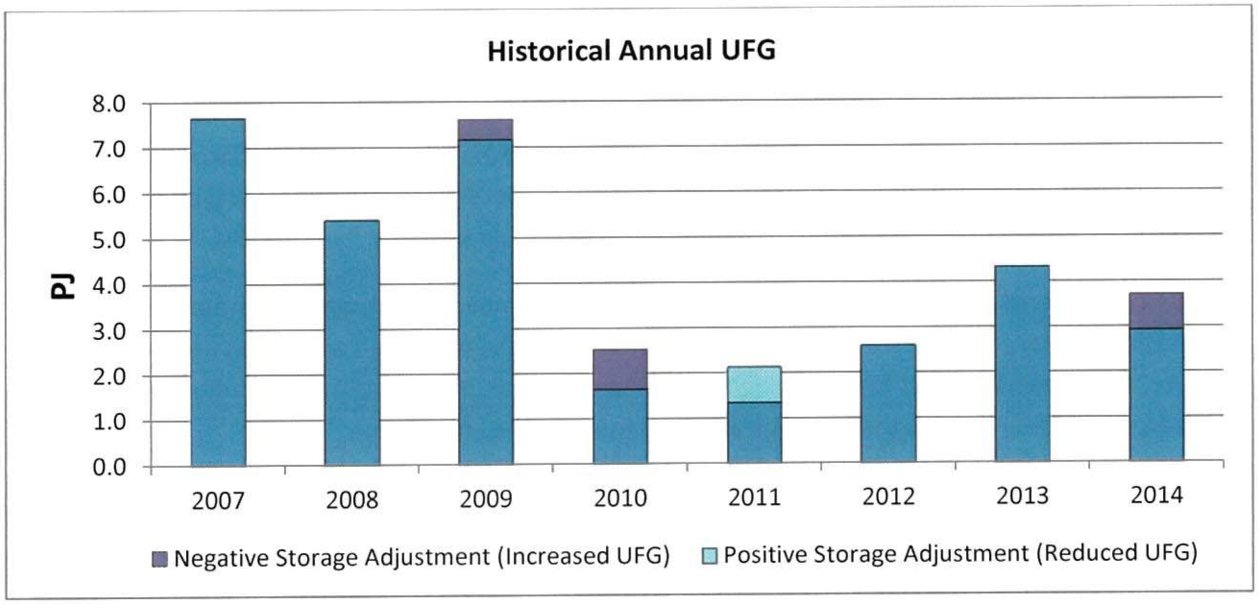
Unaccounted for Gas (UFG) is the variance between measured gas moving on (receipts) or off Union's system (deliveries) less consumption as depicted below.

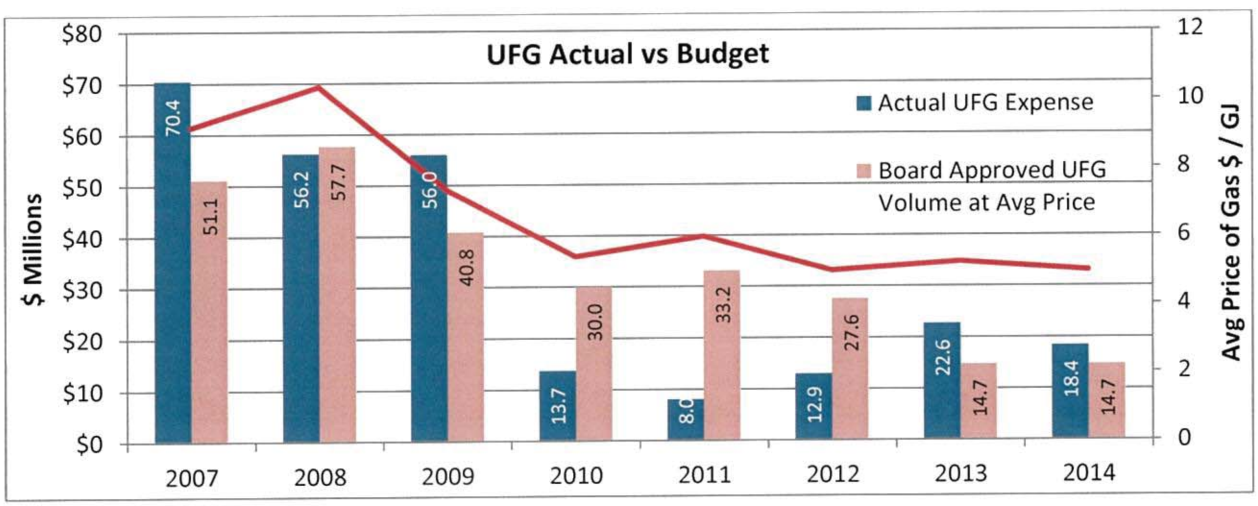


The 2015 UFG budget is $18M. Variances to budget are reported monthly through our financial reporting process. Union's shareholders have historically borne UFG variances; however, effective January 1, 2014, a deferral account was put in place to limit the shareholder impact to +/- $5M for UFG volume variance attributable to our regulated business. UFG volume variances attributable to our unregulated business (approximately 10% of total) remain a shareholder risk.

UFG History at Union

From 2007-2014 UFG ranged between 1.3 and 7.7 PJ. The net UFG variance between actual UFG expense and what was recovered through rates for this same period was approximately $11.5 million favourable.



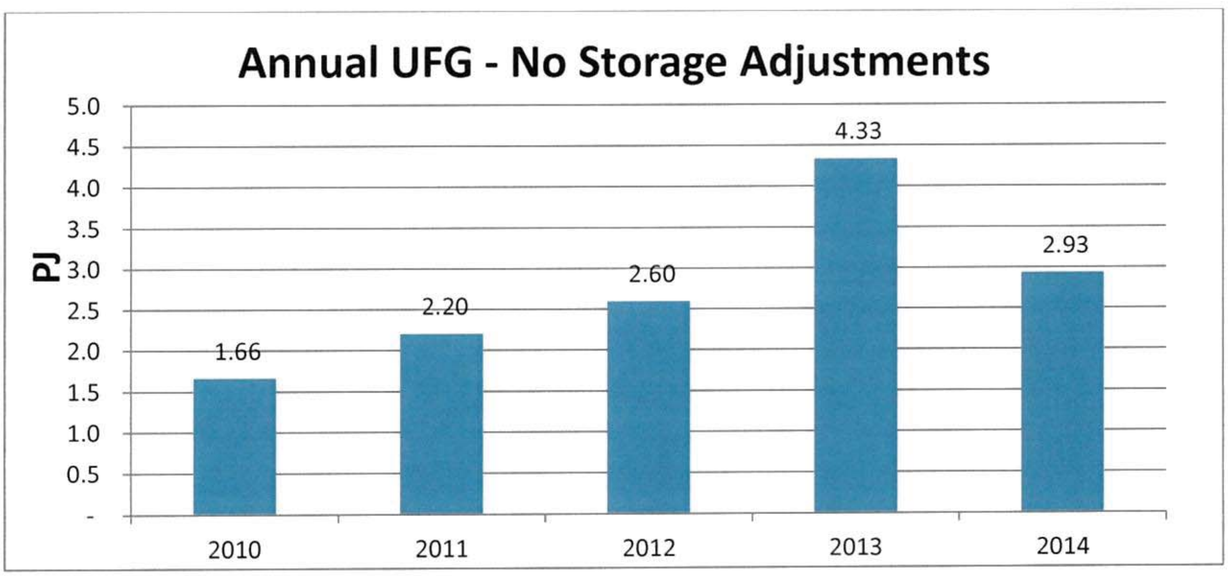


Financially, UFG has declined due to the implemented improvements identified since 2009 and lower natural gas prices. The nine year average 2001-2009, the average UFG as a percentage of throughput was 0.51%. Since the UFG initiative in 2009, this average has improved to 0.23% for the five year period 2010-2014.

Starting in 2010, Union's annual UFG losses fell by approximately 5 PJ. The change is attributable to improvements from the 2009 UFG Project, which supports the sustainability of lower UFG.

Storage pool adjustments can affect UFG. The adjustments can either be positive or negative and can be attributed to measurement error and/or a change in the reservoir index (pool size). Each pool is shut-in following injection and withdrawal seasons to determine the stabilized pressure in the reservoir. The stabilized pressures are then used to calculate the inventory in the pool. The difference between the calculated and measured inventory is reported as the variance. The variances are monitored throughout the year and inventories are audited at the end of the year. Variances are not reflected in UFG until the adjustment process is complete. Storage adjustments have occurred in 6 of the last 8 years. Although, storage adjustments are determined over several years the impact will be recognized at a single year.

Union's average annual UFG loss since 2010 is 2.9 PJ. If we remove the storage adjustments from these figures, the UFG loss would be on average 2.7 PJ per year. Applying our current QRAM prices to these volumes, the financial impact is favourable $1.0 million per year. While the average adjustment is relatively small (0.2 PJ), adjustments have been as large as 1.0 PJ per year.



Why is UFG Always Positive (Loss)?

Note: positive UFG = loss; negative UFG = gain

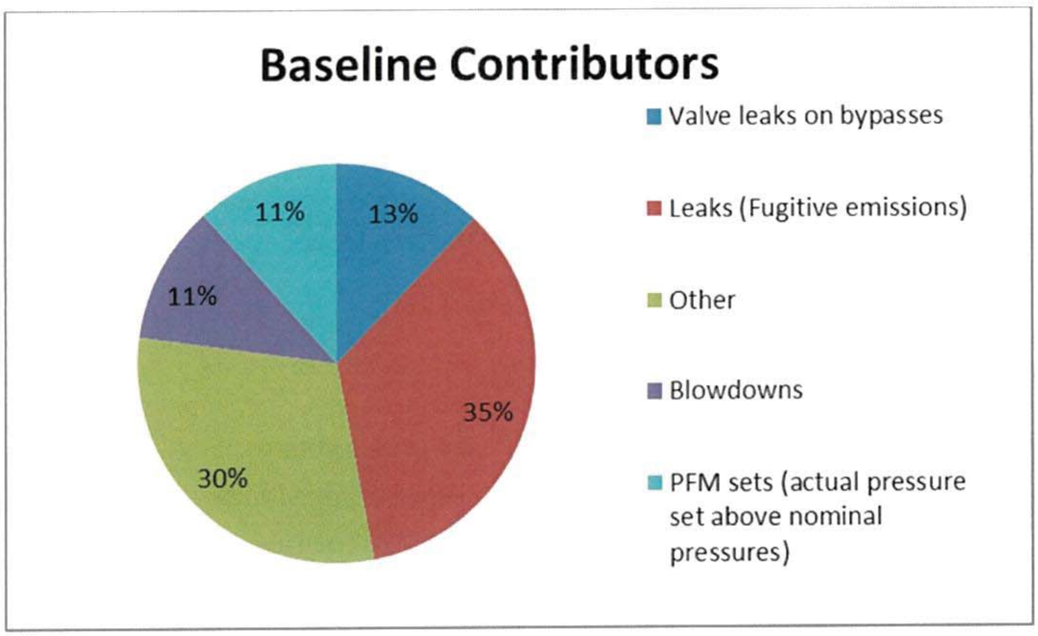
By the very nature of Unaccounted for Gas, baseline contributors result in a loss of gas. The exception is storage adjustments which can be positive or negative.

In 2014 the three most significant operational contributors resulted in UFG of 1.7 PJ, specifically:

- Leaks (Fugitive emissions) within the Union gas system = 1.0 PJ
- Blowdowns (Vented emissions) = 0.3 PJ
- Valve leaks on bypasses at industrial sites = 0.4 PJ

One other significant contributor adding to the baseline loss is from Pressure Factor Measurement (PFMs) sets where the actual pressure is set higher than the nominal pressure (0.3 PJ).

This brings the total baseline loss to 2.0 PJ from these 4 contributors alone and is approximately 70% of our 5 year average of 2.9 PJ. The remaining 30% is made up of many other small baseline contributors that have been reviewed and are considered to be either very expensive to address or are simply not operationally practical. While many of the largest and most significant opportunities for improvements have been implemented, we continuously look for improvement opportunities.



Relationship between Volatility and Consumption

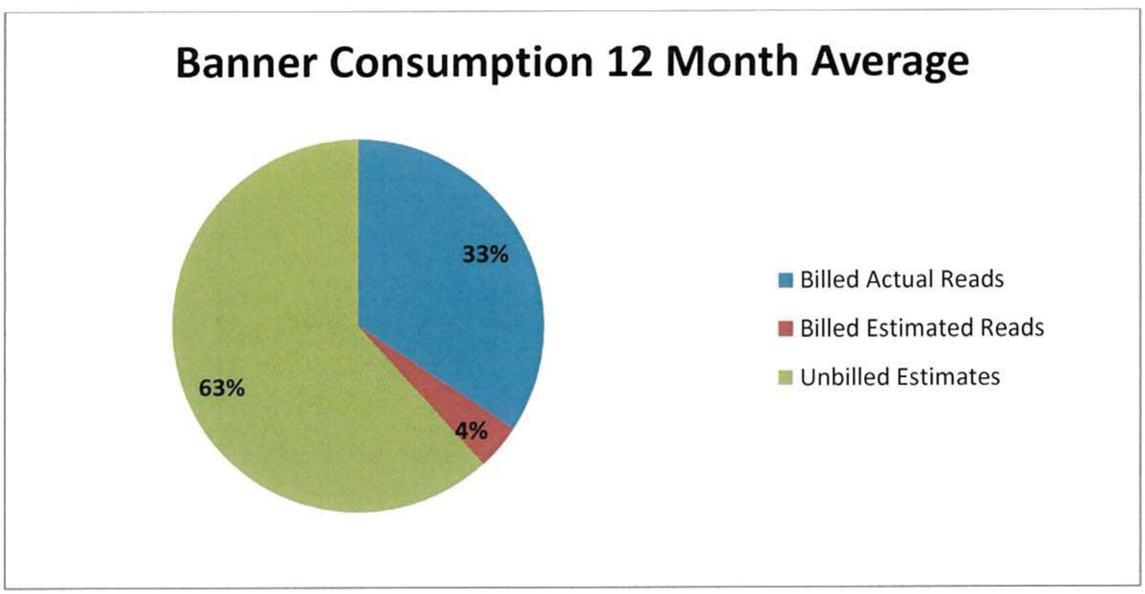
Volatility can result in large monthly variances between actual and budgeted UFG. Historically UFG variances of greater than $10 million have been experienced in a single month.

Volatility can be positive or negative and usually results from differences between consumption estimates used for financial reporting, and billing purposes, and actual consumption. These variances are recorded as UFG to recognize the correlation between consumption and gas in inventory. Each month, consumption estimates are reversed and replaced with actual meter read billed consumption. For this reason, UFG related to consumption variances are considered to be temporary or timing in nature. Variances in estimated consumption range from +1.5 PJ to -2.3 PJ. Larger variances are believed to be driven by consumption not captured in the unbilled estimate. The forecasting group is investigating seasonal loads as a potential contributor to the significant recurring UFG volatility that Union experiences in the fourth quarter of each year. To the extent these customers can be identified UFG volatility may be reduced.

It is important to recognize volatility has the potential to drive business decisions, more specifically gas purchase decisions. Volatility during the winter months may have the effect of reducing inventory which could, in turn, prompt a decision to buy gas to meet inventory needs.

Banner consumption estimates comprise of approximately 70 % of the monthly reported consumption as seen below:

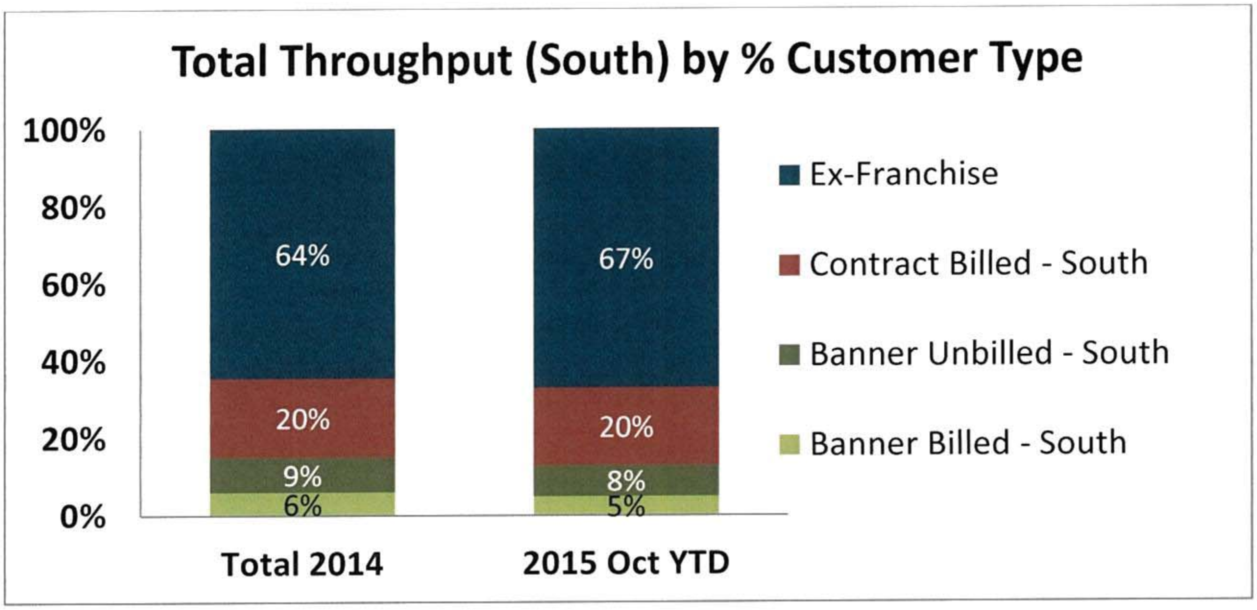
- Unbilled estimate, 63%
- Billed estimated Reads, 4%

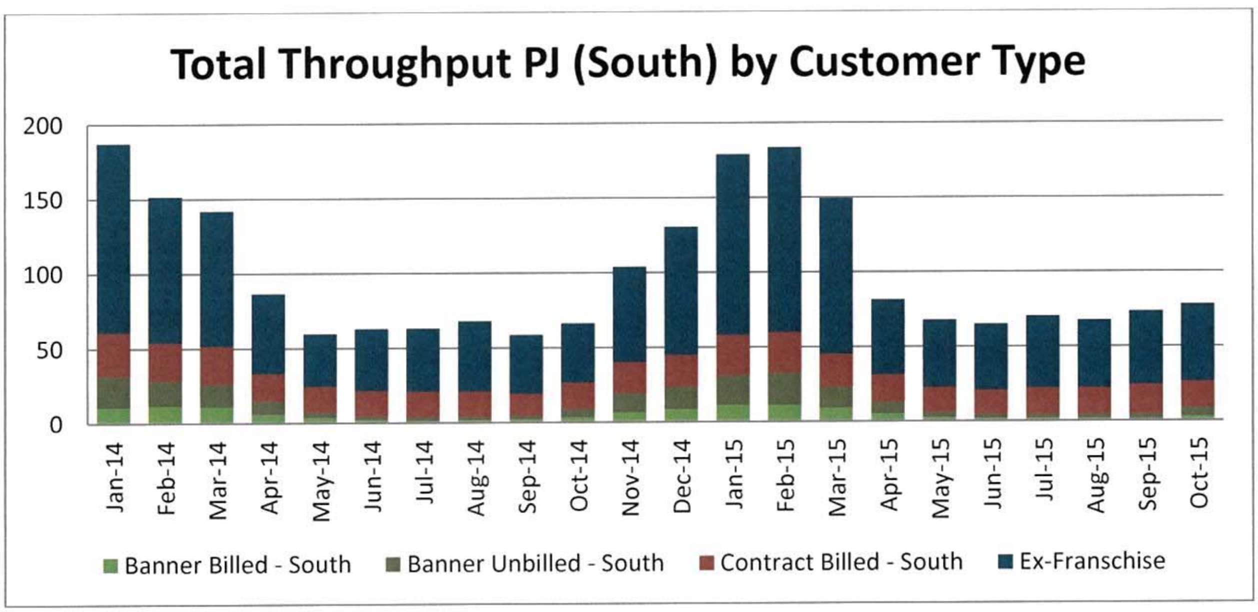


How is UFG Budgeted and Reported?

For 2013-2018, UFG is budgeted at 0.22% of total throughput. Financially, this equates to a budget of $17.8M for 2015, and $15.2M for 2016. The annual UFG budget is impacted by changes to throughput volumes and WACOG.

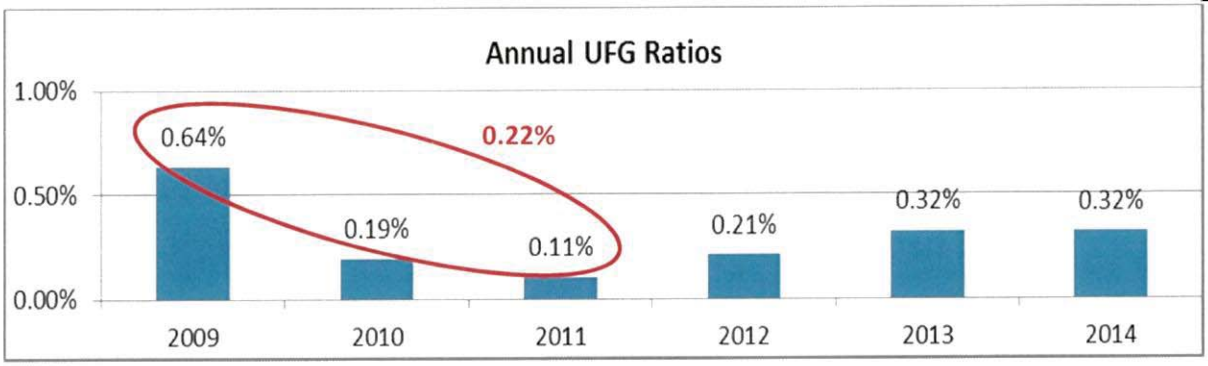
Total throughput includes all gas moving through Union's southern delivery area. In 2014, this figure was 1,171 PJ. UFG is not specifically budgeted for Union North; any UFG incurred results in a volume variance to budget.





While the unbilled estimate is 63% of the total Banner consumption, it is only 9% of total south throughput.

The UFG ratio is determined using a Board approved weighted average of the most recent three years of actual activity at the time the budget is set. The most recent year has a weighting of 3/6th, the second year has a 2/6th weighting and the first year has a 1/6th weighting. This ratio was held flat for the 2013 COS and 2014-2018 IRM. The UFG forecast ratio will be reset through the 2019 rebasing process.



The monthly budget allocation follows the same methodology as the annual budget (0.22% x throughput).

Within a budget year, the outlook is generally held to budget recognizing that monthly fluctuations in UFG are largely from estimated consumption, which corrects as actual billing data becomes available.

What Have We Done to Manage UFG?

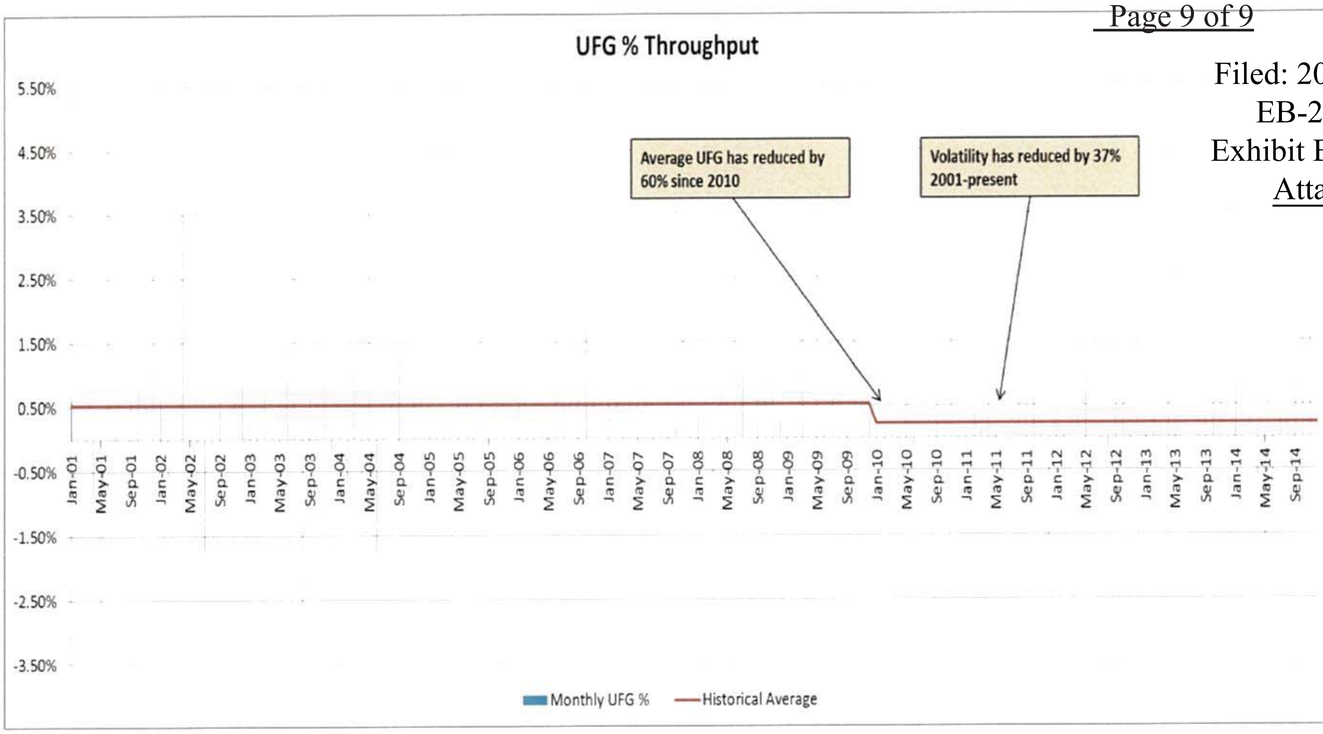
Implementation of improvements from the 2009 UFG project:

Baseline improvements, 1.0 PJ

- Implementation of super-compressibility correction for PFM sets in Banner eliminated this contributor and reduced the UFG Baseline by 0.08 PJ
- Replacement of all non-temperature compensated diaphragm meters eliminated this contributor and reduced the UFG Baseline by 0.03 PJ
- On-going turbocorrector (TOC) project and installation of 97 TOC on turbine meters at industrial sites reduced the UFG Baseline by 0.4 PJ
- Audits of TCPL stations reduced the amount of gas diverted at gas supplier sites downstream of measurement and correspondingly, the UFG Baseline by 0.5 PJ
- The process change in meter reading eliminated gas losses due to meters not activated in Banner and reduced the UFG Baseline by 0.01 PJ per year

Volatility improvements, 0.5 PJ

- Monthly line pack variation reduced from ±0.42 PJ to ±0.04 PJ due to accounting for Dawn-Parkway line pack
- Uncertainty of measurement at pool 156 reduced from ±0.17 PJ to ±0.03 PJ due to replacement of orifices with ultrasonic meters
- Overall, volatility significantly reduced for summer and fall/spring months as a result of improvements in the unbilled estimate



Benchmarking

The most recent industry data on UFG is from 2012. This date suggests Union is a strong performer in managing UFG, recognized by our % loss relative to peer distribution and transmission companies. Union is working through the CGA and AGA to solicit a broader set of current data to allow us to confirm this assumption and further benchmark our performance.

Sustainment

The identified opportunities will be transitioned to Finance and pursued in 2016.

Conclusion

A great amount of resource time has been invested in explaining UFG variances. We can clearly see the returns on the efforts from the 2009 UFG measurement project in our results. The 2015 UFG Project has identified opportunities to improve Union's UFG related to both baseline reporting and volatility. The next step is to pursue the identified opportunities and implement where feasible.

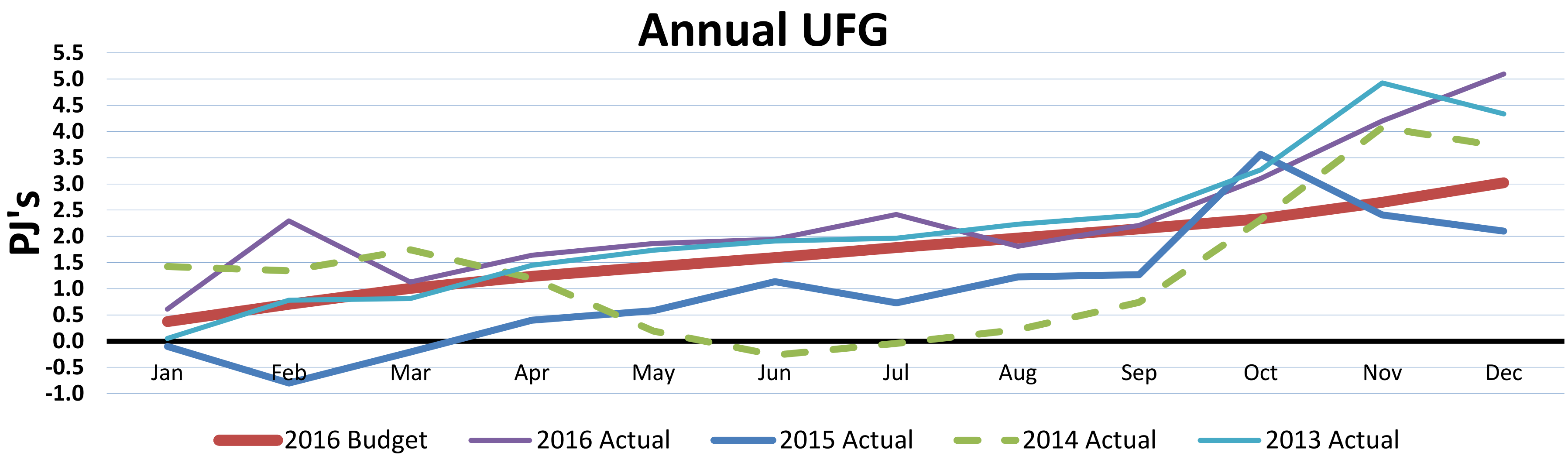
uniongas
A Spectra Energy Company

2016 UFG Summary

January 13th, 2017

2016 UFG Summary

- UFG in 2016 totaled $24MM (~$18MM net of deferral)
  - $5MM dead-band has been reached
  - $5.7MM flowing to deferral account (first time occurrence)
  - Includes $8.8MM consumption estimate variance from December 2015
- Unlike previous years, a UFG reversal has not occurred in Q4
  - Total UFG of $4.4MM in December ($1.9MM net of deferral)
  - Primarily driven by November consumption estimate variance
- UFG losses experienced in Q4 are significant, but not anomalously large
- Billing cycles 1 thru 5 for December indicate a UFG reversal in January



Potential UFG Contributors

- We have evaluated physical factors that could impact UFG, none explored to date appear to be driving the increased UFG we are seeing
  - Investigated meter reads between custody and check meters for inconsistencies
  - Explored change in custody transfer meters (TCPL to Union) and new meter stations at Parkway West and Parkway East for any meter bias
  - Verified measurement related to expansion facilities and commissioning activities
- We continue to investigate other possible physical contributors
  - Explore Delta pressuring on storage pools and heat value of gas in storage
  - Confirm accuracy of system heat value
  - Further confirmation of measurement for blowdowns and line pack
  - Verify accuracy of measurement for large industrial customers
  - Understand impact of Vector exports (occurred in summer months)
- Actuals for Contrax and the first 5 cycles of Banner are showing a favourable consumption estimate variance of $800K
  - ***If*** the trend from the first 5 cycles continues, a favourable reversal of approximately $2.5MM in January would occur

Appendix

2016 UFG Historical Comparison

- 2016 UFG volume is the highest since our 2013 settlement

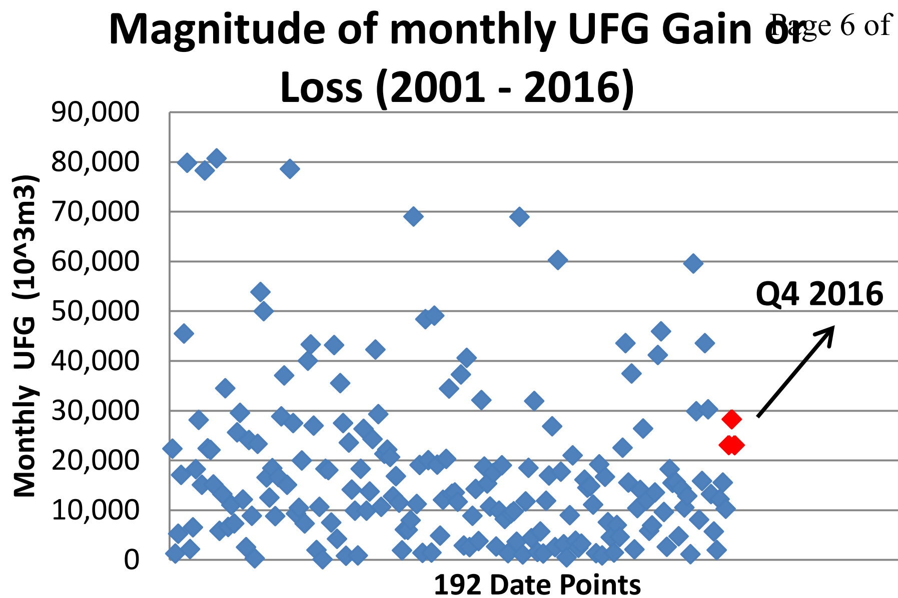
UFG Volume Summary				
Year	Throughput (10^3m3)	UFG Vol. (10^3m3)	Annual UFG %	UFG Energy (PJs)
2013 (Board Approved)	31,950,422	69,971	0.219%	-
2013	35,592,445	113,997	0.320%	4.3
2014	30,577,949	97,109	0.318%	3.7
2015	31,306,537	54,408	0.174%	2.1
2016	30,835,935	131,588	0.427%	5.1

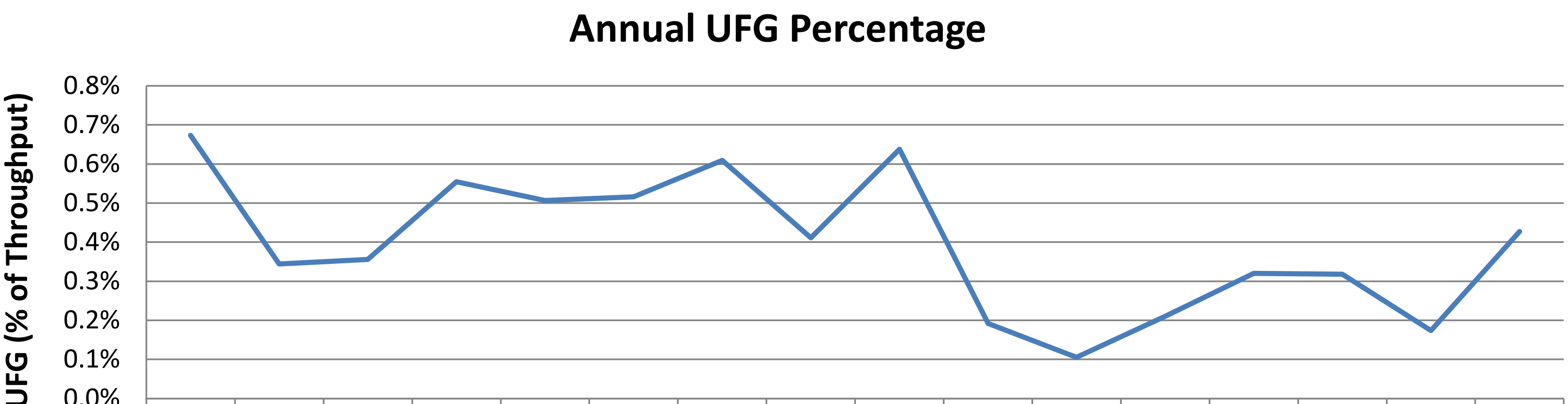
- Although we have been in the +/- $5MM dead-band, 2016 will be the first year we are booking a deferral

UFG Expense Summary			
Year	UFG Expense ($MM)	Deadband Impact ($MM) (loss)/gain	Deferral (Recievable)/Payable
2013 (Board Approved)	14.7	-	-
2013	22.6	(5.0)	-
2014	18.4	(4.1)	-
2015	10.5	3.6	-
2016	24.2	(5.0)	(5.7)

2016 UFG Historical Comparison

- UFG losses in Q4 are significant, but not anomalously large





	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
UFG %	0.67%	0.34%	0.36%	0.55%	0.51%	0.52%	0.61%	0.41%	0.64%	0.19%	0.11%	0.21%	0.32%	0.32%	0.17%	0.43%

UFG Executive Dashboard
December 2016

Key Messages:

YTD:

YTD UFG is comprised of two components: operational activity and consumption estimation variances

UFG was a loss of $24.2M for 2016 before the $5.7M deferral impact

YTD unfavourable variance to budget of $6.4M mainly relates to unfavourable UFG as a percentage of throughput (Actual 0.40% vs budget 0.22%)

YTD UFG volume deferral balance is $5.7M receivable for 2016

2016 storage adjustment equate to $1.2M (South - $1.0, North - $0.2M)

Current Month Details:

UFG was a loss of $4.4M for December before the $2.5M deferral impact. This includes:

$6.5M loss -November consumption estimation variance (Banner $5.5M, Contrax $1.1M)

$2.1M gain - (Storage adjustments - $1.2, December UFG estimate $0.9M)

Consumption was overestimated for November's activity. This produced a gain in November and a loss in December

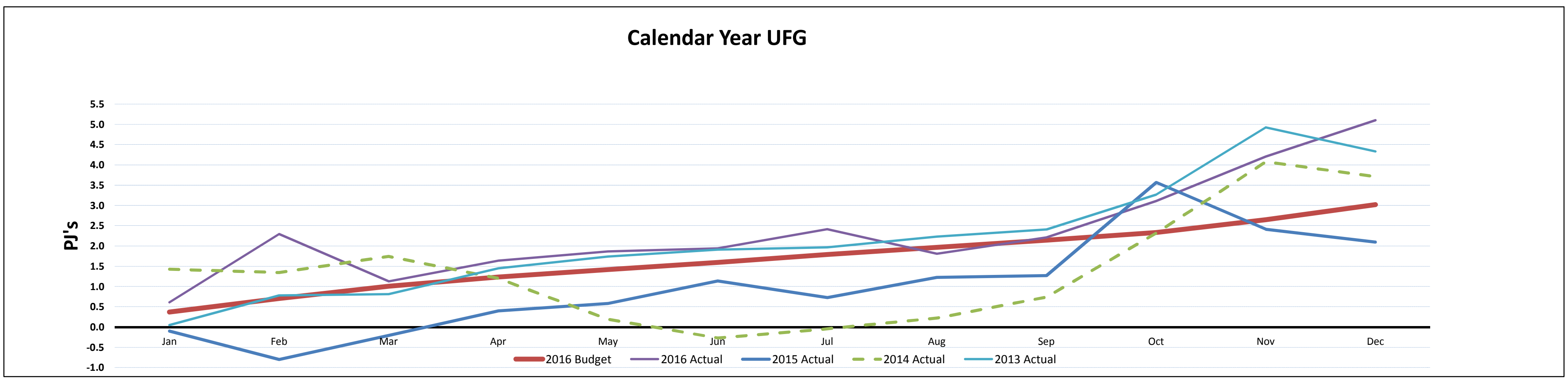
Consumption estimation variances will continue to be monitored and investigated

Notes:

1 PJ = ~$5.0M UFG is valued at Board Approved Reference Price

Annual UFG Budget is $15.2M (3.0 PJ)

	2016 Actual		**UFG Variance on EBITDA**			
	a	b	d	e	f	g = d + e
	$ Millions	**PJ's**	**Regulated Capped at $5M**	**Unregulated Excluded from $5M Cap**	**UFG Volume Deferral Account**	**UFG Variance on Financials**
Jan	2.9	0.6	(1.3)	(0.1)	0.0	**(1.4)**
Feb	7.9	1.7	(3.7)	(0.7)	(2.1)	**(4.5)**
Mar	(5.5)	(1.2)	3.7	0.7	2.1	**4.4**
Apr	2.2	0.5	(1.2)	(0.1)	0.0	**(1.3)**
May	1.0	0.2	(0.2)	(0.0)	0.0	**(0.2)**
Jun	0.3	0.1	0.3	0.1	0.0	**0.3**
Jul	2.1	0.5	(1.0)	(0.3)	0.0	**(1.3)**
Aug	(2.7)	(0.6)	3.1	0.5	0.0	**3.6**
Sep	1.8	0.4	(0.9)	(0.2)	0.0	**(1.1)**
Oct	4.4	0.9	(3.1)	(0.5)	0.0	**(3.6)**
Nov	5.4	1.1	(0.6)	(0.4)	(3.2)	**(1.0)**
Dec	4.4	0.9	0.0	(0.3)	(2.5)	**(0.3)**
YTD	**24.2**	**5.1**	**(5.0)**	**(1.4)**	**(5.7)**	**(6.4)**



UNION GAS LIMITED

Answer to Interrogatory from
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>
> *….*
>
> *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.*
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> *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.*
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extent that the cost of the measures used by Union to manage the shortfall are already covered in base rates, Y factors and/or existing deferral or variance accounts.

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

a) The forecasted amount of Dawn-Parkway capacity

b) The forecasted peak-day requirements

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

d) 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.

e) 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-b)

TJ/d	Winter 2014/2015	Winter 2015/2016	Winter 2016/2017	Winter 2017/2018
Capacity	6801	7014	7508	7923
Demand	6643	7049	7443	7783

c) Please see Attachment 1.

d) Union did not acquire incremental resources in any of the years listed to manage the Parkway delivery shortfall.

e) Union has not interrupted customers on the Dawn Parkway System in any of the winters requested.

Dawn-Parkway Capacity in 2017 Rates
Updated for W17/18 Dawn to Parkway Capacity of 7,923 TJ/d

Line No.	Particulars	Dawn-Parkway Capacity (TJ/d)
	Base Rates	
1	2013 Cost of Service	6,803
	2014-2018 IRM Y Factor Adjustments	
	Capital Pass-though Projects	
2	Brantford-Kirkwall / Parkway D Project	433
3	Dawn Parkway 2016 System Expansion Project	443
4	2017 Dawn Parkway Project (1)	457
5	Total Dawn-Parkway Capacity in Rates as Filed	8,135
6	Other Dawn-Parkway Capacity Changes (2)	(212)
7	Total Dawn-Parkway Capacity at W17/18	7,923

Notes:

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

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

Dawn-Parkway Capacity in 2016 Rates

Line No.	Particulars	Dawn-Parkway Capacity (TJ/d)
	Base Rates	
1	2013 Cost of Service	6,803
	2014-2018 IRM Y Factor Adjustments	
	Capital Pass-though Projects	
2	Brantford-Kirkwall / Parkway D Project	433
3	Dawn Parkway 2016 System Expansion Project (1)	443
4	Total Dawn-Parkway Capacity in Rates as Filed	7,678
5	Other Dawn-Parkway Capacity Changes (2)	(170)
6	Total Dawn-Parkway Capacity at W16/17	7,508

Notes:

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

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

UNION GAS LIMITED

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extent that the cost of the measures used by Union to manage the shortfall are already covered in base rates, Y factors and/or existing deferral or variance accounts.

For the last 3 calendar years, please provide the monthly revenues generated from Dawn-Parkway optimization and the amount of Dawn-Parkway utilized and the resulting average $/GJ/day of for each month.

Response:

For each of the last three calendar years, Union sold capacity on a short-term and interruptible basis throughout the year based on temporarily available capacity. The following tables provide the revenues, utilization and average rate by month from this activity on the Dawn Parkway System for the last three calendar years.

2014	January	February	March	April	May	June	July	August	September	October	November	December
Revenue ($ millions)	$ 1.09	$ 0.96	$ 0.87	$ 0.13	$ 0.03	$ 0.09	$ 0.13	$ 0.12	$ 0.11	$ 0.12	$ 0.43	$ 0.57
Utilization (PJ)	8.49	8.09	7.78	2.53	0.69	2.00	3.24	4.14	2.92	3.07	5.45	8.34
Average Rate ($/GJ/day)	$ 0.13	$ 0.12	$ 0.11	$ 0.05	$ 0.05	$ 0.04	$ 0.04	$ 0.03	$ 0.04	$ 0.04	$ 0.08	$ 0.07

2015	January	February	March	April	May	June	July	August	September	October	November	December
Revenue ($ millions)	$ 0.59	$ 0.95	$ 2.17	$ 0.78	$ 0.20	$ 0.22	$ 0.21	$ 0.21	$ 0.23	$ 0.23	$ 0.30	$ 0.31
Utilization (PJ)	7.76	6.68	11.89	2.66	5.90	6.79	6.55	6.68	4.31	4.01	2.87	2.93
Average Rate ($/GJ/day)	$ 0.08	$ 0.14	$ 0.18	$ 0.29	$ 0.03	$ 0.03	$ 0.03	$ 0.03	$ 0.05	$ 0.06	$ 0.10	$ 0.11

2016	January	February	March	April	May	June	July	August	September	October	November	December
Revenue ($ millions)	$ 0.46	$ 0.53	$ 0.43	$ 0.28	$ 0.20	$ 0.13	$ 0.16	$ 0.18	$ 0.68	$ 0.18	$ 0.41	$ 0.95
Utilization (PJ)	5.81	5.18	3.34	3.79	1.95	0.70	1.62	2.77	1.23	1.49	2.19	5.88
Average Rate ($/GJ/day)	$ 0.08	$ 0.10	$ 0.13	$ 0.07	$ 0.11	$ 0.18	$ 0.10	$ 0.07	$ 0.55	$ 0.12	$ 0.19	$ 0.16

The above tables include revenues earned on all Short-Term and Interruptible transportation contracts on the Dawn Parkway System. These revenues contain contracts which utilize various receipt and delivery points, as well as both westerly and easterly flow. As a result, the average rate ($/GJ/day) is not comparable to a firm M12 Dawn to Parkway rate.

UNION GAS LIMITED

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For each of the last 3 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.

Response:

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

The deferral balance of $2.822 million, as per the intent of the accounting order included in the 2016 Rates application, captures the variance associated with the timing differences between the effective date of the PDO and PDCI changes and the inclusion of the cost impacts in approved rates. In 2016, Union paid out $2.794 million to customers with obligated deliveries at Parkway related to the PDCI credit.

Effective January 1, 2017, Union included $17.559 million in rates related to the 2017 PDCI costs (EB-2016-0296).

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Pages 65-66 and EB-2013-0202, Exhibit A, Tab 1, Pages 35-36

Preamble: We would like to understand how this proposed disposition meets the definition of material difference and the criteria for a Z-factor adjustment in the Board-approved IRM Settlement Agreement.

Please provide Union's understanding of the Board's definition of material difference.

Response:

Union is not applying for treatment of regulatory costs imposed by the Board as a Z-factor adjustment. As per the approved accounting order, filed in the 2017 Rates Application (EB-2016-0245, Appendix F, p.34), the OEB Cost Assessment Deferral Account was created to record as a debit (credit) 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. The amount recorded in the deferral account represents this difference. The change represents an annual increase of 44%.

UNION GAS LIMITED

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Preamble: We would like to understand how this proposed disposition meets the definition of material difference and the criteria for a Z-factor adjustment in the Board-approved IRM Settlement Agreement.

Please provide Union's interpretation of the qualification of this request in meeting the criteria established in the Settlement Agreement.

Response:

Please see the response at Exhibit B.FRPO.8.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Table 2

a) How much of the UDC costs incurred shown in line 1 of Table 2 for each of Union North and Union South is attributable to warmer than normal weather?

b) Other than the weather and the UDC collected in rates, shown in Table 1, what are the other drivers of the UDC costs incurred in each of the north and south?

Response:

a) The total UDC costs, as shown in line 1 of Table 2 for Union North and Union South, attributable to warmer than normal weather, are $3.1 million and $1.9 million respectively.

b) In each of Union North and Union South, factors driving unutilized capacity other than weather and planned UDC in rates include variances in forecasted demand, unaccounted for gas and company use.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, page 7

The evidence states that the main driver of actual sales service volumes exceeding the forecasted amount is customer growth since 2013. Please provide an estimate of the actual sales service volume that is in excess of the forecasted amount into the following categories: customer growth, return to system gas from direct purchase, changes to average use due to DSM and other factors, and other.

Response:

There is an increase in the 2016 actual sales service volumes of 681,052 10^3m^3 from the 2013 Board Approved sales service volumes.

	Volume (10^3m^3)
Growth	191,352
Return to System	1,105,169
Usage	(660,664)
Other	45,195
	681,052

UNION GAS LIMITED

Answer to Interrogatory from
London Property Management Association (“LPMA”)

Reference: Exhibit A, Tab 1, Table 6

a) Please provide a table that shows the actual (non-normalized) average consumption for each of the rate classes shown in Table 6 for the last 10 years.

b) Please provide a table that shows the actual normalized average consumption for each of the rate classes shown in Table 6 for the last 10 years.

c) Please provide a table that shows for each of the last 10 years, the actual number of heating degree days and the forecasted number of heating degree days using the current Board approved methodology. If more than one set of heating degree days is used (for example, north and south), please provide the requested table for each set of heating degree days.

Response:

a)

Actual Average Comsumption (Non-Normalized)

Particulars (m^3)	Rate 01	Rate 10	Combined M1/M2	Rate M1	Rate M2
2007	3,032	132,062	4,082		
2008	3,124	153,057	4,176	3,060	189,638
2009	3,045	149,667	3,976	2,908	174,421
2010	2,737	145,575	3,729	2,737	155,960
2011	2,921	159,621	3,912	2,838	171,622
2012	2,685	157,421	3,422	2,470	152,757
2013	3,049	176,009		2,869	174,895
2014	3,216	186,900		3,114	185,199
2015	2,885	165,898		2,793	168,399
2016	2,678	153,911		2,535	152,150

b)

Actual Normalized Average Consumption

Particulars (m^3)	Rate 01	Rate 10	Combined M1/M2[1]	Rate M1	Rate M2
2007	3,101	134,099	4,185		
2008	3,119	152,606	4,091		
2009	3,072	150,299	3,980		
2010	3,015	157,204	3,875		
2011	3,034	165,323	3,971		
2012	3,011	171,980	3,812		
2013	2,900	168,975		2,768	169,422
2014	2,923	172,516		2,748	167,537
2015	2,799	162,078		2,676	163,129
2016	2,788	159,855		2,667	159,933

1 During the 2008-2012 IR, the weather normalization was done for the combined M1/M2 rates classes

c)

Heating Degree Days

Particulars (HDD)	Actual		Weather Normal	
	South	North	South	North
2007	3,700	4,888	3,822	5,090
2008	3,869	5,040	3,822	5,090
2009	3,824	5,049	3,822	5,090
2010	3,574	4,462	3,822	5,090
2011	3,695	4,741	3,822	5,090
2012	3,274	4,367	3,822	5,090
2013	3,875	5,131	3,695	4,838
2014	4,221	5,361	3,644	4,782
2015	3,834	4,912	3,681	4,832
2016	3,510	4,628	3,780	4,930

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 21-22

a) For each rate class (M1, M2, 01 & 10), please provide a table that shows the monthly difference in the average use figures that were used to generate the NAC volume variances shown in the explanations. Please also show the customer figures used in the calculation of the NAC volume variances.

b) For each rate class (M1, M2, 01 & 10), please show the aggregate excess calculations that result in the increased/decreased storage requirements shown in the evidence.

Response:

a) Please see Table 1 below for monthly 2013 Board-approved customer figures used in the calculation of the NAC volume variances.

Please see Attachment 1 for the monthly volume changes due to changes in usage.

Table 1
2013 Board-approved Customers by Rate Class

	Rate Class			
Month	M1	M2	01	10
Apr-16	1,042,203	6,753	313,969	2,094
May-16	1,043,838	6,761	314,294	2,064
Jun-16	1,043,360	6,891	314,390	2,064
Jul-16	1,044,840	6,777	314,919	2,059
Aug-16	1,045,099	6,589	314,832	2,078
Sep-16	1,046,214	6,703	315,081	2,042
Oct-16	1,046,704	6,685	315,705	2,046
Nov-16	1,049,233	6,691	316,830	2,042
Dec-16	1,052,271	6,721	317,756	2,047
Jan-17	1,052,461	6,724	318,095	2,042
Feb-17	1,053,700	6,820	318,403	2,047
Mar-17	1,055,215	6,823	318,627	2,048

b) Please see Attachment 1.

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

	Rate M1	Rate M2	Rate 01	Rate 10	Total
Apr-16	-12,102	16,403	1,172	-808	4,664
May-16	-5,064	25,630	717	271	21,553
Jun-16	-3,263	20,971	2,748	3,926	24,382
Jul-16	-544	9,723	484	2,814	12,476
Aug-16	-3,665	12,256	-1,011	3,591	11,172
Sep-16	-12,746	13,801	-917	3,892	4,029
Oct-16	-21,894	27,840	615	3,799	10,361
Nov-16	-5,322	29,942	795	1,494	26,909
Dec-16	-6,128	-2,589	-1,857	384	-10,190
Jan-17	-3,566	-16,418	4,088	381	-15,514
Feb-17	2,692	-9,000	1,163	1,354	-3,792
Mar-17	-8,732	1,565	2,795	-1,993	-6,366
Total	-80,334	**130,123**	**10,791**	**19,105**	**79,685**
Convert to PJs (Note 1)	-3.12	**5.05**	**0.41**	**0.73**	

Aggregate Excess Impact - Volume Change due to change in Usage

	Rate M1	Rate M2	Rate 01	Rate 10	Total
Annual	-80,334	130,123	10,791	19,105	79,685
(/365*151)	-33,234	53,832	4,464	7,904	32,966
Winter	-21,056	3,500	6,983	1,620	-8,953
Storage Impact (in 10^3m^3	12,178	-50,332	2,519	-6,284	-41,918
Convert to GJs	472,625	-1,953,367	96,381	-240,421	-1,624,782
Total Aggregate Excess Impact (GJs)	**472,625**	-1,953,367	**96,381**	-240,421	-1,624,782
Total Aggregate Excess Impact (PJs)	**0.47**	-1.95	**0.10**	-0.24	-1.62

Note 1: Apr. 1/16 heat value conversion rate for M1/M2 = 38.81/1,000,000
Apr. 1/16 heat value conversion rate for 01/10 = 38.26/1,000,000

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 25-27

a) Please explain why there is no savings associated with compressor fuel shown in Table 9.

b) How did Union take into account the different percentages noted (75% and 50% shown on page 25) for the first and second half 2016?

Response:

a) With the inception of HST in July 2010, Union is required to assess HST on its own-use compressor fuel. The assessment is calculated by applying HST to the difference between compressor fuel used and customer supplied fuel. When customer supplied fuel exceeds compressor fuel used no HST is assessed on own-use compressor fuel.

   There are no savings associated with compressor fuel in 2016 due to warmer than normal weather which caused customer supplied fuel to exceed compressor fuel used and therefore no HST was assessed.

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

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 27-28

a) To what does Union attribute the near doubling of the UFG percentage in 2016 as compared to the 2013 Board approved figure?

b) Please provide the actual UFG percentage for the last 10 years.

Response:

a) Please see the response at Exhibit B.Staff.9. b).

b) Please see the response at Exhibit B.Staff.9. a).

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, page 34

a) Please confirm that the 3.82% was the average long term debt rate for 2015. If not confirmed, please explain the statement at lines 4-6.

b) What was Union's average long term debt rate for 2016?

Response:

a) Confirmed.

b) Please see the response at Exhibit B.Staff.18.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Table 13

Are there any further capital expenditures associated with Parkway West incurred or expected to be incurred in 2017? If yes, quantify and explain what the expenditures are for.

Response:

Yes there will be further capital expenditures in 2017. Expenditures related to final cleanup, resolution of Heritage Houses on site and confirmation that all permit conditions have been met are forecasted to be approximately $5.0 million in 2017.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Table 16

Are there any further capital expenditures associated with Brantford-Kirkwall/Parkway D incurred or expected to be incurred in 2017? If yes, quantify and explain what the expenditures are for.

Response:

Please see the response at Exhibit B.SEC.4 b).

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 27-28 & page 52

a) Please reconcile the .427% UFG volume percentage noted on page 27 with the volumes shown in Table 17.

b) Please reconcile the Board approved cost of $11.676 million, the actual cost recovery of $10.784 million and the actual cost of $20.969 of UFG noted on pages 27-28 with the volumes and rates shown on page 52.

Response:

a) Table 17 refers to Union's 2016 UFG Price Deferral. The 0.427% is the actual UFG incurred as a percentage of total throughput for fiscal 2016. The UFG volume of 131,588 can be seen on reconciliation for part b and represents 0.427% of total throughput. The volume of 100,419 is 76.331% of total experienced UFG for 2016 included in the Board approved rates relating to T1, T2, T3 and ex-franchise customers for which Union supplies fuel.

b) Please see the table below.

2016 Unaccounted for Gas

	2016 Board Approved Rates	**2016 Actual Cost Recovery**	**2016 Actual**
UFG %	0.219%	0.219%	0.427%
Throughput (103m3)	32,009,650	30,835,935	30,835,935
UFG Volume (103m3)	70,253	67,677	131,588
Approved Reference Price (WACOG)	$183.678	$183.678	$183.678
2016 UFG Expense	$12,903,931	$12,430,773	$24,169,844
Less: L/T Non-Utility Allocation	$908,437	$1,301,502	$2,530,583
S/T Excess Utility Allocation	$318,727	$344,332	$669,505
Net 2016 Utility UFG Expense	**$11,676,767**	**$10,784,939**	**$20,969,757**

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pages 34 & 48

Please explain the difference between the long term debt rate of 3.82% noted on page 34 and the 3.36% noted on page 48. Are these rates both based on 2015?

Response:

Please see the response at Exhibit B.Staff.18.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, Table 19

Please provide a table in the same level of detail as Table 19 for the Lobo C Compressor/Hamilton-Milton Pipeline project that shows the Board approved capital expenditures and the current projection for the final expenditures, including the most recent year-to-date actuals available for 2017.

Response:

Line No.	Particulars ($000's)	2015 Actuals	2016 Actuals	2017 Actuals (up to June 30th)		Remaining Forecast	Total	Total Board Approved	Variance
		(a)	(b)	(c)		(d)	(e)	(f)	(g) = (e-f)
	Lobo C Compressor								
1	Land		3,273	1			3,274	3,000	274
2	Structures	614	19,997	(803)	[1]		19,808	21,819	(2,011)
3	Pipelines	7,577	4,080	33			11,690	8,224	3,466
4	Compressor Equipment	5,867	111,706	6,458		450	124,481	126,636	(2,155)
	Hamilton-Milton Pipeline								
5	Land		6,539				6,539	5,253	1,286
6	Land Rights		1,232			1,500	2,732	4,132	(1,400)
7	Structures			1			1		1
8	Pipelines		167,327	3,076		8,634	179,037	221,652	(42,615)
9	Total Capital Expenditures	14,058	314,154	8,766		10,584	347,562	390,716	(43,154)

[1] Reclassification of 2016 costs between Structures and Compressor Equipment in 2017.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, page 59

Please explain why Union has used a long term debt rate of 4%.

Response:

Please see the response at Exhibit B.Staff.18.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 2

Please explain any changes Union has made in financial accounting and/or regulatory accounting that impacts the 2016 figures relative to the Board Approved 2013 figures.

Response:

Union has not made any changes in financial and/or regulatory accounting that impact the 2016 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

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, Appendix B, Schedule 1

What was Union's normalized actual return on equity for 2016?

Response:

Please see the response at Exhibit B.Energy Probe.6 b).

UNION GAS LIMITED

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

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

a) Please explain the approximate $21 million increase in DSM program costs in 2016 relative to 2015.

b) How was this increase in DSM costs factored into 2016 rates?

Response:

a) Please see the response at Exhibit B.Energy Probe.3.a).

b) Union included the 2016 Board-approved DSM budget amount of $56.8 million in 2016 rates per Union's 2015-2020 DSM Plan proceeding (EB-2015-0029). Any variance between the 2016 DSM budget in rates and the 2016 DSM actual costs will be considered as part of the 2016 DSM Deferral Account Disposition proceeding.

UNION GAS LIMITED

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

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

Did Union incur any expenses in 2016 related to its community expansion application filed in EB-2015-0179, including the updating of evidence or any other impacts related to the EB-2016-0004 Decision related to the Generic Proceeding on Community Expansion, including but not limited to regulatory costs, customer/municipality meetings and project design costs?

If yes, please provide an estimate the costs incurred in 2016.

Response:

There were no costs incurred in 2016 related to EB-2015-0179.

UNION GAS LIMITED

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

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

Union's SQR for the number of days to reconnect a customer was below 85% in 6 out of the 12 months in 2016, mainly in the fall and winter months. What steps has Union taken to increase this figure in those seasons?

Response:

Please see the response at Exhibit B.Staff.22.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 3, page 2

With respect to the unabsorbed demand variance account, it appears that the allocation in the north is based on 2013-Board approved figures, while in the south, the proposal is based on forecasted figures. Please explain why the south allocation is not based on 2013 Board approved volumes for sales service customers.

Response:

In Union South, upstream transportation costs are recovered from sales service customers in common gas supply commodity charges for all rate classes. The allocation of the UDC Variance Account and Upstream Transportation Optimization Deferral Account to Union South rate classes uses the same forecast of volumes over the six month disposition period as the derivation of the unit rates for prospective recovery of gas supply commodity-related deferral balances. By using the forecast sales service volumes over the same six month period, Union generates a common unit rate for disposition, which is consistent with the common gas supply commodity charges for all Union South sales system customers.

In Union North, upstream transportation costs are recovered from sales service and bundled direct purchase customers in storage and transportation rates. The allocation of the UDC Variance Account and Upstream Transportation Optimization Deferral Account to Union North rate classes uses the 2013 Board-approved cost allocation methodologies, which is consistent with the allocation of these costs in approved rates.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 3, pages 3-4

With respect to the upstream transportation optimization revenues, it appears that the allocation in the north is based on 2013-Board approved figures, while in the south, the proposal is based on forecasted figures. Please explain why the south allocation is not based on 2013 Board approved volumes for sales service customers.

Response:

Please see the response at Exhibit B.LPMA.20.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, page 7

Preamble: Account No. 179-131 Upstream Transportation Optimization

In setting rates for 2016, the Board-approved a forecast of optimization revenue of $14.918 million. Of that amount, 90%, or $13.426 million, was credited to ratepayers in the Board-approved 2016 rates. On an actual basis, consistent with the method approved in its EB-2011-0210 Decision and Rate Order, Union credited $14.668 million in rates to ratepayers during 2016, $1.242 million greater than the Board-approved amount of $13.426 million. The credit is due to Union's actual sales service volumes exceeding the forecast sales service volumes in rates. The main driver of actual sales service volumes exceeding the forecasted amount is customer growth since 2013.

a) Please explain why it is that the apparent excess credit in rates of $1.242 million as a result of actual sales service volumes exceeding the forecasted amount is not offset by a corresponding over-collection in rates on debit items? In other words, why is it appropriate for Union to benefit from volume risk on debit items built into rates, but be protected from volume risk on this credit item?

Response:

a) Consistent with both the deferral accounts disposed of through the QRAM and the UDC deferral account (No. 179-108), the Upstream Transportation Optimization deferral account (No. 179-131) is a gas supply-related deferral account in which the actual costs (or credits) flow through to ratepayers as a pass-through item.

The Upstream Transportation Optimization deferral account was approved by the Board in its January 17, 2013 EB-2011-0210 Decision (Union's 2013 cost of service application). In its decision, the Board referenced Union's reply submission which described that:

> "*the resulting balance in the account will be the variance between the actual optimization revenue to be refunded and the actual amount refunded in approved rates..... ensures there is no gain or loss resulting from the credit for upstream optimization included in rates*".

The Board found that:

> "*the accounting order entries and description adequately reflect the purpose and operation of the account.*"

Union's calculation of the balance in the Upstream Transportation Optimization deferral account is consistent with the Board's findings in EB-2011-0210 and the manner in which Union has calculated (and the Board has approved) the deferral account balance in previous annual deferral account disposition proceedings.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, page 69

Preamble: Account No. 179-152 Greenhouse Gas Emissions Impact Deferral Account

As outlined in Union's December 17, 2015 letter to the Board, examples of the types of costs for inclusion in the GGEIDA include, but are not limited to: emissions reporting compliance costs, external consultant costs, and implementation costs, including additional salaries and employee expenses.

a) Please confirm that Account No. 179-152 only captures Union's direct costs associated with complying with its Greenhouse Gas Emissions related obligations, and does not capture the impacts of Greenhouse Gas Emission related obligations on Union's or its customers' use of natural gas, i.e. this account does not track declining use of natural gas as a result of programs implemented by Union or any other party. If not confirmed please explain which impacts are proposed to be captured in the account and how they would be captured.

b) Assuming it is confirmed in part a) that the impacts of Greenhouse Gas Emission related obligations on Union's or its customers' use of natural gas are not captured in Account No. 179-152, please identify the accounts, if any, where such impacts are captured.

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, p.23

Please explain the drivers in the variance between actual and target NAC.

Response:

Please see the response at Exhibit B.Staff.8.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, p.27

Account No. 179-135 Unaccounted for Gas ("UFG") Volume Deferral:

a) Please explain the cause of the increase in UFG percentage from 0.219% (2013 Board approved) to 0.427 (2016 actuals).

b) What is Union doing to reduce UFG?

Response:

a) Please see the response at Exhibit B.Staff.9 b).

b) Please see the response at Exhibit B.Staff.9 c).

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, p.28-36

With respect to Account No. 179-136 Parkway West Project Costs:

a) [p.31] Please provide further details regarding the difference in LCU capital costs as compared to approved.

b) [p.32] Does the applicant expect further expenditures to be incurred for the Parkway West project after 2016 that would be eligible for inclusion in the variance account? If so, please provide details.

c) What is the forecasted final cost of the project, if it has not yet been fully completed?

Response:

a) The total Board approved costs for the Parkway West Project at December 31, 2016 was $219.430 million compared to the actual costs of $228.001 million resulting in a variance of $8.571 million. There was an increase in the construction costs totalling $18.177 million. The estimate for this work was based on preliminary design therefore the estimate did not include all of the requirements of the project at the time of the estimate. Please see the evidence at Exhibit A, Tab 1, p. 36 lines 1-16 for additional details. In addition, permitting costs added to the additional work required by the contractor as well as miscellaneous labour. Miscellaneous labour to support the design, construction and permitting increased costs by $11.250 million. These additional costs were offset by the project contingency included in the estimate of $21.631 million, however the contingency amount was not enough to cover the extent of the work required at the greenfield site.

b) Yes, $4.819 million expenditure is expected in 2017 for final cleanup, resolution of Heritage Houses on site and confirmation that all permit conditions have been met.

c) The forecasted final cost of the Parkway West Project is $232.820 million.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, p.36-44

With respect to Account No. 179-137 Brantford-Kirkwall/Parkway D Project Costs:

a) [p.39] Please provide further details regarding the difference in actual compressor capital costs as compared to approved cost.

b) [p.43] Does the applicant expect further expenditures to be incurred for the Brantford-Kirkwall/Parkway D Project after 2016 that would be eligible for inclusion in the variance account? If so, please provide details and a forecast of those costs.

c) What is the forecasted final cost of the project, if it has not yet been fully completed?

Response:

Parkway D Costs:

a) The total Board Approved costs for the Parkway D project to December 31, 2016 were $108.020 million compared to the actual project costs of $94.044 million. The actual cost of the Parkway D compressor project was less than the Board approved level as the contingencies included in the original estimate for unforeseen expenditures were not required. This more than offset the higher actuals costs for the Brantford-Kirkwall pipeline portion of the project.

b) Yes, we expect further expenditures in 2017 totalling $0.272 million for final cleanup.

c) The forecasted final cost of the project is $94.316 million

Brantford-Kirkwall Costs:

a) Not applicable.

b) Yes, we expect further expenditures in 2017 of $0.050 million for final cleanup (e.g., planting replacement trees).

c) The forecasted final cost of the project is $103.035 million. The total for both portions of the project is $197.351 million.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, p.48-54

With respect to Account No. 179-142 Lobo C Compressor/Hamilton-Milton Pipeline Project Costs:

a) Does the applicant expect further expenditures to be incurred for the Lobo C Compressor/Hamilton-Milton Pipeline Project after 2016 that would be eligible for inclusion in the variance account? If so, please provide details and a forecast of those costs.

b) What is the forecasted final cost of the project, if it has not yet been fully completed?

Response:

Please see the response at Exhibit B.LPMA.12.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, p.71

With respect to No. 179-152 Greenhouse Gas Emissions Impact Deferral Account ("GGEIDA"):

a) Please provide the title and a brief job description of each of the listed FTEs.

b) Please confirm that each one of those positions is incremental, and if the employees holding those positions were previously employed by Union, their most recent position was filed around the time they took their new GHG related position.

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 2, p.4

Please provide all costs included in the ESM calculation related directly or indirectly to the merger of Spectra Energy and Enbridge Inc.

Response:

Please see the response at Exhibit B.Staff.19.

UNION GAS LIMITED

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

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

Please explain the variances between 2016 and 2015 actuals related to the following expenses:

a) Demand Side Management Programs
b) Inbound Affiliate Services

Response:

a) Please see the response at Exhibit B.Energy Probe.3.a).

b) The major drivers that contribute to the $2 million increase in Inbound Affiliate Services from 2015 to 2016 are:
    - a $0.8 million increase in IT costs (increased Data Centre Consolidation costs offset by lower general IT service expenses);
    - a $0.6 million increase in Internal Audit services costs (new for 2016); and,
    - a $0.5 million increase in procurement and supply chain services.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pg.6

a) Please amend Table 2 to show the 2015 UDC Costs Incurred.

b) Please compare and explain the variation for lines 1 through 3 for 2015 as compared to 2016 costs.

Response:

a) Please refer to the table below amended to reflect 2015 and 2016 UDC costs.

		2015			2016		
Line No.	Particulars ($000's)	Union North	Union South	Total Costs	Union North	Union South	Total Costs
1	UDC Costs Incurred	7,887	2,017	9,905	17,012	2,556	19,569
2	Released Capacity Value	(2,688)	(572)	(3260)	(9,057)	(1,394)	(10,451)
3	CTHI/CPMI Contracted Capacity Credit	(618)	0	(618)	(652)	0	(652)
4	Net UDC Costs (Credit)/Debit	4,581	1,445	6,027	7,304	1,162	8,466

b) The actual unutilized capacity in 2015 was 13.4 PJ. The actual unutilized capacity in 2016 was 31.5 PJ. The UDC costs incurred (line 1) in 2016 are greater than 2015 primarily due to increased unutilized capacity. Similarly, the released capacity value (line 2) is greater primarily due to an increase in capacity available to release to the market as well as market factors affecting the value of the capacity released to the secondary market.

The difference in CTHI / CPMI contracted capacity credit between 2016 and 2015 is related to a change in tolls.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pg.7
Table 1, Appendix A, Schedule 2

With respect to the Transportation Optimization Deferral Account (1779-131) please explain the cause of the significant decrease in Base Exchange revenue from 2013 to 2016.

Response:

The decrease is due to elimination of the TransCanada FT-Ram program, and warmer weather. Please see the response at Exhibit B.Staff.4.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pg.10

a) At the above reference it states: "*The storage requirement for the contract market was calculated using* ***either*** *the Board-approved aggregate excess methodology or the 15 times obligated Daily Contracted Quantity ("DCQ") storage methodology*" (emphasis added). Please explain why one methodology is not consistently used.

b) What is the difference in storage requirements as between the two methodologies? Is there a material difference?

Response:

a) The aggregate excess methodology calculates a standard amount of storage space to meet seasonal load balancing needs. In its Decision With Reasons EB-2005-0551 (Natural Gas Electricity Interface Review "NGEIR"), the Ontario Energy Board directed Union to develop a storage allocation methodology for customers that do not have a seasonal load balancing need. As a result of this direction, Union created the "15 times obligated Daily Contracted Quantity" methodology. Since each methodology is intended for different customer types, it would not be appropriate to only use one method to calculate the amount of storage required for the contract market.

b) Union has not calculated a total storage requirement if all customers were assumed to use only one methodology. This comparison is not considered relevant as both methodologies are available for customers.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pg.15

a) Please explain the need for the continuation of Account No. 179-120 IFRS Conversion costs.

b) When does Union expect to convert to IFRS accounting standards?

Response:

Pursuant to the terms of exemption orders granted to Union, the exemptive relief to report under U.S. GAAP will terminate on the earliest of:

a) January 2019;
b) if Union ceases to have activities subject to rate regulation, the first day of the Issuer's financial year that commences after the Issuer ceases to have activities subject to rate regulation; or
c) the effective date prescribed by the International Accounting Standards Board ("IASB") for the mandatory application of a standard within International Financial Reporting Standards ("IFRS") specific to entities with rate-regulated activities.

Union is currently evaluating the merits of an application to make unconditional and permanent the relief previously granted to permit the continued use of U.S. GAAP in the preparation of financial statements.

If Union is not successful in obtaining a U.S. GAAP reporting exemption beyond 2019, Union will explore other options, including transitioning to IFRS. At this point in time it would be premature to close Account No. 179-120.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pg.22

Please explain how Union determined that "*the majority of the NAC volume variance increase incurred in the summer months*".

Response:

Union assumes that the interrogatory references the change in storage requirements for the Rate M2 and Rate 10 rate classes.

As described in evidence, the storage costs included in the NAC deferral account recognize that variances between the 2016 target NAC and the 2013 Board-approved NAC volumes change the storage requirements for each general service rate class. To determine the change in storage requirements due to NAC variances, Union calculated the NAC volume variance per customer between its 2016/2017 Gas Supply Plan and the 2013 Board-approved volumes multiplied by the 2013 Board-approved number of customers.

As the NAC information is available on a monthly basis, Union is able to derive the NAC volume variance for winter (November through March) and summer (April through October). Please see the response at Exhibit B.LPMA.4, Attachment 1. The summer months account for the following percentage of the total annual volume variance:

- Rate M2 – 97%
- Rate 10 – 92%

Accordingly, the storage requirements (and storage costs) for Rate M2 and Rate 10 decreased by 1.95 PJ and 0.24 PJ, respectively.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pg.33

a) Please provide a breakdown of the $4.934 million budget overrun for the LCU compressor unit.

b) Please explain what "commissioning" costs are.

Response:

a) The breakdown of the $4.934 million budget overrun for the LCU Compressor is as follows; main contractor and miscellaneous labour of $5.001 million offset by contingencies of $0.067 million.

b) Commissioning costs are costs charged to the project for services provided by 3rd party vendors as well as company labour and material required to test the equipment to ensure the equipment is operating safely and efficiently.

These costs include items such as:
- Ensuring the equipment meets design standards;
- reviewing the operation of the installed equipment;
- ensuring all vendor documentation is received; and
- any required modifications to the equipment as a result of the testing.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pg. 46

Please explain why Union is not requesting the closure of Account No. 179-139 Energy East Pipeline Consultation Costs?

Response:

Typically Union would request closure of a deferral account as part of its annual rate setting process. If appropriate, Union will propose to close the Energy East Pipeline Consultation Deferral Account as part of the 2018 Rates Application.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pg.54

How many customers were charged penalties for Unauthorized overrun in 2016?

Response:

Unauthorized overrun non-compliance charges were billed to four customers in 2016.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pg.53-60

With respect to Account 179-142 (Lobo C/Hamilton-Milton Pipeline) Union states that "*The 2016 actual required return calculation was derived using a capital structure of 64% long-term debt at 3.36%, and 36% equity at the Board-approved rate of return of 8.93%*." Whereas for Account No 179-144 (Dawn H et al) Union states that: "*The 2016 actual required return calculation was derived using a capital structure of 64% long term debt at 4.0% and 36% common equity*" Similarly for Account 179-149 (Burlington-Oakville) a 4.4% long-term debt rate is used to calculated the required return. Please explain why different long-term debt rates are used for calculating the required returns on these various accounts.

Response:

Please see the response at Exhibit B.Staff.18.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 1, pg. 74

a) Has the Board reviewed the costs of Union's implementation of Cap & Trade/GHG (i.e. Account 179-151) in any other proceeding? If yes please provide the amounts that have been previously approved.

b) What are the costs related only to the Technology and Innovation group (pg. 74).

c) Please explain why Union is expending resources on "t*he pursuit of new technologies and innovations that could result in GHG emissions reductions in the province*". Specifically why is this activity the responsibility of the gas utility and how does the activity benefit ratepayers?

Response:

As per the Board's Procedural Order No. 2, Union is not required to respond to this interrogatory.

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 2, Table 1, pg.3
Appendix A, Schedule 2, Schedule 13

OM&A expenses as between 2015 and 2016 have increased by almost 4% ($382.9 to $397.8). This is significantly higher than inflation (CPI) during the same period. What are the main drivers of the increase in OM&A expenses?

Response:

The main drivers for the increase in OM&A expenses from 2015 to 2016 are:

- $21.4M Demand Side Management Programs - a result of decision and order (EB-2015-0029/EB-2015-0049)

- ($5.8M) Capitalization – increased allocations to capital as a result of the increase in capital work related to the Dawn-Parkway expansion projects

UNION GAS LIMITED

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

Reference: Exhibit A, Tab 3, pg.8

Given the large increase in unaccounted for gas please explain why using the 2013 allocation of costs to allocate the balance of account 179-141 is proper. Specifically, how does Union understand which classes have caused the unusual /large increase in UFG?

Response:

Union's proposed allocation of the UFG Price Variance account (179-141) to rate classes is reasonable because it is consistent with the manner in which UFG costs are included in rates, with exception to the exclusion of customers that provide their own fuel. Customers that provide their own fuel are excluded from the UFG Price Variance account allocation per the Board Decision in Union's 2013 Deferral proceeding (EB-2014-0145), which stated that the UFG Price Variance Account should be allocated in the same way as the underlying costs.

As the cause of UFG is not known, Union's allocation methodology of UFG costs to rate classes is based on all storage and transmission volumes, which allows Union to recover UFG from all customers based on usage.