August 24, 2012

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

Re: EB-2011-0210 – Union's 2013 Rates Application – Interrogatory Correction

Dear Ms. Walli:

Please find attached an updated Exhibit J.G for the above noted proceeding. A correction has been made to J.G-5-13-1 Attachment 1. The correction was provided to parties at the oral hearing on Friday, July 27, 2012.

If you have any questions, please contact me at (519) 436-5476.

Yours truly,

[original signed by]

Chris Ripley
Manager, Regulatory Applications

CC: EB-2011-0210 Intervenors
Crawford Smith (Torys)

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Ref: Exh G3/Tab 1/Sch 2

a) Please explain the adjustments made in Exhibit G3 / Tab 1 / Sch 2 between the statement of utility income and the cost study.

Response:

Adjustments are made to Customer Supplied Fuel, Compressor Fuel and Taxes to reconcile the Statement of Utility Income to the cost study. Please see Attachment 1.

Customer Supplied Fuel and Compressor Fuel Adjustments

The Statement of Utility Income includes the net of customer supplied fuel and compressor fuel in Cost of Gas expense. The net difference represents a reduction to the Cost of Gas expense of $0.351 million (line 4, column a).

The cost study does not net customer supplied fuel revenue and compressor fuel costs in Cost of Gas expense. The customer supplied fuel of $30.443 million is included in Transportation revenue (line 1, column b) and the compressor fuel costs of $30.426 million are included in Operating and Maintenance expenses (line 7, column b). The compressor fuel costs include $30.092 million plus a $0.334 million increase in Union's Phase II filing. The $0.334 million increase to the compressor fuel budget accounted for Rate M12 transportation activity that was not included in the Phase I compressor fuel budget (line 6, column b).

Therefore, the difference between the Statement of Utility Income and the cost study reflects the Phase II compressor fuel adjustment of $0.334 million (line 9, column c).

Taxes

The Statement of Utility Income includes $6.574 million in income tax, which is the $21.743 million in utility income taxes less the $15.169 million in deferred tax drawdown.

The cost study includes the utility income taxes and the deferred tax drawdown on separate line items. The cost study also includes $18.009 million for the provision for income tax on the deficiency, which is provided at Exhibit F3, Tab 1, Schedule 1, line 6.

Reconciliation of Statement of Utility Income to Cost Study - 2013
Customer Supplied Fuel and Compressor Fuel Adjustments

Line No.	Particulars ($000's)	Adjustments	Statement of Utility Income	Cost Study	Variance
			(a)	(b)	(c) = (b - a)
	Revenue				
1	Transportion Revenue	Customer Supplied Fuel	0	30,443	30,443
	Operating Expenses				
2	Cost Of Gas	Customer Supplied Fuel	(30,443)	0	30,443
3		Compressor Fuel	30,092	0	(30,092)
4	Total Cost of Gas		(351)	0	351
5	Operating and Maintenance	Compressor Fuel	0	30,092	30,092
6		Compressor Fuel Adjustment	0	334	334
7	Total Operating Maintenance		0	30,426	30,426
8	Total Operating Expenses		(351)	30,426	30,777
9	Utility Income Before Taxes		351	17	(334)

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Ref: Exh H1/Tab 1 / pp.50-52

Union noted that it has reviewed the cost allocation and rate design association with the M12-X, Firm C1 Kirkwall to Dawn and M12/C1 Kirkwall to Parkway transportation services. Union stated that, based on this review, it is not proposing any changes to the M12-X or the M12/C1 Kirkwall to Parkway cost allocation and rate design.

In regards to the M12-X service, Board staff submitted in EB-2010-0296 that Union's proposal to allocate all of the costs related to the facility modifications to C1 Kirkwall to Dawn customers, when the facility modifications are required to provide both C1 and M12-X services, raises some concerns regarding Union's compliance with cost allocation principles. However, Board staff submitted that given the relatively small annual revenue requirement ($0.266 million) related to the facility modifications and Union's uncertainty, at this time, regarding how shippers plan to use the new transportation services, Board staff supported Union's proposal to review cost allocation and rate design for the new transportation services at the time of rebasing.

In its EB-2010-0296 Decision and Order, the Board agreed with the submission of Board staff that Union's proposal to allocate all of the costs related to the facility modifications to C1 Kirkwall to Dawn customers raises concerns regarding Union's compliance with cost allocation principles.

a) Please provide an update on how M12-X shippers have been using (and are forecast to use) the service. Please confirm that the assets built as part of the facility modifications noted above are not being used to provide service to M12-X customers. Please explain why no facility modification costs have been allocated to M12-X customers.

b) Please provide rationale for maintaining the approved cost allocation and rate design for the M12/C1 Kirkwall to Parkway transportation services.

Response:

a) Historical activity for M12-X service is provided below. Customers electing Kirkwall as a receipt point will require the use of the facility modifications at Kirkwall.

Please see the response at Exhibit J.H-1-1-1.

All M12-X activity up to April 17, 2012

	Path		Quantity (GJ)		
	From	To	2011	2012 YTD	Total
Total M12-X	Dawn-TCPL	Parkway	13,200,003	9,403,081	22,603,084

b) As per Union's Board-approved cost allocation methodology, the costs of the Kirkwall metering facilities are allocated to rate classes based on commodity kilometres (i.e. distance-weighted demands). This cost allocation methodology recognizes that the Dawn-Parkway system is designed to meet Easterly peak day requirements and that rate classes use the Dawn-Parkway system to varying degrees depending on their design day demands and the distance those design day demands are required to be transported.

As the Kirkwall metering facilities are required to meet easterly peak day demands, Union is proposing to allocate the costs consistent with the allocation of all Dawn-Trafalgar transmission demand costs.

The "commodity-kilometres" allocation of the Dawn-Trafalgar transmission costs to in-franchise and ex-franchise rate classes based on the peak design day demand weighted by distance from Dawn was approved by the Board in the EBRO 493/494 Decision.

Union's rate design for the M12 Kirkwall to Parkway transportation service is consistent with both the cost allocation methodology described above and the Board-approved M12 rate design. This rate design recovers allocated M12 costs for easterly transportation service, including Kirkwall to Parkway transportation, on a distance-weighted basis.

There is no specific rate design for C1 Kirkwall to Parkway transportation service. The C1 transportation rate for Kirkwall to Parkway is equal to the M12 Kirkwall to Parkway transportation rate.

Please see the response at Exhibit J.G-11-10-1.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Ref: Exh G3/Tab1/Sch1/Page 5

In its application, Union has provided a summary description of the methodology followed to complete the cost allocation study used to support 2013 rate proposals. Union has indicated that general operating and engineering activity related expenses are functionalized primarily on the basis of an analysis of activities conducted by budget centre managers for their department.

a) Please explain how the analysis of activities is performed.

b) Please confirm if Union assesses the reasonability of the analysis of activities after the activities have occurred and if adjustments are made to reflect actual activities. If yes, please explain the process.

c) If not, please explain why an assessment is not performed or adjustments not made to reflect actual activities.

Response:

a) Forecasts of costs by cost study function (purchase production, storage, transmission and distribution) based on activity analyses are conducted by budget centre managers and staff during the budgeting process. Best estimates are made of activity levels and the associated costs by internal work order. These work orders are then mapped to specific accounts and allocated to functions in the cost allocation study.

b) No. Rates are set on a forward test year basis.

c) Please see the response at b) above.

UNION GAS LIMITED

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

Ref: Exhibit G1, Tab 1

Did Union investigate any other changes to the allocation of costs other than those discussed in Exhibit G1, Tab 1? If yes, please provide a summary for each of the other changes that were investigated including a description of the cost, the potential changes to the allocation reviewed, the impact by rate class of the potential change in the allocation (similar to Appendix B) and the reasons no changes to the allocation methodology were ultimately proposed.

Response:

In addition to the cost allocation methodology proposals discussed in Exhibit G1, Tab 1, Union investigated, but did not propose, the changes described below. Union did not pursue these cost allocation changes in order to manage the scope and complexity of the Phase II filing.

Union North Distribution Meter Plant
Union allocates meter plant costs based on a historic allocator to Rate 01 and Rate 10 and the average number of customers for Rate 20, Rate 100 and Rate 25. The historic allocator was based on an extensive review of the meter inventory at the time.

Union considered an option to update this allocator using the cascade approach. The allocation would use the average forecasted cost of residential, commercial and industrial meters. Union would then apply these costs in proportion to the residential, commercial and industrial customers by rate class to estimate the replacement cost for the meters. The revenue requirement impact if Union implemented the change is provided at Attachment 1.

Compressor Maintenance Costs
Union reviewed the classification of storage and transmission compressor maintenance costs. The compressor maintenance costs for storage and Ojibway/St. Clair transmission are classified as commodity-related. The operating costs for all functional classification and the compressor maintenance costs for Dawn Station transmission are classified to demand.

Union investigated the impact of changing the classification for storage and Ojibway/St. Clair compressor maintenance costs to demand. This classification change results in an allocation change consistent with other demand-related costs. Specifically, the storage compressor maintenance costs would be allocated based on design day demand from storage less design day deliveries and the Ojibway/St. Clair compressor maintenance costs would be allocated on

Ojibway/St. Clair peak day demands. The revenue requirement impact if Union implemented the change is provided at Attachment 1.

Union North Fuel and Commodity Costs

Union uses the Union North winter sales (December to February) and bundled-T volumes excluding Rate 25 to allocate STS fuel and commodity costs and to allocate costs for other storage and transmission fuel allocators and UFG.

Union investigated the option of using annual volumes to allocate these commodity-related costs and including interruptible Rate 25. This approach is more consistent with the Union South allocation of commodity-related costs, which is based on annual fuel and commodity volumes and includes interruptible volumes. The revenue requirement impact if Union implemented the change is provided at Attachment 1.

Revenue Requirement Impacts
Cost Allocation Study Filed March 27,2012

Line No.	Particulars ($000's)	Revenue Requirement Total	Gen. Service Small Volume M1	Gen. Service Large Volume M2	Firm Contract M4	Interruptible Contract- Firm M5	Interruptible Contract- Interruptible M5	Special Large Volume Contract - Firm M7	Special Large Volume Contract - Interruptible M7	Large Wholesale Service M9	Small Wholesale Service M10	Storage & Transportation Service - Firm T1	Storage & Transportation Service - Interruptible T1	Wholesale Storage & Transportation Service T3
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1	North Distribution Meter Plant	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Compressor Maintenance Operating Expenses	0	132	47	2	(2)	(66)	(4)	(1)	(6)	0	377	(0)	9
3	North Fuel and Commodity Costs	0	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
4	**Revenue Requirement Change[1]**	**0**	**132**	**47**	**2**	**(2)**	**(66)**	**(4)**	**(1)**	**(6)**	**0**	**377**	**(0)**	**9**

(1) A positive value represents an increase to the revenue requirement based on the proposed methodology.

Revenue Requirement Impacts
Cost Allocation Study Filed March 27,2012

Line No.	Particulars ($000's)	Excess Utility Storage Space	Firm Transportation Service C1	Interruptible Trans. Service & Exchanges C1	Dawn-Trafalgar Transport Service M12	Local Production Transportation Service M13	Storage Transportation Service M16	Small Volume General Firm Service R01	Large Volume General Firm Service R10	Medium Volume Firm Service R20	Large Volume High Load Factor Firm Service R100	Large Volume Interruptible Service R25
		(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(v)
1	North Distribution Meter Plant	0	0	0	0	0	0	827	(361)	(215)	(60)	(191)
2	Compressor Maintenance Operating Expenses	(63)	77	(515)	0	0	16	7	(6)	(6)	0	0
3	North Fuel and Commodity Costs	0	0	0	0	0	0	(215)	37	77	(2)	104
4	**Revenue Requirement Change**[1]	**(63)**	**77**	**(515)**	**0**	**0**	**16**	**618**	**(330)**	**(143)**	**(62)**	**(87)**

(1) A positive value represents an increase to the revenue requirement based on the proposed methodology.

UNION GAS LIMITED

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

Ref: Exhibit G3, Tab 1, Schedule 1, Updated, Appendices A, B, C

a) Please identify any new functionalization factors (Appendix A), classification factors (Appendix B), and/or classification factors (Appendix C) used in the current cost allocation model relative to those used in the Board approved 2007 cost allocation study.

b) For each factor identified in (a) above, please describe the costs that the factor is being used for and any alternatives that were investigated. Please explain why the factor used in the current model was chosen relative to the alternatives investigated.

Response:

a) Please see Attachment 1.

b) Please see Attachment 1.

New Factor Descriptions and Cost Allocation Details

New Proposed Factors (s)	New Factor Decriptions[1] EB-2011-0210	Cost Element	Account Code	Proposed Allocators and Alternatives Considered
Functionalization Factors				
COMMUNITYO&M	Directly assigns community investment operating expenses to the Distribution function.	Administrative and General Expenses - Other Admin & General Expenses	728	The costs were direct assigned to Distribution to ensure the costs are allocated based on average number of customers, see COMMUNITYO&M allocation factor. No alternatives were considered.
GS/AOP/F24-T	Directly assign general operating costs associated with the M12 F24-T service to the Dawn Trafalgar Easterly transmission function.	General Operating and Engineering - System Operation & Engineering	685	As described in Exhibit G1 Tab 1, the M12 F24-T costs are direct assigned to ensure the costs associated with the service are allocated the M12 rate class. No alternatives were considered.
GS/F24T-BENEFITS	Directly assign general operating employee benefit costs associated with the M12 F24-T service to the Dawn Trafalgar Easterly transmission function.	Administrative and General Expenses - Employee Benefits	725	As described in Exhibit G1 Tab 1, the M12 F24-T costs are direct assigned to ensure the costs associated with the service are allocated the M12 rate class. No alternatives were considered.
STORCOMP STORCOMPAD	Directly assign transmission Plant E compressor assets to Dawn Station transmission and outboard storage units to the Storage function.	Underground Storage Plant - Compressor Equipment	456	Union updated the existing storage plant direct assignments to include new direct assignments of outboard storage units and Plant E compressor. The direct assignments are consistent with the Board-approved cost allocation from EB-2011-0038.
STORLAND	Directly assign the plant costs of outboard Underground Storage land to the storage function.	Underground Storage Plant - Land	450	Union updated the existing storage plant direct assignments to include new direct assignments of outboard storage units. The direct assignments are consistent with the Board-approved cost allocation from EB-2011-0038.
STORM&R STORM&R	Directly assign transmission Plant E compressor assets to Dawn Station transmission and outboard storage units to the Storage function. Directly assigns transmission assets to the transmission function.	Underground Storage Plant - Measuring and Regulating	457	Union updated the existing storage plant direct assignments to include new direct assignments of outboard storage units and Plant E compressor. The direct assignments are consistent with the Board-approved cost allocation from EB-2011-0038. Union also directly assigned the transmission assets at Dawn Station, as described in Exhibit G3, Tab 1, Schedule 1, page 2-3.
STOROTHER STOROTHERAD	Directly assign transmission measuring and regulating Dawn-TCPL assets to Dawn Station transmission.	Underground Storage - Other	459	As described in Exhibit G1, Tab 1, Union directly assigned the Dawn-TCPL assets to Dawn Station. No alternatives were considered.
STORS&I STORS&IAD	Directly assign transmission Plant E compressor assets to Dawn Station transmission and outboard storage units to the Storage function.	Underground Storage Plant - Structures & Improvements	452	Union updated the existing storage plant direct assignments to include new direct assignments of outboard storage units and Plant E compressor. The direct assignments are consistent with the Board-approved cost allocation from EB-2011-0038.

New Factor Descriptions and Cost Allocation Details

New Proposed Factors (s)	New Factor Decriptions[1] EB-2011-0210	Cost Element	Account Code	Proposed Allocators and Alternatives Considered
Classification Factors				
COMMUNITYO&M	Directly assigns community investment operating expenses to the Distribution Customer classification	Administrative and General Expenses - Other Admin & General Expenses	728	The costs were direct assigned to Distribution Customer to ensure the costs are allocated based on average number of customers, see COMMUNITYO&M allocation factor. No alternatives were considered.
INDIR_I&II_PROD	Classify costs based on an equal weighting between Purchase Production rate base and O&M.	General Plant	Various	As described in Exhibit G1 Tab 1, Union proposed a new allocation of Purchase Production General Plant. The proposal ensures general plant costs are functionalized, classified and allocated on the same basis. The only alternative considered was to maintain the current allocation.
F24TGENOPS	Directly assign general operating costs associated with the M12 F24-T service to the Dawn Trafalgar Easterly Demand classification.	General Operating and Engineering - System Operation & Engineering	685	As described in Exhibit G1 Tab 1, the M12 F24-T costs are direct assigned to ensure the costs associated with the service are allocated the M12 rate class. No alternatives were considered.
F24TBENEFITS	Directly assign general operating employee benefit costs associated with the M12 F24-T service to the Dawn-Trafalgar Easterly Demand classification.	Administrative and General Expenses - Employee Benefits	725	As described in Exhibit G1 Tab 1, the M12 F24-T costs are direct assigned to ensure the costs associated with the service are allocated the M12 rate class. No alternatives were considered.
N_CROSSBORE-OM	Directly assigns cross bore operating expenses in the Northern and Eastern Operations area to the Distribution Customer classification.	North Distribution Maintenance - Mains & Services	675	Union direct assigned these costs to Distribution Customer to ensure the cross bore operating expenses were allocated based on average number of customer. No alternatives were considered.
N_CROSSBORE-PL N_CROSSBORE-PLAD	Directly assigns cross bore plant costs and accumulated depreciation in the Northern and Eastern Operations area to the Distribution Customer classification.	North Distribution - Mains - Grid	475.1	Union direct assigned these costs to Distribution Customer to ensure the cross bore operating expenses were allocated based on average number of customer. No alternatives were considered.
S_CROSSBORE-OM	Directly assigns cross bore operating expenses in the Southern Operations area to the Distribution Customer classification.	South Distribution Maintenance - Mains & Services	675	Union direct assigned these costs to Distribution Customer to ensure the cross bore operating expenses were allocated based on average number of customer. No alternatives were considered.
S_CROSSBORE-PL S_CROSSBORE-PLAD	Directly assigns cross bore plant costs and accumulated depreciation in the Southern Operations area to the Distribution Customer classification.	South Distribution - Mains	475.1	Union direct assigned these costs to Distribution Customer to ensure the cross bore operating expenses were allocated based on average number of customer. No alternatives were considered.

New Factor Descriptions and Cost Allocation Details

New Proposed Factors (s)	New Factor Decriptions[1] EB-2011-0210	Cost Element	Account Code	Proposed Allocators and Alternatives Considered
Allocation Factors				
COMMUNITY-O&M	Directly allocates community investment operating expenses to North and South general service rate classes in proportion to average number of customers.	Distribution Customer - Administrative and General Expenses - Other Admin & General Expenses	728	The costs are allocated based on average number of customers, see COMMUNITYO&M allocation factor. No alternatives were considered.
CUSTREG-RESAD	Directly allocates accumulated depreciation on residential regulator costs to residential customer classes in the Northern and Eastern Operations area.	Distribution Customer - North Distribution - Regulators	474.1	Union included a correction to the North Distribution Customer regulator plant direct assignments to include the corresponding accumulated depreciation. No alternatives were considered.
DAWNTCPL-M&R DAWNTCPL_M&RAD	Directly assigns the gross plant costs and accumulated depreciation of the Dawn-TCPL measuring and regualting equipment to the C1 rate class.	Underground Storage - Other	459	As described in Exhibit G1, Tab 1, Union directly assigned the Dawn-TCPL assets to the C1 rate class. No alternatives were considered.
DSM	Directly assigns DSM expenses in proportion to budgeted costs by rate class.	Sales Promo and Supervision - Demand Side Management		Union combined the previous DSM allocators into one DSM allocator. The allocator is based on the DSM budget. No alternatives were considered.
EXUTST	Allocates costs to the Excess Utility Storage Space category.	Storage Excluding Dehydrator Delivery - Distribution Customer Accounting - Customer Billing & Accounting	713.2	Union included a new storage allocation for billing short-term storage contracts. This allocation ensures the billing costs are included in the excess utility storage space category. No alternatives were considered.
HAGAR&EXUTSTFUEL	Directly allocates storage compressor fuel costs to the Excess Utility Storage Space category.	Storage Excluding Dehydrator Commodity - Underground Storage - Compressor Fuel		Union directly assigned the excess utility costs to the Excess Utility Storage Space category. The direct assignment ensures the costs associated with the excess utility space are allocated to the space category. No alternatives were considered.
F24TGENOPS	Directly assign general operating costs associated with the M12 F24-T service to the M12 rate class.	Dawn-Trafalgar Easterly Demand - General Operating and Engineering - System Operation & Engineering	685	As described in Exhibit G1 Tab 1, the M12 F24-T costs are direct assigned to ensure the costs associated with the service are allocated the M12 rate class. No alternatives were considered.
F24TBENEFITS	Directly assign general operating employee benefit costs associated with the M12 F24-T service to the M12 rate class.	Dawn-Trafalgar Easterly Demand- Administrative and General Expenses - Employee Benefits	725	As described in Exhibit G1 Tab 1, the M12 F24-T costs are direct assigned to ensure the costs associated with the service are allocated the M12 rate class. No alternatives were considered.

New Factor Descriptions and Cost Allocation Details

New Proposed Factors (s)	New Factor Decriptions[1] EB-2011-0210	Cost Element	Account Code	Proposed Allocators and Alternatives Considered
F24TCOMPMAINT	Directly assign compressor maintenance costs associated with the M12 F24-T service to the M12 rate class.	Dawn-Trafalgar Easterly Demand - Transmission - Compressor - Maintenance	866	As described in Exhibit G1 Tab 1, the M12 F24-T costs are direct assigned to ensure the costs associated with the service are allocated the M12 rate class. No alternatives were considered.
INDIR_I_PROD INDIR_II_PROD INDIR_I&II_PROD	Allocate costs based on an equal weighting of Purchase Production Other rate base.	General Plant	Various	As described in Exhibit G1 Tab 1, Union proposed a new allocation of Purchase Production General Plant. The proposal ensures general plant costs are functionalized, classified and allocated on the same basis. The only alternative considered was to maintain the current allocation.
N_CUSTSTATIONS	Allocate costs in proportion to average number of customers in Northern and Eatern Operations area excluding customers that consume less than 934,400 m^3/year.	Distribution Customer - North Distribution Customer Stations	474.2	As described in Exhibit G1 T1, Union proposed a new allocation of North customer stations. The proposal ensures that customers that consume less than 934,400 m^3/year are excluded from the allocation. The only alternative considered was to maintain the current allocation.
N_CUSTM&RXRES N_DEMM&RXRES	Allocate costs in proportion to Distribution Customer and Demand Meters and Regulators gross plant for the Northern and Eastern Operations area, excluding the Rate 01 rate class.	North Distribution Maintenance - Meter and Regulator Repairs	878	As described in Exhibit G1 T1, Union proposed a new allocation for Meter and Regulator Repairs. The proposal better reflects cost causation and harmonizes the approach between the north and the south. The only alternative considered was to maintain the current allocation.
N_CROSSBORE-OM	Directly allocates cross bore operating expenses to the general service rate classes in the Northern and Eastern Operations area in proportion to average number of customers.	Distribution Customer - North Distribution Maintenance - Mains & Services	675	Union direct assigned these costs to ensure the cross bore operating expenses were allocated based on average number of customer. No alternatives were considered.
N_CROSSBORE-PL N_CROSSBORE-PLAD	Directly allocates cross bore plant costs and accumulated depreciation to the general service rate classes in the Northern and Eastern Operations area in proportion to average number of customers.	Distribution Customer North Distribution - Mains - Grid	475.1	Union direct assigned these costs to ensure the cross bore operating expenses were allocated based on average number of customer. No alternatives were considered.
S_CROSSBORE-OM	Directly allocates cross bore operating expenses to the general service rate classes in the Southern Operations area in proportion to average number of customers.	Distribution Customer - South Distribution Maintenance - Mains & Services	675	Union direct assigned these costs to ensure the cross bore operating expenses were allocated based on average number of customer. No alternatives were considered.
S_CROSSBORE-PL S_CROSSBORE-PLAD	Directly allocates cross bore plant costs and accumulated depreciation to the general service rate classes in the Southern Operations area in proportion to average number of customers.	Distribution Customer -South Distribution - Mains	475.1	Union direct assigned these costs to ensure the cross bore operating expenses were allocated based on average number of customer. No alternatives were considered.
S_CUSTM&RXRES	Allocate costs in proportion to Distribution Customer Meters and Regulators gross plant for the Southern operations area, excluding the M1 rate class.	South Distribution Maintenance - Meter and Regulator Repairs	878	As described in Exhibit G1 T1, Union proposed a new allocation for Meter and Regulator Repairs. The proposal better reflects cost causation and harmonizes the approach between the north and the south. The only alternative considered was to maintain the current allocation.

New Factor Descriptions and Cost Allocation Details

New Proposed Factors (s)	New Factor Decriptions[1] EB-2011-0210	Cost Element	Account Code	Proposed Allocators and Alternatives Considered
STORAGECOM-INFRAN	Allocates costs to in-franchise customers in proportion to the volume injected and withdrawn from storage with the in-franchise allocation based on delivery volumes.	Storage Excluding Dehydrator Commodity - Underground Storage - Compressor Fuel; Cost of Gas and Production - Other Supplies - UFG		This allocation is used when the excess utility storage space is direct assigned, see HAGAR&EXUTSTFUEL and UFG-EXUTST. The allocator excludes the excess utility space to ensure the costs are not double counted. No alternatives were considered.
UFG-EXUTST	Directly allocates unaccounted for gas costs to the Excess Utility Storage Space category.	Storage Excluding Dehydrator Commodity - Cost of Gas and Production - Other Supplies - UFG		The direct assignment ensures the excess utility space costs are allocated to the Excess Utility Storage Space category. No alternatives were considered.

Note:

1 - The direct assignments only includes the new direct assignment descriptions - not the entire factor description from Exhibit G3, Tab 1, Schedule 1, Appendix A-C.

UNION GAS LIMITED

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

Ref: Exhibit G3, Tab 3, Schedule 1, Updated

a) What is included in accounts 401 and 402 (Intangible Plant)? In particular, please provide a breakdown of the other intangible assets in account 402.

b) Are there any franchise and consent costs included in accounts 401 and 402 that are related to transmission and or storage rights?

c) Please explain why the Intangible Plant is all functionalized to Distribution.

d) Please confirm that account 700 (Sales Promotion Supervision) only includes costs associated with in-franchise marketing/sales. Where are the costs associated with sales and marketing to ex- franchise customers included?

Response:

a) Account 401 includes cost associated with negotiating / renegotiating franchise agreements. The breakdown of account 402 is as follows:

Description	$000's
Sault St. Marie	1,852
Lakeland Premium	4,000
Lakeland Acquisition Adjustment	495
Other Sundry	9
Total Other Intangible	6,356

The accounting treatment for Sault St. Marie and Lakeland Premium can be found in the OEB order U.A. 7 dated November 9th, 1971 for Northern and Central Gas Corporation Limited. $1.852 million relates to other intangibles purchased in the acquisition of the gas system at Sault St. Marie. $4.000 million relates to the premium on acquisition of Lakeland Natural Gas Limited.

$0.495 million represents an Acquisition adjustment on the Lakeland Acquisition.

b) No.

c) In Union North and Union South E.B.R.O. 499 cost allocation studies, 98% of the total Intangible Plant was identified as Union North and functionalized in proportion to Local Storage, Underground Storage and Distribution plant. The result was 97% of the Union North Intangible Plant was functionalized to Distribution.

In RP-2003-0063 (Union's 2004 rate case), Union merged the Union North and Union South cost allocation studies. In the 2004 merged cost allocation study, to maintain a similar approach to the E.B.R.O. 499 functionalization of Intangible Plant, Union proposed and the Board approved the functionalization of all Intangible Plant to Distribution. Union's 2007 Board-approved cost allocation study also functionalized Intangible Plant to Distribution.

In the 2013 Cost Allocation Study, Union North represents 99% of the Intangible Plant. Consistent with the Board-approved methodology, Union's 2013 cost allocation study functionalized Intangible Plant to Distribution.

d) Confirmed. The costs associated with sales and marketing to ex-franchise customers is included in System Operation and Engineering (account 685).

UNION GAS LIMITED

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

Ref: Exhibit G3, Tab 1, Schedule 3

For each of the line items shown with a Cost Type of Allocator, please provide a brief description of the change/correction and confirm that the changed/corrected allocators are consistent with those approved by the Board in Union's last cost of service proceeding. If this cannot be confirmed, please explain the difference in the allocation methodology being requested in this proceeding.

Response:

Confirmed, the allocator corrections in Exhibit G3, Tab 1, Schedule 3 are consistent with Union's Board-approved cost allocation methodologies. A description of each allocator correction is provided below:

1. Property Taxes - Distribution North Mains Grid, Joint & Sole Correction (line 4)

   In the cost allocation study filed on November 23, 2011, property taxes were allocated to Distribution North Mains – Grid only. In the updated cost allocation study filed on March 27, 2012, Union corrected the property tax allocation for Distribution North Mains to include grid, joint-use and sole-use.

2. Transmission Operating Expense Direct Assignments, General Operating and Engineering Functionalization Factor Correction, Labour Functionalization Factor Correction (lines 5, 6 and 8)

   Certain O&M factors were not updated for the allocation of general storage and transmission operating expenses. In the updated cost allocation study filed on March 27, 2012, Union corrected the O&M factors to reflect the allocation of general storage and transmission operating expenses.

   The factors impacted by the incorrect allocation include MN-LINES, MN-M&R, MN-COMP, OP-LINES, OP-M&R, OP-COMP, GENOPACT and LABOUR.

3. Internal Allocator Corrections (line 7)

   Union discovered circular reference errors in the formulas of the PRODO&MEXP-1, PRODO&MEXP-2, and DISTO&MEXP-1 internal allocators. In the cost allocation study filed on March 27, 2012, Union corrected the circular references errors in the internal allocators above.

4. DSM Allocator Update (line 9)

   In the cost allocation study filed on March 27, 2012, Union updated the allocation of DSM-related costs to reflect the DSM Settlement Agreement in EB-2011-0327.

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe

Ref: Exhibit G1, Tab 1, Appendix A and Appendix B

a) List and quantify, relative to EB-2005- 0520, the Cost Allocation Changes and impact of these +/- on the 2011 revenue requirement for Rate M1 and M2 and Rate R 01 general service classes.

b) Translate this into an increase/reduction % and annual amount for an average general service customer bill in the South and North rate zones.

c) Please provide differences, if any, in impacts for Sales Service and Direct purchase customers.

Response:

a) Union has not updated the 2007 Board-approved cost allocation study with 2013 proposed cost allocation methodologies. If Union were to apply the 2013 proposed methodologies to the 2007 Board-approved cost allocation study it is Union's expectation that, on a rate class basis, the impacts would be proportional to those found at Exhibit G1, Tab 1, Appendix B.

Exhibit G1, Tab 1, Appendix B shows the 2013 revenue requirement impacts by rate class of Union's proposed methodology changes relative to the Board-approved methodologies in EB-2005-0520. The 2013 revenue requirement impacts to Rate M1, Rate M2, Rate 01 and Rate 10 are provided in Attachment 1.

Union did not update Exhibit G1, Tab 1, Appendix B to reflect the updated cost allocation study filed on March 27, 2012. An updated version of Exhibit G1, Tab 1, Appendix B is provided at Attachment 2.

b) Based on the cost allocation changes described in part a):

For an average Rate 01 (Eastern Zone) Sales Service customer using 2,200 m^3 per year, the annual impact is a decrease of $3.32 or 0.4%.

For an average Rate 01 (Eastern Zone) Direct Purchase customer using 2,200 m^3 per year, the annual impact is a decrease of $3.58 or 0.6%.

For an average Rate 10 (Eastern Zone) Sales Service customer using 93,000 m^3 per year, the

annual impact is a decrease of $524.05 or 2.1%.

For an average Rate 10 (Eastern Zone) Direct Purchase customer using 93,000 m^3 per year, the annual impact is a decrease of $535.13 or 3.9%.

For an average Rate M1 Sales Service customer using 2,200 m^3 per year, the annual impact is a decrease of $0.23 or 0.03%.

For an average Rate M1 Direct Purchase customer using 2,200 m^3 per year, the annual impact is a decrease of $0.07 or 0.02%.

For an average Rate M2 Sales Service customer using 73,000 m^3 per year, the annual impact is a decrease of $38.35 or 0.2%.

For an average Rate M2 Direct Purchase customer using 73,000 m^3 per year, the annual impact is a decrease of $20.44 or 0.5%.

c) Please see the response at b) above.

2013 Revenue Requirement Impacts to Rate M1, Rate M2, Rate 01, and Rate 10

Line No.	Particulars ($000's)	Cost Type	M1	M2	R01	R10
			(a)	(b)	(c)	(d)
1	System Integrity Hysterisis	Allocator	65	22	21	6
2	Tecumseh Metering Assets	Rate Base	131	44	(2)	(1)
3	Oil Springs East Storage Pool	Rate Base	27	9	8	2
4	Distribution Maintenance - Meter and Regulator Repairs	O&M	6	(435)	(25)	43
5	Distribution Maintenance - Equipment on Customer Premises	O&M	(323)	92	(1,488)	285
6	Purchase Production General Plant	Rate Base	(164)	(90)	165	30
7	Distribution North Customer Stations	Rate Base	0	0	0	(2,166)
8	Revenue Requirement Change [1]		(258)	(358)	(1,320)	(1,802)

Note:
1 A positive value represents an increase to the revenue requirement based on the proposed methodology.

Revenue Requirement Impacts
Cost Allocation Study Filed March 27,2012

Line No.	Particulars ($000's)	Cost Type	Revenue Requirement Total	Gen. Service Small Volume M1	Gen. Service Large Volume M2	Firm Contract M4	Interruptible Contract-Firm M5	Interruptible Contract-Interruptible M5	Special Large Volume Contract - Firm M7	Special Large Volume Contract - Interruptible M7	Large Wholesale Service M9	Small Wholesale Service M10	Storage & Transportation Service - Firm T1	Storage & Transportation Service - Interruptible T1	Wholesale Storage & Transportation Service T3
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1	System Integrity Hysterisis	Allocator	(0)	65	22	3	0	4	1	0	1	0	21	0	6
2	Tecumseh Metering Assets	Rate Base	(0)	131	44	14	0	0	5	0	2	0	101	0	11
3	Oil Springs East Storage Pool	Rate Base	0	27	9	2	0	0	1	0	0	0	16	0	2
4	Distribution Maintenance - Meter and Regulator Repairs	O&M	0	6	(435)	64	1	69	27	4	5	1	186	45	19
5	Distribution Maintenance - Equipment on Customer Premises	O&M	(0)	(323)	92	35	1	39	15	2	3	0	101	24	10
6	Purchase Production General Plant	Rate Base	0	(164)	(90)	(17)	13	(42)	(28)	0	(11)	0	40	13	2
7	Distribution North Customer Stations	Rate Base	0	0	0	0	0	0	0	0	0	0	0	0	0
8	**Revenue Requirement Change**[1]		**0**	**(258)**	**(358)**	**101**	**15**	**71**	**22**	**7**	**(1)**	**2**	**465**	**82**	**51**

(1) A positive value represents an increase to the revenue requirement based on the proposed methodology.

Revenue Requirement Impacts
Cost Allocation Study Filed March 27,2012

Line No.	Particulars ($000's)	Cost Type	Excess Utility Storage Space	Firm Transportation Service C1	Interruptible Trans. Service & Exchanges C1	Dawn-Trafalgar Transport Service M12	Local Production Transportation Service M13	Storage Transportation Service M16	Small Volume General Firm Service R01	Large Volume General Firm Service R10	Medium Volume Firm Service R20	Large Volume High Load Factor Firm Service R100	Large Volume Interruptible Service R25
			(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(v)
1	System Integrity Hysterisis	Allocator	(156)	0	1	4	0	0	21	6	1	0	0
2	Tecumseh Metering Assets	Rate Base	0	(0)	0	(306)	(1)	(0)	(2)	(1)	(0)	(0)	0
3	Oil Springs East Storage Pool	Rate Base	7	1	0	(77)	0	0	8	2	1	0	0
4	Distribution Maintenance - Meter and Regulator Repairs	O&M	0	0	0	0	0	0	(25)	43	(6)	(16)	12
5	Distribution Maintenance - Equipment on Customer Premises	O&M	0	0	0	0	0	0	(1,488)	285	530	152	521
6	Purchase Production General Plant	Rate Base	0	0	0	0	0	0	165	30	47	14	27
7	Distribution North Customer Stations	Rate Base	0	0	0	0	0	0	0	(2,166)	954	274	939
8	**Revenue Requirement Change**[1]		**(149)**	**1**	**1**	**(379)**	**(1)**	**0**	**(1,320)**	**(1,802)**	**1,527**	**423**	**1,498**

(1) A positive value represents an increase to the revenue requirement based on the proposed methodology.

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe

Ref: Exhibit G3, Tab 1, Schedule 1, Appendix B Page 2

a) When were the Classifications for Crossbore Costs (O&M, Plant, Acc. Dep) developed?

b) Have the classifications been approved by the Board?

c) Please provide the breakdown of CB costs for 2011-2012 and 2013.

d) Show the result of the direct assignments to the rate classes for these years.

e) Reconcile to the Revenue Requirement for the classes.

Response:

a) The classification factors for Union's Cross Bore Safety Program costs described beginning at Exhibit G3, Tab 1, Schedule 1, Appendix B, pages 2-3 were developed for the 2013 cost allocation study.

b) No, please see the response at a) above.

c)

Year	Capital ($)	O&M ($)
2011	1,100,000	844,550
2012	1,100,000	1,825,000
2013	1,100,000	1,863,000

d) There are no direct assignments associated with Union's Cross Bore Safety Program costs in 2011 and 2012. Union's approved rates in 2011 and 2012 did not recover any Cross Bore Safety Program costs.

The 2013 revenue requirement impact associated with the direct assignment of Cross Bore capital and O&M costs are provided at Attachment 1.

e) Please see the response at d) above.

Revenue Requirement of the Cross Bore Direct Assignments

Line No.	Particulars ($000's)	Factor	M1	M2	R01	R10	Total
		(a)	(b)	(c)	(d)	(e)	(f)
	Gross Plant in Service						
1	South Distribution Mains	S_CROSSBORE-PL	2,029	13	0	0	2,042
2	North Distribution Mains- Grid	N_CROSSBORE-PL	0	0	755	5	760
	Accumulated Depreciation						
3	South Distribution Mains	S_CROSSBORE-PLAD	55	0	0	0	55
4	North Distribution Mains- Grid	N_CROSSBORE-PLAD	0	0	22	0	22
5	Total Rate Base		1,974	13	733	5	2,725
	Calculation of Revenue Requirement						
6	Return on Rate Base		154	1	57	0	213
	Operating Expenses						
7	South Distribution Mains & Services	S_CROSSBORE-OM	1,422	9	0	0	1,431
8	North Distribution Mains & Services	N_CROSSBORE-OM	0	0	429	3	432
9	Total Revenue Requirement		1,576	10	486	3	2,076

UNION GAS LIMITED

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

Ref: Exhibit G1, Tab 1, Schedule 1

For each of the major changes made to Union's cost allocation study please provide the impact on the revenue allocated to Rates 1 and M1.

Response:

Please refer to J.G-1-3-1, Attachment 2, column (b) and column (t) for the revenue requirement impacts of Union's proposed cost allocation methodology changes to Rate M1 and Rate 01.

UNION GAS LIMITED

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

Is Union's utility Cost Allocation Study, including the methodologies and judgments used and the proposed application of that study with respect to Test Year rates, appropriate?

Reference: (1) Exhibit G3, Tab 1, pg 14-15

Preamble: TransCanada seeks information to better understand how Union allocates Dawn-Trafalgar transmission demand costs.

Request:

a) Please confirm that Union's Dawn-Trafalgar system is designed and constructed to meet winter design day demands. If not confirmed, please explain why not.

b) Do any of the following factors impact the allocation of Dawn-Trafalgar transmission demand costs between in-franchise and ex-franchise customers? If yes, please explain how the factor affects cost allocation.

   i) contracted or forecasted annual volumes;

   ii) seasonal volumes, average day volumes, or summer peak day volumes;

   iii) actual volumes; and

   iv) capacity of the Dawn-Trafalgar system.

c) Does Union deem all gas delivered at the east end of the Dawn-Trafalgar system to be delivered to in-franchise customers under its current cost allocation methodology? Please explain.

Response:

a) Confirmed.

b) i)-iv) The factors listed do not directly impact the allocation of Dawn-Trafalgar demand costs. The actual daily volumes for the winter season are used in the development of the base year

South in-franchise design day demand. The forecasted winter season volumes are used to develop the growth factors for the general service market. These growth factors are used to establish future design day demands.

c) Yes. Please see Attachment 1, part d) from RP-2003-0063.

UNION GAS LIMITED
Answer to Interrogatory
from TransCanada PipeLines Limited

Reference: Union's 2004 Rates Application RP-2003-0063, Exhibit G3, Tab 1, Schedule 1

Preamble: TransCanada seeks information to better understand how Union allocates Dawn-Trafalgar transmission demand costs.

Question

a) Please confirm that Union's Dawn-Trafalgar system is designed and constructed to meet winter design day demands. If not confirmed, please explain why not.
b) Has Union changed its methodology for allocating transmission demand costs for the Dawn-Trafalgar system since E.B.R.O. 493/494? If yes, please explain how the methodology has changed.
c) Do any of the following factors impact the allocation of Dawn-Trafalgar transmission demand costs between in-franchise and ex-franchise customers? If yes, please explain how the factor(s) affects cost allocation.
   i. contracted or forecasted annual volumes;
   ii. seasonal volumes, average day volumes, or summer peak day volumes;
   iii. actual volumes; and
   iv. capacity of the Dawn-Trafalgar system.
d) Does Union deem all gas delivered at the east end of the Dawn-Trafalgar system to be delivered to in-franchise customers under its current cost allocation methodology? If yes, please explain why.

Answer

a) Yes. Union's Dawn-Trafalgar system is designed and constructed to meet winter design day demand.

b) No. Please refer to Exhibit J1.145 for a description of the method used.

c) Please refer to Exhibit J1.36 for an explanation of how Union derives the design day demand for Dawn-Trafalgar and the factors which impact the calculation.

d) Union's east end deliveries are deliveries made by in-franchise direct purchase customers and by Union on behalf of sales service customers. Under Union's approved cost allocation method, Dawn-Trafalgar transmission costs are allocated between infranchise and exfranchise customers in proportion to distance weighted design day demand. For that portion of infranchise design day demand that can be served by deliveries at Parkway, the distance on the Dawn-Trafalgar transmission system that the gas travels is measured from Parkway to each interconnected transmission lateral being used to serve infranchise demand.

This distance is much smaller than if the distance was measured from Dawn to each lateral. Infranchise customers in the Southern Operations Area are in a sense receiving a "distance credit". The distance traveled by the remaining infranchise demand and all exfranchise demand is measured from Dawn to each lateral or take-off point (for exfranchise demand). Union has proposed, and the OEB has approved, this approach for many years and it was most recently confirmed by the Board in their E.B.R.O. 493/494 Decision dated March 20, 1997. Even though the gas delivered by infranchise customers on design day at Parkway physically flows to exfranchise customers, it is the infranchise customers who commit to obligate deliveries at Parkway that allow for the system design benefit.

UNION GAS LIMITED

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

Reference: Exhibit G3, Tab 1
Exhibit B1, Tab 5

Preamble: TransCanada seeks information to better understand how Union allocates Dawn-Trafalgar transmission demand costs.

a) Please provide the date that Union experienced the greatest actual daily transportation demand on the Dawn-Trafalgar transmission system for each of the winters of 2008/2009, 2009/2010, 2010/2011, and 2011/2012.

b) For each of the dates provided in response to (a), please provide the following information:

   i) the actual 24-hour average degree day temperature in the Southern Operations Area;

   ii) the easterly transportation demand on the Dawn-Trafalgar system, broken down by in-franchise customers without contracts, in-franchise customers with contracts, and ex-franchise customers;

   iii) a list of the ex-franchise customers and their corresponding contracted firm M12 and C1 easterly transportation volumes;

   iv) whether Union purchased Winter Peaking Service, and if so, the volume of Winter Peaking Service purchased;

   v) actual receipts by receipt point;

   vi) actual deliveries by delivery point, with deliveries at Parkway (split out between Parkway TCPL and Parkway Consumers) distinguished between those from the Dawn-Trafalgar system, Winter Peaking Service, and TransCanada FT;

   vii) the physical direction of flow (e.g. Dawn to Parkway); and

   viii) whether gas physically flowed from the TransCanada system at Parkway into Union's Dawn-Trafalgar system.

Response:

a) 2008/2009 – January 14, 2009
2009/2010 – January 29, 2010
2010/2011 – January 23, 2011
2011/2012 – January 3, 2012

b) For each of the dates provided in response to (a)

i) 2008/2009 – January 14, 2009 34.3 HDD
2009/2010 – January 29, 2010 32.6 HDD
2010/2011 – January 23, 2011 36.7 HDD
2011/2012 – January 3, 2012 30.7 HDD

ii) Actual easterly transportation measured demands on each of those dates:

Winter Peak Day	2008/2009 Jan 14, 2009	2009/2010 Jan 29, 2010	2010/2011 Jan 23, 2011	2011/2012 Jan 03, 2012
Ex-Franchise demand (PJ)	4.46	4.39	4.26	3.58
In-Franchise demand (PJ)	1.46	1.21	1.41	1.28

Please note that Union's Dawn-Parkway actual measured demands for those dates are not broken down between non-contract and contract because Union does not track or report this distinction in its nomination and scheduling system. Union tracks and measures Parkway demand as one aggregate amount representing all in-franchise markets.

iii) Please see Attachment 1.

iv) Please see the response at Exhibit J.G-10-10-2 a).

v) Actual scheduled receipts by receipt point

Winter Highest Day (GJ)	2008/2009 Jan 14 2009	2009/2010 Jan 29 2010	2010/2011 Jan 23 2011	2011/2012 Jan 03 2012
Parkway	553,817	49,079	81,233	173,267
Dawn-TCPL	3,582,464	2,220,317	1,836,166	1,201,490
Dawn-Vector	1,344,740	1,479,439	1,553,405	1,574,206

vi) Actual scheduled deliveries by delivery point

Winter	2008/2009	2009/2010	2010/2011	2011/2012
Highest Day (GJ)	Jan 14 2009	Jan 29 2010	Jan 23 2011	Jan 03 2012
Parkway-TCPL	2,176,332	1,941,580	1,719,346	2,104,281
Parkway-Enbridge	1,000,167	1,387,065	1,444,219	1,441,644
Kirkwall	1,702,908	1,282,183	1,436,460	402,730
Dawn-TCPL	1,783,125	1,679,085	1,098,409	805,949
Dawn-Vector	162,285	38,216	150,144	158,040

vii) The physical direction of flow was from Dawn to Parkway for all instances listed above.

viii) No, all flows were “exports” from Union’s Dawn-Parkway system into TransCanada’s system.

M12 Transport Expiry Profile
November 1st 2007-2013

Shipper		Quantity (GJ)	Nov-07	Nov-08	Nov-09	Nov-10	Nov-11	Nov-12	Nov-13
PPG Canada	*	3,466	3,466	3,466					
York Energy Centre L.P.		11,654						11,654	11,654
Terra International (Canada) Inc.	*	7,065	7,065	7,065	7,065	7,065	7,065	7,065	
Gaz Metro Limited Partnership		21,021	21,021	21,021	21,021	21,021	21,021	21,021	21,021
KPUC (Kingston Public Utilities Commission)		2,113	2,113						
Enbridge - Consumers		10,692	10,692						
TransCanada PipeLines Limited		64,147	64,147						
Enbridge - Consumers		53,455	53,455	53,455					
Enbridge - Consumers		20,848	20,848	20,848	20,848				
Gaz Metro Limited Partnership		62,109	62,109	62,109	62,109	62,109			
Enbridge - Consumers		107,000	107,000	107,000	107,000	107,000			
Enbridge - Consumers		37,400	37,400	37,400	37,400	37,400	37,400		
Ford Motor Company	*	14,904	14,904						
St. Lawrence Gas Company Inc.		10,785	10,785						
Gaz Metro Limited Partnership		70,196	70,196	70,196					
Gaz Metro Limited Partnership		24,908	24,908	24,908	24,908				
KPUC (Kingston Public Utilities Commission)		11,322	11,322	11,322	11,322	11,322	11,322	11,322	11,322
Nexen Marketing		50,000	50,000						
Enbridge - Consumers		1,764,678	1,764,678	1,764,678	1,764,678	1,764,678	1,764,678	1,764,678	1,764,678
Enbridge - Consumers		106,000	106,000	106,000	106,000	106,000	106,000	106,000	106,000
TransAlta Cogeneration LP	*	11,809	11,809	11,809	11,809	11,809	11,809	11,809	11,809
Energy Source Canada Inc.	*	2,500	2,500	2,500					
Energy Source Canada Inc.	*	2,500	2,500	2,500					
U.S. Steel Canada Inc.	*	17,351	17,351	17,351	17,351	17,351	17,351	17,351	17,351
TransCanada PipeLines Limited		248,103	248,103	248,103	248,103	248,103			
TransCanada PipeLines Limited		119,787					119,787	119,787	119,787
BP Canada Energy Company	*	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
The Corporation of the City of Kitchener	*	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Gaz Metro Limited Partnership		35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Enbridge - Consumers		57,100	57,100	57,100	57,100	57,100	57,100	57,100	57,100
Gaz Metro Limited Partnership		65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000
Sithe Canada Inc.	*	140,000	125,000	140,000	140,000	140,000	140,000	140,000	140,000
Vermont Gas Systems, Inc.		20,000	10,000	20,000	20,000	20,000	20,000	20,000	20,000
Greater Toronto Airports Authority (GTAA)		7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
Gaz Metro Limited Partnership		26,619	26,619	26,619	26,619	26,619			
TransCanada PipeLines Limited		64,147		64,147	64,147	64,147	64,147	64,147	
Enbridge - Consumers		10,692		10,692	10,692	10,692	10,692	10,692	10,692
St. Lawrence Gas Company Inc.		10,785		10,785	10,785	10,785	10,785	10,785	10,785
KPUC (Kingston Public Utilities Commission)		2,113		2,113	2,113	2,113	2,113	2,113	2,113
Nexen Marketing		50,000		50,000	50,000				
Portlands Energy Centre L.P.		100,000			100,000	100,000	100,000	100,000	100,000
TransCanada Energy Ltd./TransCanada Power	*	132,000			132,000	132,000	132,000	132,000	132,000
Gaz Metro Limited Partnership		70,196			70,196				
Gaz Metro Limited Partnership		52,343				52,343	52,343	52,343	52,343
Ag Energy Co-operative Ltd	*	1,600		1,600	1,600	1,600	1,600	1,600	1,600
Greenfield Ethanol Inc.	*	3,000		3,000	3,000	3,000	3,000	3,000	3,000
KeySpan Gas East Corporation		43,837					43,837	43,837	43,837
Narragansett Electric Company		1,081					1,081	1,081	1,081
Brooklyn Union Gas Company		44,019					44,019	44,019	44,019
Connecticut Natural Gas Corporation		6,410					6,410	6,410	6,410
Ag Energy Co-operative Ltd	*	1,900					1,900	1,900	1,900
Consolidated Edison Company of New York, Inc.		21,825					21,825	21,825	21,825
Gaz Metro Limited Partnership		24,908				24,908	24,908	24,908	
Gaz Metro Limited Partnership		22,908							22,908
Enbridge - Consumers		53,455			53,455	53,455	53,455		
Enbridge - Consumers		20,848				20,848	20,848		
Gaz Metro Limited Partnership		88,728					88,728	88,728	88,728
Central Hudson Gas & Electric		5,467					5,467	5,467	5,467
York Energy Centre		76,000						76,000	76,000

Niagara Mohawk Power		55,123					55,123	55,123	55,123
Greenfield South Power Corp		46,950						46,950	46,950
Enbridge - Consumers		107,000					107,000		
Enbridge - Consumers		18,703						18,703	18,703
Vermont Gas Systems, Inc.		500				500	500	500	500
J. Aron		50,000				50,000	50,000	50,000	
Brooklyn Union Gas Company		12,953	12,953	12,953	12,953	12,953	12,953	12,953	12,953
KeySpan Gas East Corporation		17,162	17,162	17,162	17,162	17,162	17,162	17,162	17,162
Central Hudson Gas & Electric		10,792	10,792	10,792	10,792	10,792	10,792	10,792	10,792
Boston Gas Company		9,282	9,282	9,282	9,282	9,282	9,282	9,282	9,282
Colonial gas Company		6,475	6,475	6,475	6,475	6,475	6,475	6,475	6,475
Essex Gas Company		2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158
EnergyNorth Natural Gas, Inc.		4,317	4,317	4,317	4,317	4,317	4,317	4,317	4,317
Connecticut Natural Gas Corporation		18,077	18,077	18,077	18,077	18,077	18,077	18,077	18,077
Southern Connecticut Gas Company		34,950	34,950	34,950	34,950	34,950	34,950	34,950	34,950
Yankee Gas Services Company		43,116	43,116	43,116	43,116	43,116	43,116	43,116	43,116
Bay State Gas Company		27,803	27,803	27,803	27,803	27,803	27,803	27,803	27,803
Northern Utilities, Inc.		6,333	6,333	6,333	6,333	6,333	6,333	6,333	6,333
Connecticut Natural Gas Corporation		9,170	9,170	9,170	9,170	9,170	9,170	9,170	9,170
Southern Connecticut Gas Company		13,970	13,970	13,970	13,970	13,970	13,970	13,970	13,970
Brooklyn Union Gas Company		30,217	30,217	30,217	30,217	30,217	30,217	30,217	30,217
KeySpan Gas East Corporation		22,772	22,772	22,772	22,772	22,772	22,772	22,772	22,772
Yankee Gas Services Company		20,560	20,560	20,560	20,560	20,560	20,560	20,560	20,560
Yankee Gas Services Company		5,380		5,380	5,380	5,380	5,380	5,380	5,380
Southern Connecticut Gas Company		9,735		9,735	9,735	9,735	9,735	9,735	9,735
Connecticut Natural Gas Corporation		6,489		6,489	6,489	6,489	6,489	6,489	6,489
Suncor Energy Products Partnership	*	15,000	15,000	15,000	15,000	15,000			
Suncor Energy Products Partnership	*	15,000					15,000	15,000	15,000
TransCanada PipeLines Limited		50,000					50,000	50,000	50,000
TransCanada PipeLines Limited		78,316					78,316	78,316	78,316
Enbridge - Consumers		200,000						200,000	200,000
TransCanada PipeLines Limited		62,695						62,695	62,695
TransCanada PipeLines Limited		533,191	533,191						
TransCanada PipeLines Limited		108,540	108,540						
TransCanada PipeLines Limited		125,297	125,297	125,297	125,297	125,297	125,297		
TransCanada PipeLines Limited		62,602						62,602	62,602
TransCanada PipeLines Limited		58,874	58,874						
TransCanada PipeLines Limited		53,440	53,440	53,440	53,440				
TransCanada PipeLines Limited		28,871	28,871						
TransCanada PipeLines Limited		267,275	267,275						
Enbridge - Consumers		35,806	35,806	35,806	35,806				
Dynegy Canada Marketing and Trade, a division of Dynegy Canada Inc.		38,306	38,306						
Enbridge - Consumers		32,123	32,123	32,123	32,123	32,123	32,123	32,123	32,123
KeySpan Gas East Corporation d/b/a KeySpan Energy Delivery Long Island		138,600	0	138,600	138,600	138,600	138,600	138,600	138,600
TransCanada PipeLines Limited		463,560		463,560	463,560	463,560			
TransCanada PipeLines Limited		146,560					146,560	146,560	
TransCanada PipeLines Limited		13,336							13,336
TransCanada PipeLines Limited		533,191		533,191	533,191	533,191	533,191		
TransCanada PipeLines Limited		158,003						158,003	158,003
Thorold CoGen L.P.		49,500			49,500	49,500	49,500	49,500	49,500
TransCanada PipeLines Limited		53,440				53,440	53,440	53,440	
Consolidated Edison Company of New York, Inc.		31,746					31,746	31,746	31,746
Dynegy Gas Imports, LLC		38,306		38,306	38,306	38,306	38,306	38,306	38,306
Enbridge - Consumers		35,806				35,806	35,806	35,806	35,806
National Fuel Gas Distribution		10,791	10,791	10,791	10,791	10,791	10,791	10,791	10,791
National Fuel Gas Distribution		15,904		15,904	15,904	15,904	15,904	15,904	15,904
Emera Energy		36,751						36,751	36,751
TransCanada PipeLines Limited		88,497						88,497	88,497
TransCanada PipeLines Limited		174,752							174,752

*these parties also have an infranchise contract, but there is no requirement
to use these Dawn to Parkway and Kirkwall to Parkway contracts to meet any infranchise obligation.

UNION GAS LIMITED

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

Reference: Exhibit G3, Tab 1
Exhibit B1, Tab 5

Preamble: TransCanada seeks information to better understand how Union allocates Dawn-Trafalgar transmission demand costs.

a) Please provide the following information for each of the forecast winter design days of 2012/2013 and 2013/2014.

   i) the assumed 24-hour average degree day temperature in the Southern Operations Area;

   ii) the forecast easterly transportation demand on the Dawn-Trafalgar transmission system, broken down by in-franchise customers without contracts, in-franchise customers with contracts, and ex-franchise customers;

   iii) a list of the ex-franchise customers and their corresponding contracted firm M12 and C1 easterly transportation volumes. Please separately identify any M12 and C1 volumes which are forecast not to be renewed or which are not yet contracted;

   iv) whether Union forecasts the purchase of Winter Peaking Service, and if so, the volume of Winter Peaking Service forecast to be purchased;

   v) forecast receipts by receipt point;

   vi) forecast deliveries by delivery point, with deliveries at Parkway (split out between Parkway TCPL and Parkway Consumers) distinguished between those from the Dawn-Trafalgar system, Winter Peaking Service, and TransCanada FT;

   vii) the physical direction of flow (e.g. Dawn to Parkway); and

   viii) whether gas is forecast to physically flow from the TransCanada system at Parkway into Union's Dawn-Trafalgar system.

Response:

a)

i) For winter 2012/2013 and winter 2013/2014 the winter design day average daily temperature is 44 degree day ("44DD").

ii)

Particulars (GJ/d)	2012/2013	2013/2014
Southern In-franchise Customers with Contracts	534,638	532,524
Southern In-franchise Customers without Contracts	1,123,058	1,116,171
Northern and Eastern Area In-franchise Customers	262,587	262,587
Northern and Eastern Area Ex-franchise Customers	4,860,004	4,681,558

iii) Please see the last 2 columns of the table attached at Exhibit J.G-1-7-2 b) iii).

iv) Please see the response at Exhibit J.G-10-10-2 c).

v)

Forecast Receipts (GJ/d)	2012	2013
Dawn	6,014,138	5,846,233
Kirkwall	109,508	284,260
Parkway	654,370	639,088

vi) Please see the response at Exhibit J.G-1-7-4.

vii) For winter 2012/2013 and winter 2013/2014 the physical direction of flow is Dawn to Parkway.

viii) For winter 2012/2013 and winter 2013/2014, design day volumes are forecast to flow from Union to TCPL at Parkway.

UNION GAS LIMITED

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

Reference: Exhibit G3, Tab1
Exhibit B1, Tab 5
Union's 2004 Rate Application RP-2003-0063, Exhibit J32.4

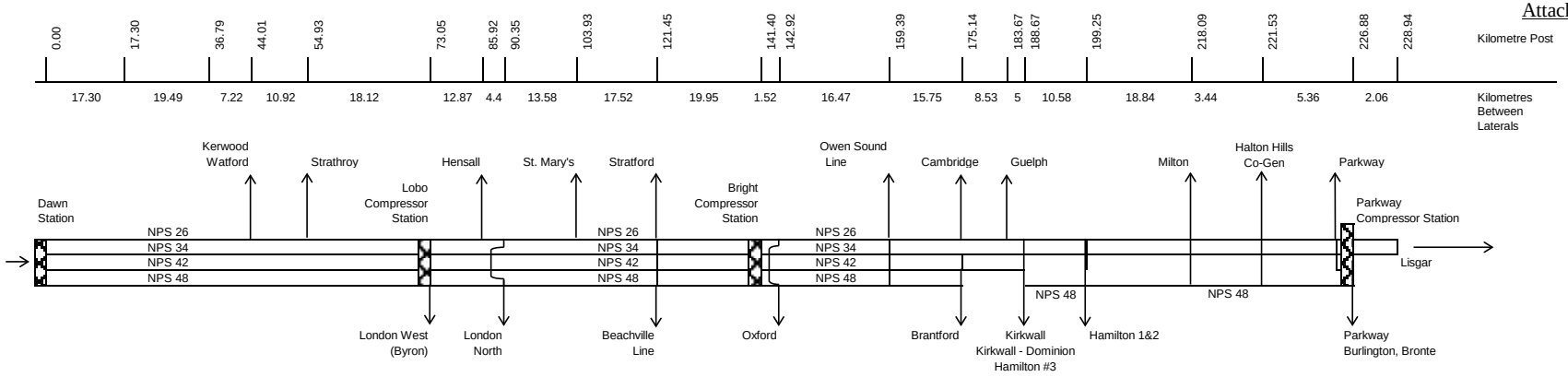
Preamble: TransCanada seeks information to better understand how Union allocates Dawn-Trafalgar transmission demand costs, to be provided in the same format as Attachment 1.

Please provide schematics of Union's Dawn-Trafalgar system on the 2012/2013 winter design day and the 2013/2014 winter design day. Following the format of the schematic in reference (iii), please include tables showing design day demands, system capacity, and compressor station operating conditions at peak hour.

Response:

The schematic of Union's Dawn-Parkway transmission system based on 2012/2013 and 2013/2014 winter design day are provided at Attachment 1 and Attachment 2.

PARKWAY SYSTEM



Design Day Demands

		(GJ/d)
	Southern Ontario	
	Forest, Watford	7.098
	Strathroy	7.865
	London West	112.938
U	Hensall	29.185
N	London North	97.723
I	St. Mary's	6.499
O	Stratford	36.514
N	Beachville	52.214
	Oxford Line	42.989
M	Owen Sound Line	236.331
A	Cambridge	70.044
R	Brantford	98.057
K	Kirkwall - Dominion	81.022
E	Guelph	83.106
T	Hamilton 3	59.460
S	Hamilton 1&2	253.816
	Milton	70.838
	Halton Hills	139.719
	Parkway (Greenbelt)	34.903
	Burlington, Bronte	137.375
	Total Southern Ontario	1.657.698
	North and Eastern Ontario	262.587
	Kirkwall	773.381
	Parkway TCPL	2.459.230
M	Parkway Cons/Lisgar	1.627.393
1	**Total M12**	4.860.004
2	**Total Design Day Demands**	**6.780.289**

System Capacity

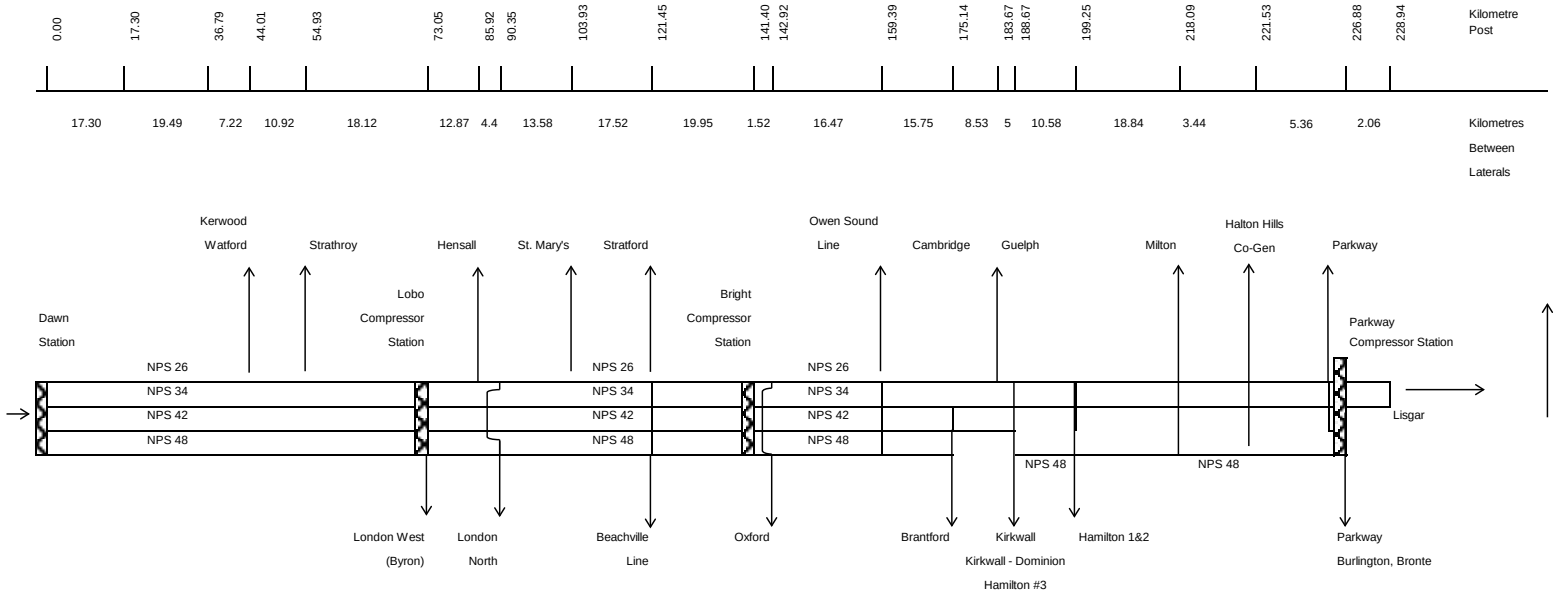
	(GJ/d)
Total System Capacity	**6,811,088**
(Including Firm Service Receipts of 654,370 GJ/d)	
Total Requirements	**6,780,289**
Total (Shortfall) Surplus	**30,800**
Union Markets	
M12 Transportation	
Kirkwall	
Lisgar, Parkway	30,800

WINTER DESIGN DAY
PARKWAY SYSTEM
WINTER 2012/13

Compressor Stations Operating Conditions at Peak Hour

STATION	LOBO	BRIGHT	PARKWAY
Power Available (MW)	36.8	91.9	52.9
Power Required (MW)	36.8	91.9	49.3
Pressure			
Suction (kPa)	4,536	3,764	3,520
Discharge (kPa)	5,294	5,845	6,453
Compression Ratio	1.17	1.55	1.83
Flow (GJ/d)	6,120,200	5,990,121	2,235,287
Daily Fuel (GJ/d)	11,513	21,195	11,752

PARKWAY SYSTEM



Design Day Demands

	Southern Ontario	(GJ/d)
	Forest, Watford	6,943
	Strathroy	7,716
	London West	110,799
U	Hensall	28,581
N	London North	95,956
I	St. Mary's	6,384
O	Stratford	35,714
N	Beachville	51,808
	Oxford Line	42,634
M	Owen Sound Line	234,289
A	Cambridge	69,021
R	Brantford	97,294
K	Kirkwall - Dominion	80,392
E	Guelph	82,175
T	Hamilton 3	59,756
S	Hamilton 1&2	255,082
	Milton	71,209
	Halton Hills	139,762
	Parkway (Greenbelt)	35,086
	Burlington, Bronte	138,095
	Total Southern Ontario	1,648,695
	North and Eastern Ontario	262,587
	Kirkwall	487,183
M	Lisgar, Parkway	4,194,375
1	**Total M12**	4,681,558
2	**Total Design Day Demands**	**6,592,840**

System Capacity

	(GJ/d)
Total System Capacity	**6,802,653**
(Including Firm Service Receipts of 639,088 GJ/d)	
Total Requirements	**6,592,840**
Total (Shortfall) Surplus	**209,813**
Union Markets	
M12 Transportation	
Kirkwall	
Lisgar, Parkway	209,813

WINTER DESIGN DAY
PARKWAY SYSTEM
WINTER 2013/14

Compressor Stations Operating Conditions at Peak Hour

STATION	LOBO	BRIGHT	PARKWAY
Power Available (MW)	36.8	91.9	52.9
Power Required (MW)	36.8	91.9	52.8
Pressure			
Suction (kPa)	4,503	3,847	3,655
Discharge (kPa)	5,283	6,028	6,453
Compression Ratio	1.17	1.57	1.77
Flow (GJ/d)	6,037,409	5,957,281	2,537,630
Daily Fuel (GJ/d)	11,517	20,307	12,544

UNION GAS LIMITED

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

Reference: Exhibit G3, Tab1;
Exhibit B1, Tab 5;
Union's 2004 Rate Application RP-2003-0063, Exhibit J32.5.

Preamble: TransCanada seeks information to better understand how Union allocates Dawn-Trafalgar transmission demand costs, to be provided in the same format as Attachment 2.

a) Please provide the following information used to determine Union's 2003 rates:

   i) the commodity-kilometres used to determine the allocation of the Dawn-Trafalgar transmission demand costs between in-franchise and ex-franchise customers. Please show the demands and distances, in the same format as reference (3); and

   ii) the Dawn-Trafalgar transmission demand cost allocated to in-franchise and ex-franchise customers. Please respond in the same format as reference (3).

b) Please provide the following information based on the same methodology and assumptions used to determine Union's 2013 rates, except assuming that all in-franchise customers are served from Dawn, with no regard for volumes delivered at the east end of the Dawn-Trafalgar system:

   i) The commodity-kilometres used to determine the allocation of the Dawn-Trafalgar transmission demand costs between in-franchise and ex-franchise customers. Please show the demands and distances, in the same format as reference (3); and

   ii) The Dawn-Trafalgar transmission demand costs allocated to in-franchise and ex-franchise customers. Please respond in the same format as reference (3).

Response:

a) i. Please refer to Attachment 1.

ii. Please refer to Attachment 2 and Attachment 3.

b) i. Please refer to Attachment 4.

ii. Please refer to Attachment 5 and Attachment 6.

Dawn Trafalgar Allocation Units
Winter 2013/14

Line No.	Particulars	Demand ($10^6m^3/d$) (a)	Kilometre Post (km) (b)	Commodity Kilometre (($10^6m^3/d$)*km) (c)
	Union Demands Supplied by Dawn			
1	Forest, Watford	0.184	44.01	8.094
2	Strathroy	0.204	54.93	11.228
3	Byron	2.935	73.05	214.408
4	Hensall	0.515	85.74	44.161
5	London N	2.542	90.35	229.659
6	Hensall	0.242	85.74	20.754
7	St Mary's	0.169	103.93	17.575
8	Stratford	0.946	121.45	114.898
9	Beachville	1.372	121.45	166.677
10	Oxford	1.129	142.92	161.410
11	Owen Sound Line	6.206	159.39	989.229
12	Cambridge	1.828	175.14	320.219
13	Brantford	2.577	175.14	451.394
14	Guelph	2.177	183.67	399.817
15	Kirkwall- Dominion	2.130	188.67	401.787
16	Gate 3	1.024	188.67	193.188
17	Gates 1 & 2	6.757	199.25	1,346.358
18	Milton	0.202	218.09	44.126
19		33.141		5,134.980
	Union Demands Supplied by Parkway			
20	Milton	1.684	10.85	18.271
21	Halton Hills (dist'n)	0.222	7.33	1.630
22	HH Power Plant	3.480	7.33	25.508
23	Burlington	1.433	0.00	0.000
24	Bronte	2.225	0.00	0.000
25	Greenbelt	0.929	0.00	0.000
26		9.974		45.409
	Union Demands Supplied by Kirkwall			
27	Gate 3	0.559	0.00	0.000
28		0.559		0.000
29	Total Union	43.674		5,180.390
	Storage & Transportation Contracts			
30	Dawn to Parkway	104.136	228.94	23,840.847
31	Dawn to Kirkwall	12.906	188.67	2,434.883
32	Kirkwall to Parkway	6.973	40.27	280.822
33	Total S & T	124.015		26,556.552
34	Northern & Eastern Areas	6.956		
35	Total Union and S&T	174.645		31,736.942
36	Gross Parkway Firm Deliveries	16.929		
37	Total Design Day Demand	157.716		

Dawn Compression Allocation Units
Winter 2013/14

Line No.	Particulars	10^6m^3
1	Union load	50.071
2	Less Parkway FT	(16.929)
3	Less Load not requiring Dawn compression	(0.243)
4	Union load requiring Dawn compression	32.899
5	S&T load	117.041
6	Less load not requiring Dawn compression	(0.857)
7	S&T load requiring Dawn compression	116.184
8	Total System Design Day Load Requiring Dawn Compression	149.083

M12 Transportation Allocation
Winter 2013/14

Line No.	Particulars	Transportation Demand Excl. Dawn Compression (a)	Dawn Compression (b)	Total (c)
	Cost of Service ($000's)			
1	Ref. Exhibit G3, Tab 2, Schedule 14, Updated	151,690		
2	Ref. Exhibit G3, Tab 2, Schedule 12, Updated		20,423	
3				172,113
	Allocation of Costs Between M12 and Union Markets:			
	Direct Assignment ($000's)			
4	Customer Billing & Accounting to M12	19		
5	Remaining Cost of Service to be allocated	151,671		
	Allocation Units:			
	Transmission ($10^6 m^3$/d*km)			
6	Total System Allocation Unit	31,736.942		
7	M12 Allocation Unit	26,556.552		
	Dawn Compression ($10^6 m^3$)			
8	System Maximum Day Volume		149.083	
9	M12 Maximum Day Volume		116.184	
	Allocated Costs:			
	Transmission ($000's) (Ref. G3,T2,S14, Updated)			
10	M12 allocated costs	127,031		
11	C1 allocated costs	106		
12	In-franchise allocated costs	24,553		
	Dawn Compression ($000's) (Ref. G3,T2,S12, Updated)			
13	M12 allocated costs		15,485	
14	C1 allocated Costs		553	
15	In-franchise allocated costs		4,385	

Dawn Trafalgar Allocation Units with No Obligated Parkway Deliveries
Winter 2013/14

Line No.	Particulars	Demand ($10^6m^3/d$)	Kilometre Post (km)	Commodity Kilometre (($10^6m^3/d$)*km)
		(a)	(b)	(c)
	Union Demands Supplied by Dawn			
1	Forest, Watford	0.184	44.01	8.094
2	Strathroy	0.204	54.93	11.228
3	Byron	2.935	73.05	214.408
4	Hensall	0.515	85.74	44.161
5	London N	2.542	90.35	229.659
6	Hensall	0.242	85.74	20.754
7	St Mary's	0.169	103.93	17.575
8	Stratford	0.946	121.45	114.898
9	Beachville	1.372	121.45	166.677
10	Oxford	1.129	142.92	161.410
11	Owen Sound Line	6.206	159.39	989.229
12	Cambridge	1.828	175.14	320.219
13	Brantford	2.577	175.14	451.394
14	Guelph	2.177	183.67	399.817
15	Kirkwall- Dominion	2.130	188.67	401.787
16	Gate 3	1.024	188.67	193.188
17	Gates 1 & 2	6.757	199.25	1,346.358
18	Milton	1.886	218.09	411.389
19	Halton Hills (dist'n)	0.222	221.61	49.267
20	HH Power Plant	3.480	221.61	771.203
21	Burlington	1.433	228.94	328.069
22	Bronte	2.225	228.94	509.427
23	Greenbelt	0.929	228.94	212.785
24		43.115		7,372.996
	Union Demands Supplied by Parkway			
25	Guelph	0.000	45.27	0.000
26	Kirkwall- Dominion	0.000	40.27	0.000
27	Gate 3	0.000	40.27	0.000
28	Gates 1&2	0.000	29.69	0.000
29	Milton	0.000	10.85	0.000
30	Halton Hills (dist'n)	0.000	7.33	0.000
31	HH Power Plant	0.000	7.33	0.000
32		0.000		0.000
	Union Demands Supplied by Kirkwall			
33	Gate 3	0.559	0.00	0.000
34		0.559		0.000
35	Total Union	43.674		7,372.996
	Storage & Transportation Contracts			
36	Dawn to Parkway	104.136	228.94	23,840.847
37	Dawn to Kirkwall	12.906	188.67	2,434.883
38	Kirkwall to Parkway	6.973	40.27	280.822
39	Total S & T	124.015		26,556.552
40	Northern & Eastern Areas	6.956	228.940	1,592.495
41	Total Union and S&T	174.645		35,522.042
42	Gross Parkway Firm Deliveries	0.000		
43	Total Design Day Demand	174.645		

Dawn Compression Allocation Units with No Obligated Parkway Deliveries
Winter 2013/14

Line No.	Particulars	10^6m^3
1	Union load	50.071
2	Less Parkway FT	0.000
3	Less Load not requiring Dawn compression	(0.330)
4	Union load requiring Dawn compression	49.741
5	S&T load	117.041
6	Less load not requiring Dawn compression	(0.770)
7	S&T load requiring Dawn compression	116.271
8	Total System Design Day Load Requiring Dawn Compression	166.012

M12 Transportation Allocation with No Obligated Parkway Deliveries
Winter 2013/14

Line No.	Particulars	Transportation Demand Excl. Dawn Compression (a)	Dawn Compression (b)	Total (c)
	Cost of Service ($000's)			
1		183,681		
2			20,408	
3				204,089
	Allocation of Costs Between M12 and Union Markets:			
	Direct Assignment ($000's)			
4	Customer Billing & Accounting to M12	19		
5	Remaining Cost of Service to be allocated	183,662		
	Allocation Units:			
	Transmission ($10^6m^3/d*km$)			
6	Total System Allocation Unit	35,522.042		
7	M12 Allocation Unit	26,556.552		
	Dawn Compression (10^6m^3)			
8	System Maximum Day Volume		166.012	
9	M12 Maximum Day Volume		116.271	
	Allocated Costs:			
	Transmission ($000's)			
10	M12 allocated costs	137,536		
11	C1 allocated costs	106		
12	In-franchise allocated costs	46,039		
	Dawn Compression ($000's)			
13	M12 allocated costs		13,906	
14	C1 allocated Costs		553	
15	In-franchise allocated costs		5,949	

UNION GAS LIMITED

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

Reference: Exhibit B1, Tab 5 pages 3-4

Preamble: TransCanada seeks information to better understand how Union allocates Dawn-Trafalgar transmission demand costs.

a) Please provide the 2013 design capacity reduction of the Dawn-Trafalgar system made possible by forecast obligated east end deliveries.

b) Please provide an approximation of the reduction in utility plant rate base of the Dawn-Trafalgar system made possible by forecast east end deliveries.

Response:

a) For winter 2013/2014 the design capacity reduction of the Dawn-Parkway system made possible by forecast obligated east end deliveries is 639,088 GJ/d or 16.929 $10^6 m^3$.

b) Removal of obligated deliveries at Parkway (639,088 GJ/day) would require the replacement volumes to be sourced from Dawn and shipped on the Dawn-Parkway system. The estimated capital cost of the expansion required to meet incremental Dawn send-out and Dawn-Parkway transport is between $250 million and $500 million. The removal of east end deliveries at Parkway will increase the volume of gas compressed at Parkway, and may impact the capacity of TCPL's system.

The facilities required vary depending on the amount of available capacity and future growth of the Dawn-Parkway demands. If sufficient Dawn-Parkway capacity were available to permanently eliminate the Parkway obligation there would be no change in rate base. In-franchise rates would, however, increase to reflect the increased use of the Dawn-Parkway system by in-franchise customers.

UNION GAS LIMITED

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

Reference: Exhibit G3, Tab1 Pg. 4-5
Union's 2004 Rate Application RP-2003-0063, Exhibit J32.12 (a).

Preamble: TransCanada requires further information in order to understand how compressor costs are functionalized to Dawn-Trafalgar transmission to be provided in the same format as Attachment 3.

a) Please provide a schematic of the pipeline layout and the compressor units in the Dawn compressor station in the same format as reference (2). The layout should show how each compressor is connected to the TransCanada, St. Clair, Bluewater, Vector, Ojibway, and Dawn-Trafalgar pipelines and to the pipelines from Union and Enbridge Gas Distribution's storage sites on the 2013 design day that Union uses for determining the winter compression charge. The schematic should also show the pipeline arrangements from the compressors' discharge side into each line of Union's Dawn-Trafalgar system.

b) Please list all of the compressors at the Dawn compressor station that have some or all of their costs allocated to Dawn-Trafalgar transmission.

c) Please identify the compressors provided in response (b) which are also used to provide other services besides transmission, specify the other service provided (e.g. storage, transportation on other pipelines, etc.), and provide calculations and allocation factors used to functionalize the costs of these compressors between Dawn-Trafalgar transmission and other services.

d) Are each of the compressors at the Dawn compressor station that have some or all of their costs allocated to Dawn-Trafalgar transmission physically capable of providing, and actually used to provide, compression for the purpose of transmission on the Dawn-Trafalgar system? If not, please list the exceptions and explain why costs related to these compressors are allocated to Dawn-Trafalgar transmission.

e) Please provide the following operating information for each of the compressors at the Dawn compressor station on the 2013 design day that Union uses for determine the winter compression charge:

   i) ISO power;

   ii) Maximum volumetric capacity;

   iii) suction pressure;

iv) discharge pressure;

v) MW required;

vi) volume compressed for each service provided by that compressor;

vii) inlet gas composition and temperature;

viii) efficiency of the compression; and

ix) ambient temperature.

Response:

a) Please see Attachment 1.

b) The compressors that are allocated some or all of their costs to Dawn-Trafalgar transmission include Plant B, C, D, E, F, G, and J, Oil Springs East, Edys Mills and Dow 'A'.

c) The compressors that form part of the Dawn Compressor station are used for a variety of different services throughout the year including storage, transmission on Dawn Trafalgar, and transmission on other pipelines. The usage can be different each day. The compressor usage is optimized on a daily basis to minimize costs.

Union uses an allocation based on design day horsepower requirements to functionalize the Dawn compression rate base related costs. The functionalization percentages of the factor COMPRECL-PT are:

- Storage Excluding Dehydrator – 54.77%
- Dawn Station – 41.98%
- Ojibway/St. Clair – 3.65%

The horsepower allocation includes all the compressors listed in part b) except for the Plant E compressor. In accordance with Union's regulated/unregulated cost allocation methodology, which was approved by the Board in EB-2011-0038, Union directly assigned the Plant E compressor to the transmission function and excluded Plant E from the horsepower allocation.

Calculations:

Using a proprietary network analysis software package, Union hydraulically models its entire Dawn yard on the design day. This model is complete with piping, valving, compressors, and

other facilities.

For the compressors, Union enters full performance maps based on actual test data. Union then enters the boundary conditions for the model. This includes all flows and pressures of gas entering and leaving the boundary (including the Trafalgar and Panhandle markets).

The software then calculates the horsepower required by each compressor to move the volumes coming into the boundary at lower pressures and exiting the boundary at higher pressures. The horsepower, suction, and discharge pressures for each compressor are calculated by the model in order to satisfy the boundary conditions.

Union then allocates the required horsepower of each compressor to Storage Service or to Transmission Service. This is done outside of the model. Because of the integrated nature of the Dawn yard, not all compressors are specifically performing Storage or Transmission Services. The horsepower of compressors not performing a specific service must be divided between Storage and Transmission Services. The horsepower required to raise the pressure of gas from storage pool pressure to 700 psig is allocated to Storage Service. The horsepower required to raise the pressure of gas from 700 psig to 895 psig is allocated to Transmission Service.

The total transmission horsepower is further subdivided between Dawn Trafalgar Transmission Service and Panhandle Transmission Service, based on the ratio of the flows to each system.

The factor COMPRECL-O&M is used to functionalize Dawn compression O&M costs. The allocation is based on the utility fuel requirements.

Storage Excluding Dehydrator – 20.46%
Dawn Station – 73.19%
Ojibway/St. Clair – 6.36%

The Dawn storage and transmission fuel requirements are calculated using the Gross Compressor Fuel Model. The Gross Compressor Fuel Model is used to predict the annual compressor fuel that will be required to meet all of Union's storage and transmission needs. It is an operational model that uses a blend of forecast information, historical information and typical operational practices and assumptions.

Fuel requirements are calculated based on forecasted monthly activity for each system.

Due to the fact that the model is very large and involves multiple worksheets for each calculation and utilizes assumptions that vary by season and month, it is not practical to provide the calculations that would be generated by the model. In order to assist in the

understanding of how Union calculates its fuel requirements, the methodology has been provided below.

Dawn Storage Fuel

The Dawn storage fuel volume is the volume of fuel required to compress forecast storage withdrawal activity to the transmission delivery pressure (700 psig) at Dawn in the winter and the forecast storage activity from Dawn delivery pressure to storage discharge pressure in the summer. The volume of the storage fuel is dependent on the forecast inventory level, the corresponding storage pressure and the discharge and suction pressure for each month.

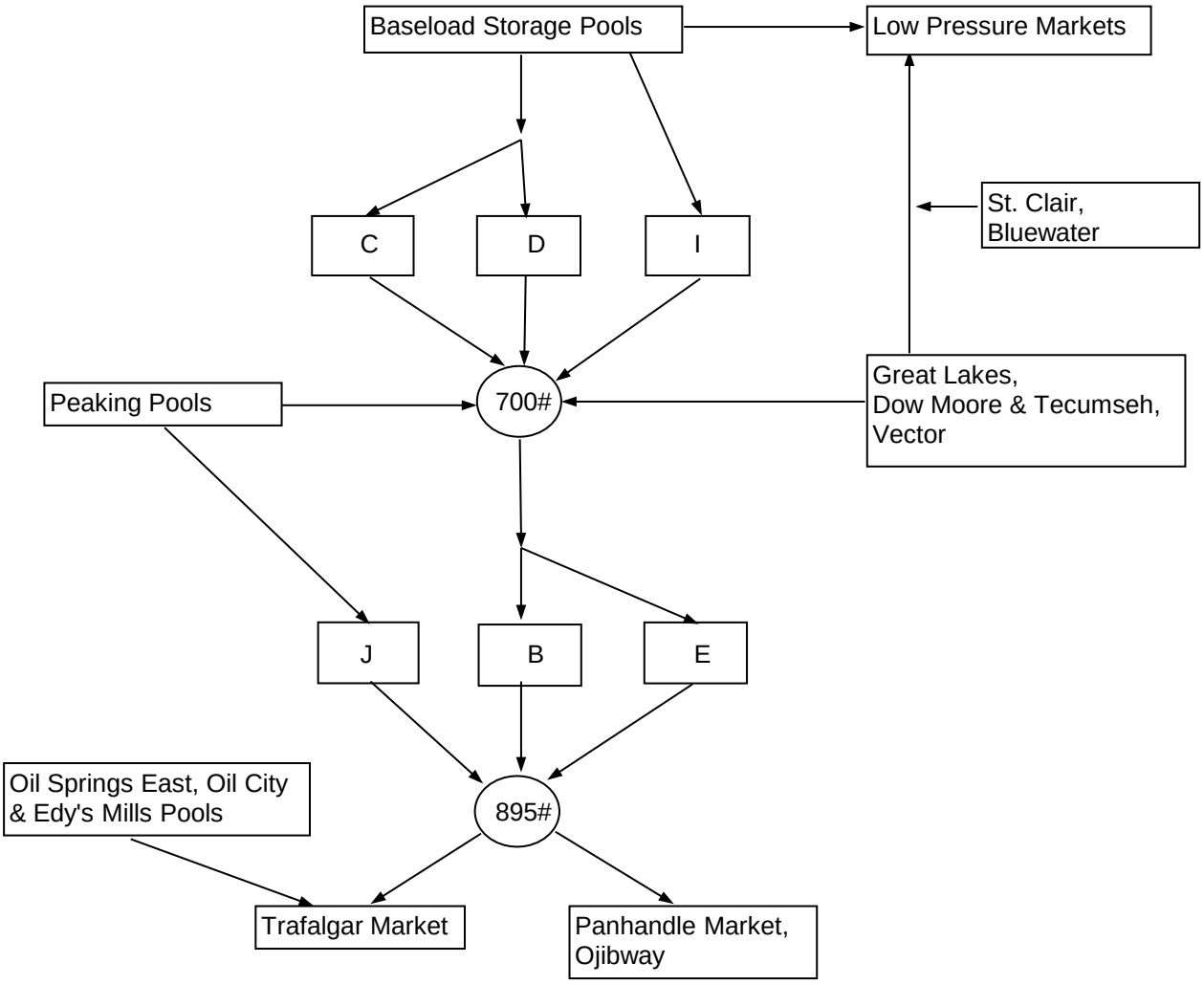
Dawn Transmission Fuel

In the winter time, the Dawn transmission fuel is the volume of fuel required to compress the total Sendout requiring compression from Dawn from the transmission delivery contract pressure of 700 psig to the forecasted market pressure. These market pressures vary on a monthly basis and are determined by historical information and operational philosophies.

In the summer time for any delivery point outboard of Dawn, if the forecasted market consumption is less than the total imports deliveries, the volumes are compressed from the market pressure to the Dawn transmission delivery contract pressure of 700 psig. These market pressures will vary on a monthly basis and are determined by historical information and operational philosophies.

d) No, not all of the compressors listed in part b) that have some or all of their costs allocated to Dawn Trafalgar transmission are physically capable of providing, nor used to provide, compression for the purpose of transmission on the Dawn Trafalgar system. Union uses the horsepower allocation and a direct assignment of Plant E compressor costs, described in part c) to functionalize costs to the Dawn-Trafalgar system.

e) Please see Attachment 2.


Baseload Storage Pools
Low Pressure Markets
C
D
I
St. Clair,
Bluewater
Peaking Pools
700#
Great Lakes,
Dow Moore & Tecumseh,
Vector
J
B
E
Oil Springs East, Oil City
& Edy's Mills Pools
895#
Trafalgar Market
Panhandle Market,
Ojibway

Compressor Data - W13/14 Design Day

COMPRESSOR	SUCTION PRESSURE (kPag)	DISCHARGE PRESSURE (kPag)	ISO HP	MAXIMUM AVAILABLE HP(1)	TOTAL REQUIRED HP	TOTAL REQUIRED TO 4962 kPag LEVEL HP	PEAK HOUR GAS FLOWRATE ($10^3m^3/d$)	GAS SPECIFIC GRAVITY	SUCTION TEMPERATURE (deg.C)	COMPRESSION RATIO	FUEL CONSUMPTION ($10^3m^3/d$)	EFFICIENCY
B	4,790	6,200	26,700	27,400	14,875	n/a	26,334	0.582	17	1.29	2.7	79%
C	1,380	4,770	30,270	32,100	22,893	22,893	8,759	0.586	9	3.30	3.9	78%
D	1,410	4,780	33,350	37,100	24,519	24,519	9,226	0.586	11	3.24	4.4	79%
E	4,740	6,320	35,000	39,100	39,100	n/a	73,895	0.586	20	1.33	6.4	80%
F1	4,770	6,250	10,310	12,509	11,436	n/a	22,536	0.586	14	1.30	1.9	79%
F2	4,770	6,250	10,310	12,509	11,436	n/a	22,536	0.586	14	1.30	1.9	79%
G(2)	n/a	n/a	35,000	38,400	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a
I	2,210	4,770	44,500	47,200	47,200	47,200	28,501	0.586	14	2.11	6.8	76%
J	4,210	6,270	10,310	12,508	12,508	4,263	15,806	0.586	14	1.48	2.0	77%
DOW 'A'	2,640	4,990	2,650	2,650	2,650	2,519	1,834	0.586	16	1.86	0.5	n/a (3)
EDYS MILLS	2,080	6,140	1,355	1,355	1,355	1,065	189	0.586	16	2.86	0.2	n/a (3)
OIL SPRINGS EAST	2,320	6,140	2,000	2,000	2,000	1,521	907	0.586	16	2.58	0.3	n/a (3)

Notes:

(1) Maximum Horsepower may exceed ISO Horsepower due to low ambient temperature of -26 degrees Celsius.

(2) Unit reserved for Loss of Critical Unit protection.

(3) Horsepower calculated by empirically derived power/flow vs. compression ratio curve. Therefore no efficiency is calculated.

UNION GAS LIMITED

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

Reference: Exhibit G3, Tab1 pg 16, lines 2-4

Preamble: Union states that Ojibway / St. Clair demand costs are allocated to ex-franchise customers based on the relationship between ex-franchise firm demand and St. Clair import capacity, Ojibway export capacity, and Ojibway local market demand.

a) Please provide the design day and peak day capacity of the St. Clair to Dawn line.

b) Please provide the average daily throughput and peak day throughput on the St. Clair to Dawn line for each of the last 10 years.

c) Please provide the annual load factor on the St. Clair to Dawn line for each of the last 10 years.

Response:

a) The design day and peak day capacity of the St. Clair to Dawn line is 5,700 10^3m^3.

b) Information for 2001 – 2006 is not readily available.

Average Daily and Peak Day Throughput

Line No.	Particulars (10^3m^3)	Average	Peak
1	2007	300	3,700
2	2008	800	2,100
3	2009	700	2,700
4	2010	800	4,100
5	2011	2,400	7,100

c) Annual Load Factor

Line No.	St. Clair to Dawn Line	Load Factor
1	2007	5%
2	2008	14%
3	2009	12%
4	2010	14%
5	2011	43%

UNION GAS LIMITED

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

Ref: Exhibit G3, Tab 1, Schedule 1, pg 3 line 7 to pg 4 line 22

Preamble: TransCanada wishes to better understand how compression rate base related costs are functionalized.

a) Please provide a schematic of the Dawn compression and storage pool facilities including all pipes, compressors, meters, and valves and the following information:

   i) Storage assets that are used solely for the provision of storage serves and are not included in the compressor horsepower requirements calculation that can be identified as storage assets at the point of interconnect with other assets on the schematic with further detail of the storage assets required.

   ii) For each pipe provide the diameter, length and the maximum allowable operating pressure (MAOP).

   iii) For each meter please provide the capacity of the meter.

   iv) For each valve please provide the size, the MAOP, whether the valve is normally open or closed or a regulator and whether the valve can be remotely operated from Union's gas control.

   v) Please indicate on the schematic the facilities identified as: 26"/34"/42" Meter Runs; Total Measurement; Tecumseh Interconnect; TCPL Interconnect and Great Lakes Header; Vector Interconnect; Plant E Compressor; and Tecumseh Sombra Line Extension.

Response:

a) i) – v) Please see the response at Exhibit J.G-1-7-7. Union does not have a schematic and cannot reasonably create one with the level of detail requested.

UNION GAS LIMITED

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

Reference: Exhibit G3, Tab 1, Schedule 1, pg 4 line 20 to pg 5 line 2

Preamble: TransCanada wishes to better understand the functionalization of the Dawn assets between storage and compression.

Please provide the following information at design day conditions for 2013:

i) For each of the compressor units used to functionalize assets between storage and transmission please provide:

   a) power available;

   b) total power required;

   c) power required to raise the pressure to 4962 kPa if applicable;

   d) suction pressure;

   e) discharge pressure;

   f) compression ratio;

   g) flow; and

   h) fuel consumption.

   If the flow is expressed in thermal units, i.e. PJ/d, then please provide the assumed heating value of the gas.

ii) For each of the meters and storage assets as identified in the schematic to Interrogatory 9 (Section G. Cost Allocation Question 1)

iii) For each of the valves identified in the schematic to Interrogatory 9 (Section G. Cost Allocation Question 1) please identify if the valve is open, closed or regulating and if regulating provide the flow, upstream pressure and downstream pressure.

Response:

i) Please see the response at Exhibit J.G-1-7-7e).

ii) / iii) Responding to this request would be an onerous task. The question has no relevance to setting Union's 2013 rates.

UNION GAS LIMITED

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

Reference: Exhibit G1, Tab1, pg 9, lines 7 – 9

Preamble: TransCanada wishes to understand the facilities that are used to provide Dawn to Dawn-TCPL firm service and the extent to which additional Dawn to Dawn-TCPL service may be available or could be made available.

a) For each of the facilities identified in the schematic requested in Interrogatory 9 (Section G. Cost Allocation Question 1), please provide the following information at the conditions used to determine the amount of firm Dawn to Dawn-TCPL capacity available for the 2012/2013 Gas Year:

   i) For each of the compressor units please provide:

      a. power available;
      b. power required;
      c. suction pressure;
      d. discharge pressure;
      e. compression ratio;
      f. flow; and
      g. fuel consumption.

   If the flow is expressed in thermal units, i.e. PJ/d, then please provide the assumed heating value of the gas.

   ii) For each of the meters and storage assets please provide the flow and the pressure.

   iii) For each of the valves please identify if the valve is open, closed or regulating and if regulating provide the flow, upstream pressure and downstream pressure.

   iv) For each of the pipes please provide the upstream pressure, downstream pressure and flow

b) What is Union's capacity to provide Dawn to Dawn-TCPL service?

c) Please specifically identify the "bottleneck(s)" in the facilities that currently constrain(s) the amount of Dawn to Dawn-TCPL capacity that Union can provide.

d) Please identify specific facilities, if any, required to increase TransCanada's firm Dawn to Dawn-TCPL service from the current level of 500 TJ/d to 600 TJ/d as well as an estimate of the capital cost for the facilities identified and an estimate of the incremental commodity costs based on 90 days of utilization.

e) Please identify specific facilities, if any, required to increase TransCanada's firm Dawn to Dawn-TCPL service from the current level of 500 TJ/d to 800 TJ/d as well as an estimate of the capital cost for the facilities identified and an estimate of the incremental commodity costs based on 90 days of utilization.

f) Please identify specific facilities, if any, required to increase TransCanada's firm Dawn to Dawn-TCPL service from the current level of 500 TJ/d to 900 TJ/d as well as an estimate of the capital cost for the facilities identified and an estimate of the incremental commodity costs based on 90 days of utilization.

Response:

a)

i) Union has not determined the amount of firm Dawn to Dawn-TCPL capacity available for the 2012/2013 Gas Year. The detailed compressor information for each of the units is dependent on supplies and demands entering and leaving Dawn. Union does not have adequate information to respond to this question.

ii) Please see the response to i) above.

iii) Please see the response to i) above.

iv) Please see the response to i) above.

b) Union currently has a contracted capacity of 500 TJ/d for Dawn to Dawn-TCPL.

c) Please see the response at b) above.

d) Please see the response at b) above.

e) Please see the response at b) above.

f) Please see the response at b) above.

UNION GAS LIMITED

Answer to Interrogatory from
City of Kitchener

Ref: Exhibit G3, Tab 5, Schedules 1 & 21
EB-2005-0520 – Exhibit G3, Tab 5, Schedules 1 & 24

Preamble: The attached table prepared by Kitchener compares Gross Plant in Service and Accumulated Depreciation for Underground Storage from the cost studies filed by Union for its 2013 and 2007 base rates applications. For illustrative purposes, the table also compares storage demand related allocation factors from the 2013 and 2007 cost studies.

a) For each of lines 1 through 8 of the attached table, please provide a continuity schedule for Total Gross Plant In Service (columns a and d) that identifies: plant additions and retirements from 2007 through 2013 for regulated storage; plant additions and retirements from 2007 through 2013 for unregulated storage; adjustments or reclassifications; and, the removal of plant assets related to the unregulated storage business.

b) Please provide a similar continuity schedule as in part (a) above for Total Accumulated Depreciation for Underground Storage as shown at line 10 of the attached table.

c) Please verify that the allocation factor STORAGEXCESS for Kitchener's T3 rate class has decreased by about 7% from the 2007 cost study to the 2013 cost study as shown at line 12 of the attached table at columns b and e.

d) Have other in-franchise rate classes, particularly in the Southern Area, also reduced their allocated use of storage based on the STORAGEXCESS allocation factor from the 2007 cost study to the 2013 cost study?

e) Please verify that the allocation factor NETFROMSTOR for Kitchener's T3 rate class has decreased by about 10% from the 2007 cost study to the 2013 cost study as shown at line 14 of the attached table at columns b and e.

f) Have other in-franchise rate classes, particularly in the Southern Area, also reduced their allocated use of storage based on the NETFROMSTOR allocation factor from the 2007 cost study to the 2013 cost study?

g) Please explain why the allocation of Measuring and Regulating gross plant to the T3 rate class has increased by $ 489,000 or about 82% from the 2007 cost study to the 2013 cost study as shown at line 5, column h of the attached table?

h) Please explain why the allocation of Compressor Equipment gross plant to the T3 rate class has increased by $ 710,000 or about 15% from the 2007 cost study to the 2013 cost study as shown at line 7, column h of the attached table?

i) Please explain why the total NBV (Net Book Value) of Underground Storage as expressed in $ per GJ for illustrative purposes using the STORAGEXCESS allocation factor as shown at line 15 of columns a and d of the attached table has increased by $0.65 per GJ or 26% from the 2007 cost study to the 2013 cost study? Assuming the removal of unregulated storage assets for the 2013 cost study at generally more recent and higher marginal capital costs than the remaining embedded costs for regulated storage assets, shouldn't the average net capital cost of underground storage expressed in unit terms based on a space allocator (for illustrative purposes) decrease instead of increase?

Response:

a) The plant values provided in columns (a) for 2013 Cost Study and (d) 2007 Cost Study are estimated rate base values (average of the monthly averages), not Total Gross Plant In Service. Rate base values for an individual asset category are only calculated in a test year. Data by asset category for 2007 – 2012 is not available.

Total Gross Plant In Service for Regulated Storage was provided in Union's evidence submission as follows:

2007	Exhibit B9, Tab 1, Schedule 2, Page 1 of 3, rows 10 - 19
2008	Exhibit B8, Tab 1, Schedule 2, Page 1 of 3, rows 10 - 19
2009	Exhibit B7, Tab 1, Schedule 2, Page 1 of 3, rows 10 - 19
2010	Exhibit B6, Tab 2, Schedule 2, Page 1 of 3, rows 10 - 19
2011	Exhibit B5, Tab 2, Schedule 2, Page 1 of 3, rows 10 - 19
2012	Exhibit B4, Tab 2, Schedule 2, Page 1 of 3, rows 10 - 19
2013	Exhibit B3, Tab 2, Schedule 2, Page 1 of 3, rows 10 – 19

Assets transferred to the unregulated storage operation are identified in the 2007 Continuity of Property, Plant and Equipment in column (c).

Unregulated storage continuity for Gross Plant in Service will not be provided. To assess whether capital expenditures have been appropriately allocated between the regulated and unregulated storage operations, refer to the schedule at Exhibit B1, Summary Schedule 2 within Union's Updated 2013 Rate Application. The total expenditure and the amount allocated to the regulated operation are identified is this report. The methodology Union applied to separate the assets at December 31, 2006 was approved by the Board in EB-2011-0038.

b) See the response at a) above.

Total Accumulated Depreciation for Regulated Storage was provided in Union's evidence submission as follows:

2007	Exhibit B9, Tab 1, Schedule 3, Page 1 of 3, rows 9 - 16
2008	Exhibit B8, Tab 1, Schedule 3, Page 1 of 3, rows 9 - 16
2009	Exhibit B7, Tab 1, Schedule 3, Page 1 of 3, rows 9 - 16
2010	Exhibit B6, Tab 2, Schedule 3, Page 1 of 3, rows 9 - 16
2011	Exhibit B5, Tab 2, Schedule 3, Page 1 of 3, rows 9 - 16
2012	Exhibit B4, Tab 2, Schedule 3, Page 1 of 3, rows 9 - 16
2013	Exhibit B3, Tab 2, Schedule 3, Page 1 of 3, rows 9 - 16

Accumulated depreciation related to assets transferred to the unregulated storage operation are identified in the 2007 Continuity of Accumulated Depreciation in column (b).

c) Confirmed. The amount of storage space allocated to Rate T3, per the STORAGEEXCESS allocator, has decreased from 86,646 10^3m^3 in 2007 to 80,826 10^3m^3 in 2013 or approximately 7%.

d) Yes. The allocation of storage space has also decreased for Union South in-franchise rate classes M1, M4, M7, M9, M10, and T1 and Union North in-franchise rate classes Rate 10, and Rate 100 from 2007 to 2013.

e) Confirmed. The amount of storage deliverability allocated to Rate T3, per the NETFROMSTOR allocator, has decreased from 1,658 10^3m^3 in 2007 to 1,500 10^3m^3 in 2013, or approximately 10%.

f) Yes. The allocation of storage deliverability has also decreased for Union South in-franchise rate classes M1, M4, M5, M7 and M9 and Rate 100 in Union North.

g) The increase from the 2007 cost study to the 2013 cost study in underground storage M&R gross plant of $489,000 allocated to Rate T3 is due to the increase in functionalization of M&R plant to the storage function.

In the 2007 cost allocation study, approximately 21% of underground storage M&R gross plant was functionalized to storage, with 79% functionalized to transmission.

In the 2013 cost allocation study, approximately 42% of underground storage M&R gross plant was functionalized to storage, with 58% functionalized to transmission.

The increase in M&R gross plant functionalized to storage is the result of the application of Union's regulated/unregulated cost allocation methodology approved by the Board in EB-2011-0038.

This methodology recognizes that certain underground storage M&R assets are used to provide either storage or transmission service only. Accordingly, Union has directly assigned these M&R assets to either the storage or transmission functions. Consistent with the Board-approved methodology, the remaining M&R assets, which provide both storage and transmission service are functionalized between storage and transmission functions based on an analysis of use.

The result is a net increase in underground storage M&R gross plant functionalized to storage, which increases the allocation of underground storage M&R gross plant to Rate T3. Please see Attachment 1.

h) The increase from the 2007 cost study to the 2013 cost study in underground storage compressor equipment gross plant of $710,000 allocated to Rate T3 is due to the increase in functionalization of compressor equipment to the storage function.

In the 2007 cost allocation study, approximately 44% of underground storage compressor equipment gross plant was functionalized to storage, with 56% functionalized to transmission.

In the 2013 cost allocation study, approximately 51% of underground storage compressor equipment gross plant was functionalized to storage, with 49% functionalized to transmission.

The increase in compressor equipment functionalized to storage is the result of the application of Union's regulated/unregulated cost allocation methodology approved by the Board in EB-2011-0038.

This methodology recognizes that certain underground storage compression assets are used to provide either storage or transmission service only. Accordingly, Union has directly assigned these compression assets to either the storage or transmission functions. Consistent with the Board-approved methodology, the remaining compression assets, which provide both storage and transmission service are functionalized between storage and transmission functions based on compression horsepower.

The result is a net increase in underground storage compressor equipment gross plant functionalized to storage, which increases the allocation of underground storage compressor equipment to Rate T3. Please see Attachment 2.

i) The net book value ("NBV") of underground storage plant expressed as $ per GJ of storage space provided by Kitchener is not valid as it does not recognize that underground storage plant includes costs for both storage and transmission assets in the Dawn Station yard. It is also invalid to assume that the underground storage assets were removed at a higher marginal capital costs than the embedded costs for regulated storage. The 2007 cost allocation study does not include the costs associated with the non-utility storage development after the NGEIR decision.

Please see Attachment 3 for a NBV calculation of the underground storage plant functionalized to storage expressed as $ per PJ of storage space. As shown in Attachment 3 (columns a and b), the NBV per PJ of underground storage plant functionalized to storage has increased by $0.266 million (or 16%) per PJ of storage space from the Board-approved 2007 cost allocation study to the 2013 cost allocation study filed March 27, 2012.

NBV per PJ of storage space has increased as a result of Union's comprehensive review of underground storage assets at Dawn when performing the one-time separation of assets between the regulated and unregulated businesses.

NBV per PJ of storage space has also increased as of a result of Union's maintenance capital spend. All new storage capacity or storage deliverability is allocated 100% to the unregulated operation, but Union continues to complete maintenance capital projects on storage facilities that do not increase deliverability or capacity. Over time, this will increase the costs allocated to storage without increasing the storage space available. One example from 2011 would be the Dawn J project which was constructed to replace Dawn Plant A as a result of our Comprehensive Certificate of Approval program.

Background:

As a result of the NGEIR decision, Union identified three categories of underground storage assets:

a. storage assets that are directly attributable to providing storage services,
b. storage assets that are directly attributable to providing transmission services only; and
c. storage assets that provide both storage and transmission services.

In accordance with Union's regulated/unregulated cost allocation methodology, which was approved by the Board in EB-2011-0038, Union has directly assigned utility storage assets that are directly attributable to providing storage services to the storage function in the cost allocation study. These storage assets include storage lines, wells, dehydration assets and outboard storage compression equipment. As a result of this methodology, Union directly assigned $116.2 million net book value to the storage function in the 2013 cost allocation study. Please see Attachment 4 (line 1 and line 2, column b).

Similarly, Union has directly assigned utility storage assets that are directly attributable to the provision of transmission services only to the transmission function in the cost allocation study. While Union's system of accounts identifies all Dawn facility assets as underground storage assets, certain Dawn facility assets are only used in the provision of transmission services even though they are classified as underground storage assets in the plant accounting records. The underground storage assets that are directly assigned to transmission are described at Exhibit G3, Tab 1, Schedule 1, Updated, pages 3 and 4. As a result of this

methodology, Union directly assigned $25.7 million net book value to the transmission function in the 2013 cost allocation study. Please see Attachment 4 (line 2, column c).

The third category of underground storage assets provide both storage and transmission services. These underground storage assets include the remaining compression, and related structures and improvement and land, and measuring and regulating at the Dawn facility. Two methods are used to functionalize the remaining assets.

For Dawn compression assets, Union utilizes a horsepower allocation method to functionalize compression-related costs between storage and transmission functions based on the amount of compression horsepower required to provide storage and transmission services on design day.

The compression horsepower required to bring the pressure up to 4,926 kPa (700 psig) on design day is storage-related. The compression horsepower required to bring the pressure from 4,926 to 6,270 kPa (700 to 895 psig) on design day is transmission-related. Consistent with the Board's Decision in EB-2011-0038, Union adjusted the horsepower allocator to remove the compression horsepower that is directly assigned to either the storage or transmission functions. Accordingly, the Dawn Plant E compressor and certain outboard storage compression units have been excluded from the horsepower allocation. As a result of this change in the horsepower allocation, Union functionalized $72.5 million (or 55%) net book value to the storage function and $59.9 (or 45%) million to transmission in the 2013 cost allocation study. Please see Attachment 4 (line 3).

For measuring and regulating assets at the Dawn facility, Union functionalizes measuring and regulating plant costs based on an analysis of use. The analysis identifies forecasted transmission and storage activity at Dawn to functionalize measuring and regulating assets between the storage and transmission functions. The analysis of use includes in-franchise storage activity and short-term storage activity associated with the excess utility storage space. As a result of this change in the measuring and regulating allocation, Union functionalized $2.5 million (or 24%) net book value to the storage function and $8.0 (or 76%) million to transmission in the 2013 cost allocation study. Please see Attachment 4 (line 4).

Accordingly, the NBV per PJ of storage space has increased as a result of Union's comprehensive review of underground storage assets at Dawn. The result of these changes to the net book value of underground storage plant functionalization is $191.2 million (or 67%) functionalized to storage and $93.6 million (or 33 %) functionalized to transmission. Of the overall total decrease to underground storage plant of $102.8 million, $78.0 million (or 76%) relates to the storage function and $24.8 million (or 24%) relates to the transmission function. Please see Attachment 4 (line 11).

Functionalization of Underground Storage M&R Gross Plant and Allocation to Rate T3
Proposed 2013 vs. 2007 Board-Approved Cost Study

Line No.	Functional Classification ($000's)	2007	2013	Difference	Allocator	2007 Allocation % [1]	2007 Allocation $	2013 Allocation % [2]	2013 Allocation $	Difference
		(a)	(b)	(c)	(d)	(e)	(f) = (a x e)	(g)	(h) = (b x g)	(i) = (h - f)
	Storage Excluding Dehydration -									
1	Storage Deliverability	11,682	23,625	11,943	NETFROMSTOR	2.65%	309	3.48%	823	514
	Transmission									
2	Dawn Station Demand[3]	0	15,401	15,401	DAWNCOMP	1.17%	0	1.00%	155	155
3	Dawn Trafalgar Easterly[3]	42,160	16,552	(25,608)	DTTRANS	0.68%	287	0.65%	108	(180)
4	Ojibway St. Clair	2,212	278	(1,935)	O/SC_DEMAND	0.00%	0	0.00%	0	0
5	Total M&R Gross Plant	56,054	55,855	(199)			596		1,085	489

Notes:

1 Please see EB-2005-0520 Exhibit G3, Tab 5, Schedule 24.
2 Please see Exhibit G3, Tab 5, Schedule 21, Updated.
3 Includes transmission assests in the Dawn Station yard directly assigned to the transmission function, as per Exhibit G3, Tab 1, Schedule 1, Updated, pages 3-4.

Functionalization of Underground Storage Compressor Gross Plant and Allocation to Rate T3
Proposed 2013 vs. 2007 Board-Approved Cost Study

Line No.	Functional Classification ($000's)	2007	2013	Difference	Allocator	2007 Allocation		2013 Allocation		Difference
						%[1]	$	%[2]	$	
		(a)	(b)	(c)	(d)	(e)	(f) = (a x e)	(g)	(h) = (b x g)	(i) = (h - f)
	Storage Excluding Dehydration -									
1	Storage Deliverability	115,542	122,449	6,907	NETFROMSTOR	2.65%	3,056	3.48%	4,264	1,208
	Transmission									
2	Dawn Station Demand	134,578	108,310	(26,269)	DAWNCOMP	1.17%	1,578	1.00%	1,087	(491)
3	Dawn Trafalgar Easterly	3,681	2,989	(692)	DTTRANS	0.68%	25	0.65%	19	(6)
4	Ojibway St. Clair	10,285	6,291	(3,995)	O/SC_DEMAND	0.00%	0	0.00%	0	0
5	Total M&R Gross Plant	264,087	240,038	(24,048)			4,660		5,370	711

Notes:
1 Please see EB-2005-0520 Exhibit G3, Tab 5, Schedule 24.
2 Please see Exhibit G3, Tab 5, Schedule 21, Updated.

Functionalization of Underground Storage Plant Net Book Value
Proposed 2013 vs. 2007 Board-Approved Cost Study

Line No.	Gross Plant ($000's)	Storage			Transmission			
		Dehydrator	Excluding Dehydrator	Total Storage	Dawn Station	Dawn-Trafalgar Easterly	Ojibway/ St. Clair	Total
		(a)	(b)	(c) = (a + b)	(d)	(e)	(f)	(g) = (c + d + e + f)
	2013 Underground Storage Plant							
	Gross Plant:							
1	Land	0	2,456	2,456	1,260	0	98	3,814
2	Land Rights	0	32,062	32,062	0	0	0	32,062
3	Structures & Improvements	0	21,769	21,769	25,285	655	1,134	48,843
4	Wells and Lines	0	91,465	91,465	0	0	0	91,465
5	Measuring and Regulating	0	23,625	23,625	15,401	16,552	278	55,855
6	Base Pressure Gas	0	35,204	35,204	0	0	0	35,204
7	Compressor Equipment	0	122,449	122,449	108,310	2,989	6,291	240,038
8	Other	7,406	0	7,406	2,302	0	0	9,708
9	Subtotal	7,406	329,030	336,436	152,557	20,195	7,801	516,990
10	Accumulated Depreciation	4,420	140,814	145,234	74,265	9,340	3,332	232,171
11	Net Book Value	2,986	188,216	191,202	78,293	10,856	4,469	284,819
	2007 Underground Storage Plant							
	Gross Plant:							
12	Land	0	2,040	2,040	2,376	0	182	4,597
13	Land Rights	0	51,514	51,514	0	0	0	51,514
14	Structures & Improvements	0	22,830	22,830	26,592	3,182	2,032	54,637
15	Wells and Lines	0	139,927	139,927	0	0	0	139,927
16	Measuring and Regulating	0	11,682	11,682	0	42,160	2,212	56,054
17	Base Pressure Gas	0	48,544	48,544	0	0	0	48,544
18	Compressor Equipment	0	115,542	115,542	134,578	3,681	10,285	264,087
19	Other	10,555	0	10,555	0	0	0	10,555
20	Subtotal	10,555	392,079	402,634	163,546	49,023	14,712	629,915
21	Accumulated Depreciation	6,634	126,794	133,428	71,664	30,502	6,705	242,300
22	Net Book Value	3,921	265,285	269,206	91,882	18,521	8,006	387,615
23	Difference (line 22 - 11)	935	77,069	78,004	13,589	7,665	3,537	102,796
24	2007 Cost per PJ (line 22 / 163.5 PJ)	24	1,623	1,647				
25	2013 Cost per PJ (line 11 / 100 PJ)	30	1,882	1,912				
26	Variance per PJ (line 25 - line 24)	6	260	266				
27	Percent Change per PJ (line 26 / line 24)	25%	16%	16%				

Functionalization of Underground Storage Plant Net Book Value
Proposed 2013 vs. 2007 Board-Approved Cost Study

Line No.	Particulars ($000's)	Functionalization Factor	Storage NBV	Transmission NBV	Underground Storage NBV	Storage %	Transmission %	Underground Storage %
		(a)	(b)	(c)	(d) = (b + c)	(e)	(f)	(g) = (e + f)
	2013 Underground Storage Plant							
1	Allocate to Storage	STORDEHY (X)	101,037	0	101,037	100%	0%	100%
2	Direct Assignments	Various	15,160	25,750	40,911	37%	63%	100%
3	Allocate Land, S&I, Compressors	COMPRECL-PT	72,488	59,866	132,355	55%	45%	100%
4	Allocate Measuring and Regulating	M&RRECL-PT	2,517	8,000	10,517	24%	76%	100%
5	Total 2013 Underground Storage Plant		191,202	93,617	284,819	67%	33%	100%
	2007 Underground Storage Plant							
6	Allocate to Storage	STORDEHY (X)	185,124	0	185,124	100%	0%	100%
7	Direct Assignments	Various	0	5,017	5,017	0%	100%	100%
8	Allocate Land, S&I, Compressors	COMPRECL-PT	78,885	98,904	177,789	44%	56%	100%
9	Allocate Measuring and Regulating	M&RRECL-PT	5,197	14,488	19,685	26%	74%	100%
10	Total 2007 Underground Storage Plant		269,206	118,409	387,615	69%	31%	100%
11	Difference (line 5 - line 10)		(78,004)	(24,792)	(102,796)	76%	24%	100%

UNION GAS LIMITED

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

Ref: Exhibit G3, Tab 1, Schedule 1, page 14

Union explains that under its cost allocation methodology Union South in-franchise rate classes receive a credit for firm deliveries at Parkway. Please explain how the commodity-kilometres for the T1 and T3 rate classes are adjusted for the purpose of allocating Dawn-Trafalgar Easterly demand costs for:

a) Obligated DCQ deliveries, and

b) Union firm winter peaking service purchases at Parkway,

c) For each of the responses a) and b) above, please illustrate by showing exactly how the adjustment is calculated for the T3 rate class.

Response:

a) The Dawn-Parkway commodity kilometres are adjusted by the east end deliveries, which include the obligated DCQ deliveries made by Union South in-franchise direct purchase customers and Union supply made on behalf of Union South sales service customers.

Please refer to Exhibit J.G-1-7-1 part c) for a description of the east end deliveries and the approach used to calculate the distance weighted design day demands.

The reduced commodity kilometres for South in-franchise customers are allocated to South in-franchise customers, including Rate T1 and Rate T3 customers, based on their Dawn Trafalgar design day demands.

b) There is no winter peaking service purchase included in Union's 2013 forecast.

c) If there were no obligated deliveries, the Union South commodity kilometres would be 7,373 10^6m^3. Please refer to J.G.1-7-5 Attachment 4 (line 24).

The commodity kilometres including the Parkway firm deliveries of 16.929 $10^6m^3/d$ are provided at Attachment 1. 9.974 $10^6m^3/d$ is utilized to meet the Union South demands (line 26). The remaining 6.956 $10^6m^3/d$ of Parkway firm deliveries are also utilized to meet Union South demands that would otherwise be met from Dawn. Union South demands supplied from Dawn of 33.141 $10^6m^3/d$ (line 19) are reduced by 6.956 $10^6m^3/d$. The result is

that total Union South demands supplied from Dawn are 26.186 $10^6m^3/d$ (line 28). This approach ensures that the demands and commodity kilometres for Union North reflect that these demands utilize the entire Dawn-Parkway path (line 29).

The allocation to Rate T1 and Rate T3 is based on design day demands. Rate T1 and Rate T3 represent 18 and 6 percent of the total design day demands. Please see Attachment 2, line 2. The allocation of the 7,373 10^6m^3*km total Union South in-franchise commodity kilometres before the reduction of the obligated deliveries is provided at line 3. The allocation of the 3,588 $10^6m^3/d$*km Union South commodity kilometres is provided at line 4. The result is a reduction in the Union South in-franchise commodity kilometres of 3,785 $10^6m^3/d$*km. The allocation of this adjustment to Rate T1 is 694 $10^6m^3/d$*km and to Rate T3 is 218 $10^6m^3/d$*km.

Union South In-franchise Dawn Trafalgar Allocation Units
Winter 2013/14

Line No.	Particulars	Demand ($10^6m^3/d$) (a)	Kilometre Post (km) (b)	Commodity Kilometre (($10^6m^3/d$)*km) (c)
	Union Demands Supplied by Dawn			
1	Forest, Watford	0.184	44.01	8.094
2	Strathroy	0.204	54.93	11.228
3	Byron	2.935	73.05	214.408
4	Hensall	0.515	85.74	44.161
5	London N	2.542	90.35	229.659
6	Hensall	0.242	85.74	20.754
7	St Mary's	0.169	103.93	17.575
8	Stratford	0.946	121.45	114.898
9	Beachville	1.372	121.45	166.677
10	Oxford	1.129	142.92	161.410
11	Owen Sound Line	6.206	159.39	989.229
12	Cambridge	1.828	175.14	320.219
13	Brantford	2.577	175.14	451.394
14	Guelph	2.177	183.67	399.817
15	Kirkwall- Dominion	2.130	188.67	401.787
16	Gate 3	1.024	188.67	193.188
17	Gates 1 & 2	6.757	199.25	1,346.358
18	Milton	0.202	218.09	44.126
19		33.141		5,134.980
	Union Demands Supplied by Parkway			
20	Milton	1.684	10.85	18.271
21	Halton Hills (dist'n)	0.222	7.33	1.630
22	HH Power Plant	3.480	7.33	25.508
23	Burlington	1.433	0.00	0.000
24	Bronte	2.225	0.00	0.000
25	Greenbelt	0.929	0.00	0.000
26		9.974		45.409
27	Gross Parkway Firm Deliveries	16.929		
28	Total South In-franchise Design Day Demand from Dawn	26.186		
29	Adjustment of Northern & Eastern Areas	6.956	228.940	1,592.495
30	Kilometers from Dawn (line 19 + line 26 - line 29)			3,587.895

Allocation of Dawn-Trafalgar Demands and Obligated Parkway Deliveries

Line No.	Particulars	T1	T3	Other South In-Franchise	Total South In-Franchise
		(a)	(b)	(c)	(d) = (a + b + c)
1	Design Day Volumes ($10^3m^3/d$)	7,999	2,511	33,114	43,624
2	Percent of Total Design Day Demands	18%	6%	76%	100%
	Allocation of Commodity Kilometres with:				
3	No Obligated Deliveries ($10^6m^3/d*km$)	1,352	424	5,597	7,373
4	Obligated Deliveries - DTTRANS ($10^6m^3/d*km$)	658	207	76%	3,588
	Adjustment of Commodity Kilometres due to				
5	Obligated Deliveries ($10^6m^3/d*km$) (line 4 - line 3)	(694)	(218)	(5,596)	(3,785)

UNION GAS LIMITED

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

Ref: Exhibit D3, Tab 2, Schedule 6

Allocation of Assets (Storage) - Southern Operations Area

a) For each of the respective rate classes, please provide the associated deliverability for the rate class expressed as a percentage of the total space allocated.

b) Line 11 provides the storage space per customer will equal 579 m3. Please provide the monthly volumes used by Union for an average residential customer in the forecast.

c) Please provide the total forecasted volumes by month for the non-contract commercial/industrial customers.

d) Please provide a description of the genesis of the SPS factor and the proceeding that approved Union's use of the 16% SPS factor.

e) Please provide how Union allocates this SPS storage from a cost point of view and the operational adjustments associated with SPS.

f) Please provide any studies that Union has submitted to the Board that support the continued use of the 16% SPS factor.

g) How has Union confirmed the on-going appropriateness of this allocation practice?

Response:

a) Please see Attachment 1.

b) The average monthly consumption per residential customer in Union South in 2013 is provided below:

Residential Rate M1
NAC: m³/ Customer

Jan-13	398
Feb-13	338
Mar-13	295
Apr-13	173
May-13	85
Jun-13	56
Jul-13	56
Aug-13	55
Sep-13	61
Oct-13	106
Nov-13	198
Dec-13	322
Total	2,144

c) The monthly volumes forecast for non-residential customers located in the southern franchise for the year 2013 is provided below:

Total Throughput Volumes 10^3m^3
Non-Residential General Service

Jan-13	290,506
Feb-13	267,977
Mar-13	234,848
Apr-13	141,733
May-13	76,784
Jun-13	35,876
Jul-13	40,068
Aug-13	40,784
Sep-13	53,534
Oct-13	114,193
Nov-13	177,848
Dec-13	260,920
Total	1,735,072

d) The genesis of the SPS factor is described on pages 20 and 21 of the Board-approved RP-1999-0017 Settlement Agreement, Issue 1.3.2, Standard Peaking Service:

"The physical operating characteristics of Union's storage facilities have been incorporated into the design of the unbundled storage service. Union's "base" pools which provide a base level of deliverability are used to provide the Standard Storage Service (SSS) and the high deliverability pool capacity in the Southern Operations Area is used to provide the Standard Peaking Service (SPS), maintain system integrity, and to supplement the SSS late in the withdrawal cycle (i.e. late winter)…

The SPS is a high deliverability storage service used to meet the design day demands of the heat sensitive general service customers in Union's Southern Operations Area (i.e. Rate M2 customers). In the absence of the SPS service, Union could not serve Rate M2 small volume customers on cold days…The combination of the SSS and SPS represents the storage service underpinning the existing M2 rate class. Consequently, Union has designed the SSS and SPS to recognize this linkage. The SPS is determined as 16% of the SSS entitlement."

As per RP-1999-0017, Exhibit C1.43, Issue 1.3.2, Answer to Interrogatory from Board Staff:

"the 16% was calculated by dividing the SPS entitlement by the SSS entitlement. The combined deliverability of the SSS and SPS maintains the design day demand from storage for Rate Class M2."

e) Union allocates the costs for the SPS storage service consistent with the allocation of Union South in-franchise storage space and deliverability. Union South in-franchise storage space is allocated based on aggregate excess, the excess of winter volumes (November-March) compared to annual use for the same 151-day period. Union South in-franchise storage deliverability is allocated in proportion to design day demands less design day deliveries.

The calculation to determine the amount of high deliverability pool capacity available for the SPS service is as follows:

Total High Deliverability Pool Capacity – High Deliverability Pool Capacity Required for System Integrity = SPS High Deliverability Pool Capacity.

f) Union has not provided any studies to the Board regarding the 16% SPS factor. However, the calculation of the SPS factor (dividing the SPS entitlement by the SSS entitlement) has remained unchanged since that accepted in the RP-1999-0017 Settlement Agreement.

g) Union completes the calculation of the Southern Operations Area Storage Asset Allocation each year to ensure the appropriateness of the SSS and SPS factors.

The calculation of the SPS factor (dividing the SPS entitlement by the SSS entitlement) has remained unchanged since that accepted in the RP-1999-0017 Settlement Agreement.

Union South In-Franchise Storage Deliverability as a Percent of Allocated Space

Line No.	Rate Class (10^3m^3)	Storage Space Allocation[1]	2013 Cost Study Storage Space Allocation[2]	2013 Design Day Demands From Storage	% of Allocated Space
		(a)	(b)	(c)	(d) = (b / c)
1	M1/M2	1,105,538	1,154,781	20,546	1.8%
2	M4	37,133	41,926	1,344	3.2%
3	M5A	60,008	61,760	5	0.0%
4	M7	15,051	16,949	466	2.8%
5	M9	7,725	7,822	80	1.0%
6	M10	15	82	9	10.9%
7	Total	1,225,469	1,283,320	22,451	1.7%

Notes:

1 Union South in-franchise storage space based on winter 2012/2013 excluding unbundled storage space. As per Exhibit D3, Tab 2, Schedule 6, column (b).

2 2013 Union South in-franchise storage space allocation, based on winter 2013/2014, including unbundled storage space.

UNION GAS LIMITED

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

Ref: Exhibit G3, Tab 3, Schedule 1, page 10

Please explain the costs that are included in the Transmission M&R Operating Expense of $4,899,000 and why nearly all of this cost ($4,826,000) allocated to Other Transmission?

Response:

The transmission M&R operating expenses of $4,899,000 are costs related to technician services for M&R stations on transmission lines in Union South.

In accordance with the Board-approved cost allocation methodology, transmission M&R operating expenses associated with the Dawn-Trafalgar and Ojibway/St. Clair transmission systems are directly assigned to those functions. The remaining transmission M&R operating expenses are allocated to Other Transmission, as these costs are related to other transmission lines (e.g. Owen Sound and London lines).

UNION GAS LIMITED

Answer to Interrogatory from
Ontario Association of Physical Plant Administrators ("OAPPA")

Reference: Exhibit G3, Tab 1, Schedule 3

Please explain the amount of $1.603 million shown for Interruptible Contract- Interruptible - M5 under DSM Allocation Update (page 1, column (f), line 9).

Response:

The allocation of DSM-related costs to Rate M5 reflects the EB-2011-0327 Settlement Agreement filed on January 31, 2012.

Please see Attachment 1 for the updated DSM program costs and the revenue requirement impact for Rate M5.

Union allocates certain indirect costs in proportion to O&M costs. Accordingly, the increase in the Rate M5 revenue requirement includes an allocation of these indirect costs (lines 4-6). The allocation between firm and interruptible services is based on Rate M5 delivery volumes.

DSM Allocator Update for Rate M5

Line No.	Revenue Requirement ($000s)	Rate M5 Firm	Rate M5 Interruptible	Rate M5 Total
		(a)	(b)	(c) = (a + b)
	Update to DSM Program Costs			
1	DSM Program Costs in Cost Allocation Study filed 2011-11-23	47	1,453	1,501
2	DSM Program Costs in Cost Allocation Study filed 2012-03-27	88	2,611	2,700
3	Difference	41	1,158	1,199
	Allocation of Indirect Costs			
4	Working Capital	0	6	6
5	Administrative & General	16	438	454
6	Income Tax	0	1	1
7	Total Revenue Requirement	57	1,603	1,660

UNION GAS LIMITED

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

Ref: Exhibit C3, Tab 2, Schedule 3
Exhibit G3, Tab 5, Schedule 1, page 11 (see Other Supplies – UFG) and page 23 (see account code 721 and 725)
Exhibit G3, Tab 1, Schedule 1, Appendix A, Page 7
Exhibit G3, Tab 1, Schedule 1, Appendix B, Pages 7, 10 and 11
Exhibit G3, Tab 1, Schedule 1, Appendix C, Page 5
Exhibit G3, Tab 5, Schedule 3, Page 16
Exhibit G3, Tab 1, Schedule 1, Appendix C, Page 2

a) Please explain how the T1 customers which represents 0.005% can be allocated 4.6% of administrative costs (4,331/93,862), 4.8% of employee benefits costs (2,718/56,299), and 13.4 % of "other supplies – UFG" costs (1,772/13,232).

b) Please explain how the M12 customers can be allocated 8.7% of administrative cost (8,142/93,862), 9.7% of employee benefits (5,445/56,299) and 44 % of "other supplies – UFG" costs (5,910/13,232).

c) In your explanation to questions a) and b), please explain how the "other supplies – UFG" cost amount, of which 88% is originally functionalized to the "Purchase Production" function, ends up allocated to rate T1 and M12 at a level of 57.4%.

d) Why are there not any "other supplies – UFG" costs functionalized partly to "transmission" and "Distribution" function?

e) The LABOUR functionalization factor is described as followed "*Functionalizes costs to the functions in proportion to labour expenses*". Explain how the proportion of labour expenses is obtained for rate T1 and M12 and provide the proportion used.

f) The O&MEXP functionalization factor is described as followed "*Functionalizes costs to the functions in proportion to components of O&M*". Explain how the proportion of components of O&M is obtained and provide the proportion used for rate T1 and M12.

g) Classification Factors FIRST, FOURTH, SECOND and THIRD; please provide the details of what those columns are, and provide an example of those columns for the Transmission function.

h) UFGALLO factor; explain how the amount of "Other supplies – UFG" (G3 tab 5 Schedule 3 page 16) subject to the UFGALLO is determined?

i) Allocation Factors F24T-BENEFITS, F24T-COMPMAINT and F24T-GENOPS; please provide the detail showing how much each of these amounts allocated to rates M12, M12X and C1.

j) Allocation Factor DTTRANS; please provide the firm design day demand for each rate category noted below used to calculate this allocation factor.

Line No.	Particulars	Peak Demand ($10^3m^3/d$)
	North Delivery	
1	R01	
2	R10	
3	R20	
4	R25	
5	R100	
	South Delivery & Storage	
6	M1	
7	M2	
8	M4	
9	M5A	
10	M7	
11	M9	
12	M10	
13	T1	
14	T3	
	North Transportation & Storage	
15	R01	
16	R10	
17	R20	
18	R25	
19	R100	
	Ex-Franchise	
20	M12	
21	M13	
22	M16	
23	C1	

Response:

a) Administrative costs, employee benefits and transmission UFG costs are not allocated to rate classes based on the average number of customers in each rate class. Please see Attachment 1 for a summary of the allocators used to calculate these costs and the proportions allocated to Rate T1 and Rate M12.

Administrative costs are primarily allocated based on how other O&M costs are functionalized in the cost allocation study. There are also direct assignments for gas supply and direct purchase administration costs. Please refer to part f) for a description of the O&M expense allocation and the proportion of costs allocated to Rate T1 and Rate M12.

Employee benefits are primarily allocated based on labour expenses. There are also direct assignments for gas supply, direct purchase and the F24-T service costs. Please refer to part e) for a description of the labour expense allocation and the proportion of costs allocated to Rate T1 and Rate M12.

Transmission UFG costs are allocated based on transmission and delivery volumes. The transmission and delivery volumes for Rate T1 and Rate M12 are provided below. Please refer to part d) and h) for a description of the UFG functionalization of storage and transmission UFG costs.

Line No.	Particulars	T1	M12	Transmission
		(a)	(b)	(c)
1	Volumes (10^6m^3)	5,367	18,846	37,274
2	Total Volumes (%)	14%	51%	100%
3	UFG Costs (line 2 x line 3, column c) ($000's)	1,683	5,910	11,689

b) Please see response to part a).

c) Please see response to part a).

d) Union's Board-approved methodology functionalizes UFG costs on the basis of storage injections and withdrawals and transmission volumes.

Storage injections and withdrawals include all in-franchise delivery volumes, and storage injections and withdrawals. Transmission volumes include all transmission volumes and in-franchise delivery volumes. Since the storage and transmission volumes used to functionalize UFG costs include in-franchise injections and withdrawals and in-franchise delivery volumes, it is not necessary to functionalize UFG costs to distribution.

e) Union functionalizes employee benefit costs in proportion to labour expenses. The LABOUR factor includes $149.991 million of O&M labour costs provided at Exhibit G3, Tab 3, Schedule 3, Updated. The labour expense detail is used to determine the portion of the functionalized O&M that is labour-related. Each labour cost is functionalized in proportion to the corresponding functionalized O&M costs in the cost allocation study. The costs are classified and allocated on the same basis as the functionalization. The labour costs are classified and allocated in proportion to the corresponding functionalized O&M costs in the cost allocation study.

Please see Attachment 2 for a summary of the functionalization, classification and allocation of labour costs to Rate T1 and Rate M12.

f) Union functionalizes administrative and general expenses based on how other O&M costs, such as Underground Storage, Transmission and Distribution, are functionalized in the cost allocation study. The proportions of the functionalized O&M costs are used in the internal calculation of this factor.

The administrative and general expenses are also classified and allocated in proportion to O&M costs. Please see Attachment 3 for a summary of the O&M expenses and the proportions to Rate T1 and Rate M12.

g) The classification factors First, Second, Third, and Fourth refer to the classification of the costs for a particular function into the columns to the right on the applicable schedules. Please see Attachment 4 for the description of these columns for each function.

h) The amount of $11.689 million (Exhibit G3, Tab 5, Schedule 3, Updated, page 16) represents the functionalized transmission costs for UFG. A breakdown of the total UFG costs is provided at Attachment 5.

UFGALLO directly assigns the transmission UFG costs to ex-franchise and Union North, with Union North costs allocated to rate classes based on winter volumes. Union South in-franchise transmission UFG costs are allocated based on Union South delivery volumes.

i) The F24-T allocation factors directly assign all costs to Rate M12, which includes the M12-X service. The costs include $1.147 million of employee salary and benefits and compressor maintenance costs.

j) Please refer to Exhibit G3, Tab 5, Schedule 23, Updated, pages 7-8, line 2.

Proportion of Employee Benefits, Administrative and UFG Costs Allocated to Rate T1 and Rate M12

Line No.	Particulars ($000's)	T1	M12	Total
		(a)	(b)	(c)
1	Labour Allocation	2,636	5,274	54,428
2	Direct Assignment of F24-T Benefits	0	171	171
3	Direct Assignment of Gas Supply & DP Benefits	82	0	1,700
4	Total Employee Benefit Costs	2,718	5,445	56,299
5	Percent Allocation of Employee Benefit Costs	4.8%	9.7%	100%
6	O&M Expense Allocation	4,468	8,698	93,043
7	Direct Assignment of Gas Supply & DP Administrative Costs	16	0	819
8	Total Administrative Costs	4,485	8,698	93,862
9	Percent Allocation of Administrative Costs	4.8%	9.3%	100%
10	Transmission UFG	1,683	5,910	11,689
11	Storage UFG	88	0	1,543
12	Total Utility UFG Costs	1,771	5,910	13,232
13	Percent Allocation of Utility UFG Costs	13.4%	44.7%	100%

Proportion of Labour Expenses for Rate T1 and Rate M12

Line No.	Particulars ($000's)	Purchase Production	Storage		Transmission				Distribution	Total
			Dehydrator	Excluding Dehydrator	Dawn Station	Trafalgar Easterly	Other Transmission	Ojibway/ St. Clair		
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	Functionalization									
1	LABOUR	5,368	62	6,184	3,745	13,826	5,703	843	114,259	149,991
	Classification									
2	FIRST	1,724		2,536	3,745	13,826	5,703	636	25,755	53,925
3	SECOND	3,645	62	447				207	88,504	92,865
4	THIRD			1,652						
5	FOURTH			1,549						
6	Total	5,368	62	6,184	3,745	13,826	5,703	843	114,259	149,991

	Functional Classification	T1 (j)	M12 (k)	Total Labour (l)
7	Purchase Production System	0	0	1,724
8	Purchase Production Other	379	0	3,645
9	Storage Dehydrator Commodity	3	0	62
10	Storage Excluding Dehydrator Delivery	454	0	2,536
11	Storage Excluding Dehydrator Commodity	29	0	447
12	Storage Excluding Dehydrator Space	195	0	1,652
13	Storage Excluding Dehydrator System Integr	12	46	1,549
14	Dawn Station Demand	120	2,919	3,745
15	Dawn East Demand	287	11,569	13,826
16	Other Transmission Demand	1,868	0	5,703
17	Ojibway/St. Clair Demand	311	0	636
18	Ojibway/St. Clair Commodity	0	0	207
19	Distribution Demand	2,096	0	25,755
20	Distribution Customer	1,510	0	88,504
21	Total	7,264	14,533	149,991
22	Proportion of Labour Expenses Allocated	4.8%	9.7%	100%

Proportion of O&M Expenses for Rate T1 and Rate M12

Line No.	Particulars ($000's)	Purchase Production	Storage		Transmission				Distribution	Total
			Dehydrator	Excluding Dehydrator	Dawn Station	Trafalgar Easterly	Other Transmission	Ojibway/ St. Clair		
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	Functionalization									
1	O&MEXP	8,557	23	11,618	5,965	22,032	10,157	1,296	188,327	247,976
	Classification									
2	FIRST	2,699		5,024	5,965	22,032	10,157	978	35,321	82,177
3	SECOND	5,858	23	714				319	153,006	159,920
4	THIRD			3,493						
5	FOURTH			2,386						
6	Total	8,557	23	11,618	5,965	22,032	10,157	1,296	188,327	247,976

	Functional Classification	T1 (j)	M12 (k)	Total O&M (l)
7	Purchase Production System	0	0	2,699
8	Purchase Production Other	490	0	5,858
9	Storage Dehydrator Commodity	1	0	23
10	Storage Excluding Dehydrator Delivery	900	0	5,024
11	Storage Excluding Dehydrator Commodity	46	0	714
12	Storage Excluding Dehydrator Space	413	0	3,493
13	Storage Excluding Dehydrator System Integr	25	98	2,386
14	Dawn Station Demand	191	4,649	5,965
15	Dawn East Demand	457	18,436	22,032
16	Other Transmission Demand	3,328	0	10,157
17	Ojibway/St. Clair Demand	478	0	978
18	Ojibway/St. Clair Commodity	0	0	319
19	Distribution Demand	3,355	0	35,321
20	Distribution Customer	2,227	0	153,006
21	Total	11,909	23,182	247,976
22	Proportion of O&M Expenses Allocated	4.8%	9.3%	100%

Classifications Identified

Line No.	Function	Classification Factor	Classification
	(a)	(b)	(c)
1	Purchase Production	First	Purchase Production System
2	Purchase Production	Second	Purchase Production Other
3	Purchase Production	Third	Purchase Production Demand
4	Storage Dehydrator	First	Storage Dehydrator Demand
5	Storage Dehydrator	Second	Storage Dehydrator Commodity
6	Storage Excluding Dehydrator	First	Storage Excluding Dehy Delivery
7	Storage Excluding Dehydrator	Second	Storage Excluding Dehy Commodity
8	Storage Excluding Dehydrator	Third	Storage Excluding Dehy Space
9	Storage Excluding Dehydrator	Fourth	Storage Excluding Dehy System Integrity
10	Dawn Station	First	Dawn Station Demand
11	Dawn Station	Second	Dawn Station Commodity
12	Dawn-Trafalgar Easterly	First	Dawn-Trafalgar Easterly Demand
13	Dawn-Trafalgar Easterly	Second	Dawn-Trafalgar Easterly Commodity
14	Dawn-Trafalgar Westerly	First	Dawn-Trafalgar Westerly Commodity
15	Other Transmission	First	Other Transmission Demand
16	Ojibway/St. Clair	First	Ojibway/St. Clair Demand
17	Ojibway/St. Clair	Second	Ojibway/St. Clair Commodity
18	Distribution	First	Distribution Demand
19	Distribution	Second	Distribution Customer

Functionalization of UFG Costs

Line No.	Particulars ($000's)	Transmission (a)	Storage (b)	Total (c) = (a + b)
1	Volumes ($10^6 m^3$)	37,274	3,780	41,053
2	Total Volumes (%)	91%	9%	100%
3	Utility UFG Costs (column c x line 2)	11,689	1,185	12,875
4	Excess Utility Direct Assignment[3]	0	358	358
5	Total Regulated UFG Costs	11,689	1,543	13,232

Notes

1 The transmission volumes include all transmission volumes and in-franchise delivery volumes.

2 The storage volumes include all in-franchise delivery volumes and utility storage injections and withdrawals.

3 The excess utility volumes are directly assigned to the excess utility storage space. The costs for the excess utility are calculated in Exhibit D, Tab 2, Schedule 2, line 13.

UNION GAS LIMITED

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

Ref: Exhibit A1, Tab 3
Exhibit G1, Tab 1
Exhibit G1, Tab 1, Appendix A and Appendix B

Union seeks approval for the seven Cost Allocation Methodology changes listed at Exhibit A1, Tab 3, Schedule 2, page 1. The proposed changes are described in Exhibit G1, Tab 1 and summarized in Exhibit G1, Tab 1, Appendix A. The impacts on different in-franchise rate classes are shown in Exhibit G1, Tab 1, Appendix B. In connection with this evidence, please provide the following additional information:

a) Do any of the Cost Allocation changes Union proposes have the effect of shifting costs from non-utility to utility and/or from ex-franchise to in-franchise customers? If so, then please provide an exhibit that displays these impacts.

b) Please isolate the cost shifts that Union proposes "to further harmonize the Cost Allocation methodologies used for Union North and Union South". In particular, do these "harmonizing" methodology changes have the effect of shifting costs from one operating area to another; or are they merely shifting costs between customer classes in an operating area that did not previously use a Cost Allocation methodology that is being used in Union's other operating area?

c) Please provide a list of all of the other "harmonization" changes that have been made prior to this proceeding and the date on which each of those changes were approved by the Board. Please identify the operating area where the "harmonizing" methodology originated and the methodology it replaced in the other operating area.

Response:

a) The only proposed cost allocation methodology change that shifts costs between the utility and non-utility is Union's proposal for the allocation of empty system integrity space reserved for hysteresis, as described at Exhibit G1, Tab 1, page 5.

The revenue requirement impact of this proposal is provided below.

Line No.	Particulars ($000's)	Revenue Requirement Change
1	Excess Utility Storage Space	(28)
2	Non-Utility Storage	(128)
3	In-franchise Space	156
	Total	0

The cost allocation methodologies that shift costs between ex-franchise and in-franchise rate classes are the proposals for Tecumseh metering and Oil Springs East assets. The revenue requirement impact of these proposals is provided at J.G-1-3-1 Attachment 2.

b) Union is proposing two methodology changes which further harmonize the Union North and Union South cost allocation. The proposals include the classification and allocation changes proposed for distribution maintenance meter and regulator repairs and equipment on customer premises. Please see Attachment 1 for the revenue requirement impact of the proposed methodology changes.

The small shift in costs from Union South to Union North is a result of the allocation of general costs. The allocations are based on distribution-related O&M costs classified to Distribution Demand and Distribution Customer, which has shifted as a result of the meter and regulator repair proposal.

c) Please see Attachment 2.

Revenue Requirement Impacts
Cost Allocation Study Filed March 27,2012

Line No.	Particulars ($000's)[1]	Union South (a)	Union North (b)	Total (c) = (a + b)
1	Distribution Maintenance - Meter and Regulator Repairs	(7)	7	0
2	Distribution Maintenance - Equipment on Customer Premises	0	0	0
3	Total Revenue Requirement Impact	(7)	7	0

Note:
1 A positive value represents an increase to the revenue requirement based on the proposed methodology.

Summary of Board-Approved Methodology Changes to Harmonize Union North and Union South Cost Allocation

E.B.R.O. 499 - Effective Janauary 1, 1999

	Union North Approved Methodology E.B.R.O. 493/494	Union South Approved Methodology E.B.R.O. 493/494	
Cost Element	Factor Description	Factor Description	Board-Approved Methodology
Storage Commodity Costs	Allocates storage commodity costs in proportion to winter sales volume excluding bundled-T.	Allocates storage commodity costs in proportion to annual volumes including bundled-T.	Change the Union North allocation to allocate the storage commodity costs in proportion to winter sales volume including bundled-T as it more accurately reflects cost incurrence.
Income Taxes	Allocated using an income statement approach. This approach requires judgment in the determination of how each tax adjustment should be handled.	Allocated in proportion to rate base.	Change the Union North allocation to allocate income taxes in proportion to rate base as the return that gives rise to tax is earned on rate base.
Depreciation Expense	Depreciation expense was incorporated by function in the cost allocation study. Depreciation expense by function was then classified and allocated in a manner consistent with the classification and allocation of gross plant.	Depreciation expense by plant type within each function is classified and allocated in proportion to the classification and allocation of gross plant.	Change Union North to input depreciation expense by plant type within the functions. Depreciation expense by plant type within each function will then be classified and allocated in proportion to the classification and allocation of gross plant.
Unaccounted-for-Gas	Allocated in proportion to sales volume excluding bundled-T and T-service.	Allocate costs to customers in proportion to delivery volume.	Change the Union North allocation to allocate costs to customers in proportion to delivery volume.
Heavy Work Equipment and Capital Leases	Functionalized entirely to storage.	Functionalized, classified and allocated to rate classes consistent with general plant items.	Change the Union North allocation to be functionalized consistent with other general plant items. Other general plant items are functionalized, classified and allocated to rate classes in proportion to local storage (LNG), underground storage and distribution plant.

Summary of Board-Approved Methodology Changes to Harmonize Union North and Union South Cost Allocation

RP-2003-0063 - Effective January 1, 2004

	Union North Approved Methodology E.B.R.O. 499	Union South Approved Methodology E.B.R.O. 499	
Cost Element	Factor Description	Factor Description	Board-Approved Methodology
Intangible Plant	Functionalized to distribution (approximately 97%).	Functionalized to storage, transmission and distribution.	Change the Union South methodology to functionalize all intangible plant to distribution.
General Plant	Functionalized in proportion to storage, underground storage and distribution plant.	Functionalized 50/50 in proportion to rate base and O&M.	Change the Union North methodology to functionalize 50/50 rate base / O&M approach because it recognizes that both distribution plant and O&M contribute to general costs.
General Operating and Engineering Expenses	Functionalized General Operating and Engineering O&M based on various historic functionalization factors.	Functionalized based on activity forecasts by function provided by budget center managers.	Change the Union North methodology to functionalize based on activity forecasts by function because it provides a more accurate reflection of expected activities.
Underground Storage Plant and Operating & Maintenance	Classified as either deliverability-related, commodity-related or system integrity-related.	Additional classification of space-related costs.	Change the Union North classification method to add the space-related functional classification. It is required that the space-related classification be maintained within the integrated cost allocation study for rate design purposes.
Distribution Capacity-Related Costs	Allocates distribution capacity-related costs excluding the demands of customers not served by grid, joint-use, or sole-use facilities.	The design day demands of customers served directly off transmission lines are included in the allocator of Southern Operations area capacity-related distribution costs.	Change the allocation of distribution capacity-related costs in Union South to use design day demand exclusive of the demands of customers served of transmission lines.

Summary of Board-Approved Methodology Changes to Harmonize Union North and Union South Cost Allocation

EB-2005-0520 - Effective January 1, 2007

	Union North Approved Methodology RP-2003-0064	Union South Approved Methodology RP-2003-0064	
Cost Element	Factor Description	Factor Description	Board-Approved Methodology
Distribution Plant:			
Land, Structures & Improvements	Classified in proportion to Union North distribution mains, measuring and regulating equipment, and compressor equipment.	Classified costs based on historical factors. Allocates costs in proportion to average weighted number of in-franchise customers.	Change the Union South classification and allocation of costs based on Union South distribution mains, measuring and regulating equipment, and compressor equipment.
Land Rights	Classified in proportion to Union North distribution mains, measuring and regulating equipment, and compressor equipment.	Classified as demand and customer-related based on minimum plant method. Allocates costs in proportion to service replacement costs.	Change the Union South classification and allocation of costs based on Union South distribution mains, measuring and regulating equipment, and compressor equipment.
Mains	Classified grid main costs based on the zero intercept method.	Classified as demand and customer-related based on minimum plant method.	Change the Union North grid mains classification to minimum plant method using Union North area data.
Services	All services classified as "demand-related".	All services classified as "customer-related".	Change Union North to be classified as "customer-related".
Distribution Operating Expenses:			
Mains & Services	Classified in proportion to Union North distribution mains and services plant.	Classified as demand and customer-related based on minimum plant method.	Change Southern Operations area classification to be based on distribution mains and services plant.
Other - Customer Service Other - Meter Shop Maintenance	Classified as customer-related. Allocates costs in proportion to Union North average number of customers excluding Large Industrial.	Classified costs based on historical factors. Allocates costs in proportion to service call time.	Change the Union South classification to "customer-related". Change the Union North methodology to allocate costs in proportion to service call time.

Summary of Board-Approved Methodology Changes to Harmonize Union North and Union South Cost Allocation

EB-2005-0520 - Effective January 1, 2007

	Union North Approved Methodology RP-2003-0064	Union South Approved Methodology RP-2003-0064	
Cost Element	Factor Description	Factor Description	Board-Approved Methodology
Distribution Operating Expenses:			
Meter & Regulator Removal & Resetting, Meter Turn-ons & Turn-offs Operating Expenses	Allocates costs in proportion to Union North average number of customers excluding Large Industrial.	Allocates costs in proportion to meter call time.	Change Union North methodology to allocate costs in proportion to meter call time.
Services on Customer Premises Operating Expenses	Allocates costs in proportion to Union North average number of customers excluding Large Industrial.	Allocates costs in proportion to service call time.	Change Union North methodology to allocate costs in proportion to service call time.

UNION GAS LIMITED

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

Ref: Exhibit A1, Tab 3
Exhibit G1, Tab 1
Exhibit G1, Tab 1, Appendix A and Appendix B

Union is proposing a number of changes to the eligibility criteria for its existing rate classes. In connection with the inter-relationship, if any, between these rate design proposals and the Cost Allocation study presented in these proceedings, please provide the following additional information:

a) Is the Cost Allocation study that Union presents in these proceedings, including its allocation to various rate classes, premised on the existing or the proposed rate classes?

b) What effect, if any, will the approval of the new rate classes and/or sub-classes that Union proposes have on the allocation factors that are being used to allocate costs to these classes and sub-classes and, in turn, to produce revenue-to-cost ratios for each rate class and sub-class?

Response:

a) Union's 2013 cost allocation study is based on current approved rate classes.

b) Any rate design proposals approved by the Board will be reflected in the cost allocation study filed in Union's next cost of service proceeding. New rate classes will be added and the allocation factors that are used to allocate costs to rate classes will also be updated to reflect the composition of the approved rate classes. For example, allocation factors that allocate costs based on design day demands by rate class will be updated to reflect the design day demands of the new rate classes.

Should the Board approve the rate design proposals as filed, the revenue to cost ratios shown at Exhibit H3, Tab 1, Schedule 1, Updated will not be impacted.

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe

Ref: Exhibit G1, Tab 1, page 8 -Oil Springs East

a) Please provide details -amount of costs and split between transmission and Storage before and after the change.

b) Explain the reduction in the allocation to M12.

c) Reconcile to revenue requirement impact in G1Tab Appendix B.

Response:

a) Please see Attachment 1.

b) Union's is proposing to eliminate the direct assignment of structure and improvements and measuring and regulating plant costs associated with the Oil Springs East storage pool to the Dawn Trafalgar Easterly transmission function. Based on a comprehensive review of the storage assets at Dawn, Union has identified these assets as providing both storage and transmission services. Accordingly, Union is proposing to functionalize these assets between storage and transmission functions. This approach is consistent with the treatment of other underground storage assets at Dawn that provide both storage and transmission services. The change is also consistent with the allocation of the Oil Springs East storage pool costs between Union's regulated and unregulated storage operations.

   Union's proposal reduces the costs functionalized to transmission and increases the costs functionalized to storage. As the M12 rate class provides transmission service only, the reduction in costs functionalized to transmission results in a reduction of costs allocated to the M12 rate class.

c) Please see Attachment 2.

Functionalization of Oil Springs East Storage Pool Revenue Requirement

Line No.	Particulars ($000's)	Storage	Transmission	Total
		(a)	(b)	(c) = (a + b)
1	2007 Board-Approved Methodology	0	309	309
2	2013 Proposed Methodology	85	224	309
3	Difference (line 2 - line 1)	85	(85)	0

Oil Springs East Revenue Requirement Impacts

Line No.	Particulars ($000's)	Revenue Requirement Total	Gen. Service Small Volume M1	Gen. Service Large Volume M2	Firm Contract M4	Interruptible Contract- Firm M5	Interruptible Contract- Interruptible M5	Special Large Volume Contract - Firm M7	Special Large Volume Contract - Interruptible M7	Large Wholesale Service M9	Small Wholesale Service M10	Storage & Transportation Service - Firm T1	Storage & Transportation Service - Interruptible T1	Wholesale Storage & Transportation Service T3
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1	Storage	85	30	10	3	0	0	1	0	0	0	15	0	3
2	Transmission	(85)	(3)	(1)	0	0	0	0	0	0	0	1	0	0
3	**Revenue Requirement Change**[1]	0	27	9	2	0	0	1	0	0	0	16	0	2

(1) A positive value represents an increase to the revenue requirement based on the proposed methodology.

Oil Springs East Revenue Requirement Impacts

Line No.	Particulars ($000's)	Excess Utility Storage Space	Firm Transportation Service C1	Interruptible Trans. Service & Exchanges C1	Dawn-Trafalgar Transport Service M12	Local Production Transportation Service M13	Storage Transportation Service M16	Small Volume General Firm Service R01	Large Volume General Firm Service R10	Medium Volume Firm Service R20	Large Volume High Load Factor Firm Service R100	Large Volume Interruptible Service R25
		(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(v)
1	Storage	7	0	0	0	0	0	11	3	1	0	0
2	Transmission	0	1	0	(77)	0	0	(3)	(1)	0	0	0
3	**Revenue Requirement Change**[1]	7	1	0	(77)	0	0	8	2	1	0	0

(1) A positive value represents an increase to the revenue requirement based on the proposed methodology.

UNION GAS LIMITED

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

Ref: Exhibit G1, Tab 1, page 7

What are the Tecumseh metering assets used for and please explain why they are no longer allocated only to the M12 rate class?

Response:

The Tecumseh metering assets are used to measure transportation volumes received in the Dawn Station yard from the Tecumseh Storage facilities.

Please see the response at Exhibit J.G-3-3-1 c).

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe

Ref: Exhibit G1, Tab 1, page 7

a) How were Tecumseh metering assets classified/functionalized in EB-2005-0520?

b) Please explain in detail the change in allocation.

c) Specifically, why are the costs now allocated to in-franchise classes other than M12?

Response:

a) In Union's Board-approved 2007 cost allocation study from the EB-2005-0520 proceeding, the Tecumseh metering assets were directly assigned to the Dawn Station transmission function and classified to the Dawn Station Customer classification.

b) In EB-2005-0520, the costs associated with the Tecumseh metering assets were allocated to the M12 rate class based on Tecumseh metering demands.

In the 2013 cost allocation study, Union is proposing to allocate the costs associated with the Tecumseh metering assets based on the design day demands of Dawn Compression. This allocation results in 78 percent of the costs being allocated to the M12 rate class and 22 percent to in-franchise customers.

c) Union is proposing to allocate Tecumseh metering costs to in-franchise rate classes based on the design day demands of Dawn compression to recognize that the assets provide a transmission service to both M12 and in-franchise customers. This approach is consistent with the cost allocation of other interconnects in the Dawn Station yard and results in an allocation of costs that better reflects cost incurrence than the Board-approved 2007 cost allocation described above.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Ref: Exh G1/Tab 1/pp. 3-6

Union noted that it requires empty system integrity space on November 1 to manage late season injection demands. This space is specifically held in reserve to manage the difference between in-franchise supplies and demand. Empty system integrity space is not required for short-term and long-term non-utility storage contracts as these contracts have little to no firm injection rights during October and November.

Please provide the expected amount of firm injection rights for short-term and long-term non-utility storage contracts during October and November 2013. Please compare this amount to the total expected amount of firm injection rights during that same period in 2013.

Response:

Firm injection rights for non-utility storage contracts for October and November 2013 are as follows:

Forecasted firm injections for standard long-term non-utility storage contracts are 0.082 PJ, and are considered in the evidence quotation.

In addition, Union also has forecasted injections for High Deliverability Storage contracts of 0.37 PJ and are sold to ex-franchise customers. These firm injections are only available if the customer has empty contracted space. There is no requirement for system integrity space.

The total system Peak Day Injection capacity is 1.24 PJ.

In-franchise customers may exceed their planned daily injection entitlements due to the impacts of weather. During the late injection season, Union manages these unforeseen swings to inventory through the use of the empty system integrity space. The firm activity of ex-franchise customers is limited to their contracted space and injection quantities and Union makes no provisions to allow for non-contracted injections.

UNION GAS LIMITED

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

Ref: Exhibit G1, Tab 1, pages 3-6

a) Please provide a table that shows the allocation of the total system integrity costs for hysteresis by rate class, broken down between the 1.2 PJ for the filled space and the 0.7 PJ for the empty space requirements.

b) Please show which figures in Table 1 comprise the 100 PJ of storage space reserved for in- franchise demands per the Board's NGEIR Decision.

Response:

a) Union allocates system integrity costs based on all the operational components of system integrity space. Union also directly assigns Hagar LNG costs to Union North rate classes. Union does not allocate the costs of individual system integrity components. Therefore, Union cannot provide the system integrity costs on a stand-alone basis.

b) The 100 PJ of storage space reserved for in-franchise needs is comprised of:

	Space (PJ)
In-franchise Demands	77.5
Excess Utility	13.0
System Integrity Requirements	9.5
Total	100.0

The figures in Exhibit G1, Tab 1, Table 1 that comprise the 100 PJ of storage space reserved for in-franchise needs are:

	Space (PJ)
In-franchise Demands	77.5
Excess Utility	13.0
System Integrity Requirements	6.9
Total	97.4

Table 1 excludes the 2.6 PJ of system integrity space reserved for the Hagar LNG facility and storage space for hysteresis. This space is not required to determine the revised storage space used to allocate filled and empty space of hysteresis to rate classes.

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe

Ref: Exhibit G1, Tab1, Table 1

a) When was Excess Utility Storage Space first approved Docket year etc.?

b) Please provide the Board -Approved Allocation with and without the change for Reserved regulated storage.

c) Compare to the current proposal and indicate why this is/is not better for ratepayers.

Response:

a) EB-2005-0551 NGEIR Decision, November 6, 2006.

b) Union cannot provide the requested cost allocation study. Union's 2013 test year forecast only relates to Union's regulated operations, which reserves 100 PJ of storage space to meet utility requirements.

c) Please see the response at part b) above.

UNION GAS LIMITED

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

Ref: Exhibit G3, Tab 1, Schedule 1, pages 12 and 13 Rate 20 Tariff Sheets

Union indicates that it is allocating the costs of storage space and system integrity space to Union North customers "using excess peak over annual average demand (i.e. the difference between what a rate class takes on an average day and what it requires on its peak day)". Union's Rate 20 tariff sheets indicate under storage service: "For load balancing purposes for customers using Transportation Service on this rate schedule. If at the sole discretion of Union, adequate supplies exist, bundled and unbundled storage and delivery/redelivery services will be provided."

a) Is storage space allocated to contract customers on the same basis as the excess peak over annual demand?

b) Union's tariff sheets imply that access to storage by a Union North customer is at Union's option. Please provide a copy of Union's policy for allocating storage space to a new Union North customer.

c) Please provide the total storage space allocated to Union North customers, by rate class.

d) To the extent that access to storage space by a Union North customer is different than Union's cost allocation methodology, please explain such differences.

Response:

a) Yes, please see Attachment 1 for the Union North storage space allocation policy.

The excess peak over average allocator is used to allocate the Union North storage space determined by the aggregate excess methodology to rate classes. The excess peak over average allocator also includes bundled storage demands.

b) Please see Attachment 1 and Attachment 2.

c) The total Union North storage space is 405,185 10^3m^3. The allocation to rate classes is provided at Exhibit G3, Tab 5, Schedule 23, Updated, page 2, line 18.

d) Please see the response to a) above.

POLICIES & GUIDELINES

Policy #:

Subject:	**Effective:**
Storage Space Allocation – Northern & Eastern Operations Area	

Applies to:

Bundled, Semi-Unbundled and Unbundled Customers in the Northern & Eastern Operations Area

Purpose:

To describe the amount of cost-based storage space an in-franchise customer in the Northern & Eastern Operations Area may receive from Union Gas.

Background: *(Not to limit the applicability of the policy)*

Policy:

1.0 Storage space Allocation for Bundled Customers – Northern & Eastern Operations Area

The total bundled customer storage space allocation in the Northern & Eastern Operations Area is calculated annually using the Board approved aggregate excess method. This method calculates the seasonal storage requirements of Union's bundled customer base. This requirement can be described as the difference between total winter consumption (November 1 through March 31) of all bundled customers and their average daily consumption multiplied by 151 days of winter. The formula can be expressed:

Aggregate Excess = Total Winter Consumption – [(151/365)(Total Annual Consumption)]*

The source of the consumption data for the calculation is Union's corporate demand forecast for all Northern & Eastern Operations Area classes of bundled in-franchise customers. The corporate demand forecast is prepared annually from the General Service demand forecast and the Contract Customer demand forecast (as explained periodically in rate filings) encompassing all bundled customer consumption in Union's Northern & Eastern Operations Area. The corporate demand forecast is prepared on an April 1 through March 31 planning basis.

Once the aggregate excess storage space allocation associated with each class of customer has been determined based on the method described above, they are then aggregated to provide a total in-franchise bundled storage space allocation for the Northern & Eastern Operations Area.

2.0 Storage space Allocation for Individual Customers Electing Semi-Unbundled or Unbundled Service – Northern & Eastern Operations Area

At the time Union prepares the annual bundled in-franchise storage allocation, Union will also calculate the Northern & Eastern Operations Area storage space allocation available to individual customers who elect to move from a bundled to a semi-unbundled or unbundled service. The allocation of storage space to customers electing the semi-unbundled or unbundled service option reflects the existing Board approved allocation methods.

The allocation of the aggregate excess storage space reserved for the Northern & Eastern Operations Area to individual customers who elect to move from the bundled service is based on the Board approved excess peak over average annual demand method (also described as the "peak day shortfall"). This method allocates storage space to each delivery area in the Northern & Eastern Operations area in proportion to the difference between the peak day demand of the delivery area and the allocated firm transportation capacity in each delivery area. The storage space allocated to each delivery area is then allocated to each rate class and individual customers within the rate class in proportion to the peak day shortfall of each delivery area.

The source of the inputs for the Northern & Eastern Operations Area customer storage allocation calculation is Union's corporate demand forecast, the aggregate excess storage allocation for the Northern & Eastern Operations area and Union's portfolio of TCPL FT long haul and STS contracts serving the Northern & Eastern Operations area.

As described previously, the total amount of storage space reserved for Union's Northern & Eastern Operations Area bundled customer base is determined using the aggregate excess method. The allocation of this storage space to customers who elect to move from bundled to a semi-unbundled or unbundled service within each delivery area and rate class is then determined using the peak day shortfall method as follows:

a) Rate 01 (residential) – Rate 01 (residential) storage space by delivery area divided by number of customers in delivery area

b) Rate 01 (commercial) – Rate 01 (commercial) storage space by delivery area multiplied by (customer's average day demand / Rate 01 (commercial) average day demand in delivery area)

c) Rate 10 (small commercial/industrial) – Rate 10 storage space by delivery area multiplied by (customer's average day demand / Rate 10 (small commercial/industrial) average day demand in delivery area)

d) Rate 20/100 – customer specific allocation by delivery area in proportion to the peak day shortfall and peak day

3.0 RENEWAL

In all circumstances, should a customer or a marketer acting on behalf of an end-use customer elect less that 100% of their cost based storage space allocation entitlement this will represent a permanent election. Specifically, customers or marketers electing less than 100% of their storage space entitlement are no longer able to access this capacity at cost based rates in the future.

POLICIES and GUIDELINES

Policy #: 09-DP-STOR-018

Subject:	**Effective**:
Cost-Based Storage Space and Deliverability Allocation Methodology – Northern and Eastern Operations Area	**June 21, 2000**

Applies to:

Bundled, Bundled (T-Service) and Unbundled Customers in the Northern and Eastern Operations Area

Purpose:

To describe the amount of cost-based storage space and deliverability an in-franchise firm service customer in the Northern and Eastern Operations Area may receive from Union Gas.

Background: *(Not to limit the applicability of the policy)*

Allocation of Storage Space

Storage space at Dawn is allocated to the Northern and Eastern operations area using a two-step approach. The first step is to allocate storage space to the whole of the Northern and Eastern operations area using the Ontario Energy Board (the "Board") approved aggregate excess method as described in the Cost-Based Storage Space and Deliverability Allocation Methodology - Southern Operations Area policy (Policy #09-DP-STOR-017).

The next step is to allocate storage space to each of the Delivery Areas and the individual customers within the Delivery Area using the Board approved (RP-1999-0017) Peak Day Shortfall methodology. The peak day shortfall is the difference between peak day demand and allocated firm transportation capacity. Under the peak day shortfall method, storage space is allocated to each delivery area in proportion to the peak day shortfall for all bundled customers in the delivery area. Similarly, the storage space allocated to the delivery area is then allocated to each rate class in proportion to its peak day shortfall.

When an individual customer in a Northern and Eastern delivery areas elects a bundled (T-Service) or unbundled storage service, they are allocated storage space in proportion to their peak day shortfall.

- The amounts allocated to firm service contract rate customers upon renewal of the contract will not be recalculated each year. Once the customer has elected storage, the storage space quantity will not change unless the customer requests to have it reduced. If a contract rate customer or their agent elects less than 100% of the cost-based storage space allocation at any time, this will represent a permanent election – the customer will no longer be able to access the declined space at cost-based rates in the future.
- Amounts allocated to unbundled general service customers (Rate 01 and Rate 10) are redetermined at April 1 of each year.
- No cost based storage is available to interruptible customers (Rate 25)

Unbundled customers must also contract for storage delivery and redelivery services (subject to availability) to deliver gas to storage and redeliver gas from storage to their delivery area as outlined below.

Allocation of Delivery Capacity

Delivery capacity uses TransCanada Pipelines ("TCPL") Storage and Transportation Services ("STS") injections, pooling rights and Parkway-Dawn capacity to transport excess FT capacity from the delivery area to Dawn. Recognizing that the need for delivery capacity is even through the summer, delivery capacity is allocated to the appropriate delivery areas, rate classes, and customers based on allocated Firm transportation capacity in excess of average summer demands.

Allocation of Redelivery Capacity

Redelivery capacity uses TCPL STS withdrawals, pooling rights and Dawn-Parkway capacity to transport gas between Dawn and the Northern and Eastern delivery areas. Union retains some redelivery capacity to address demand swings due to temperature variances from forecast. Recognizing that the need for redelivery capacity tends to increase significantly during periods of extreme cold (i.e. peak day), the remaining redelivery capacity is allocated to the appropriate delivery areas, rate classes, and customers based on peak day shortfall

Policy:

Annual Firm Storage Space

The allocation of storage space to customers electing these service options reflects the Board approved Peak Day Shortfall methodology applied as follows:

Rate S1 Unbundled Storage Service available to General Service customers	▪ Union will allocate a fixed amount of storage space per Rate 01 residential customer. ▪ Union will allocate commercial and industrial customers their proportionate amount of storage allocated to the appropriate rate class in the delivery area based on the peak day shortfall. ▪ Storage space allocation will be recalculated annually.
Bundled (T-Service) and Unbundled Storage Service available to contract rate classes Rate 20 (Medium Volume Firm Service) and Rate 100 (Large Volume High Load Factor)	▪ Union will allocate Rate 20 and Rate 100 customer-specific allocation by delivery area in proportion to the peak day shortfall. ▪ Should a customer or an Agent acting on behalf of an end-use customer elect less that 100% of their cost based storage space allocation entitlement this will represent a permanent election and the customer or their Agent will no longer be able to access this capacity at cost based rates in the future.
Delivery to Storage (Injections)	▪ Union will allocate delivery capacity to unbundled customers in proportion to the difference between the amount of firm capacity allocated and the average summer daily demand in the appropriate delivery area.
Redelivery from Storage (Withdrawals)	▪ Union will allocate redelivery capacity to unbundled customers in proportion to the difference between the peak day demand and the allocated firm transportation capacity (i.e. Peak Day Shortfall) in the appropriate delivery area.

Procedures:

1) Union Gas will calculate or recalculate potential storage parameters for all new contracts and renewing S1 contracts.

2) Requests for new or revised Bundled T-Service or Unbundled Storage Service available to Rate 20 and Rate 100 contracts effective November 1 are evaluated during the month of March. For S1 contracts, the calculations will be based on information available approximately 45 days prior to contract renewal to reflect end-use locations added or deleted to the contract pursuant to the Gas Distribution Access Rule Electronic Business Transactions Standard. In addition:
    a. Union Gas will prepare storage allocations consistent with the above policy.
    b. Rate 20 and Rate 100 customers may propose and Union Gas may accept an alternative forecast (with a resulting change in contract parameters) provided the contract holder provides justification acceptable to Union Gas for the alternate forecast - a forecast of expected consumption to support the requested contract parameters to be effective November 1 must be provided during the month of March.
    c. Requests received after the above noted dates will be dealt with on a reasonable efforts basis.

3) Union Gas will issue a contract renewal reflecting storage parameter changes consistent with the above policy (along with all other contract parameter changes) approximately 35 days before the effective date of the renewal for customer signature.

4) Customer will sign and return the contract renewal to Union Gas at least 25 days before the effective date of the amendment.

5) Union Gas will sign the contract renewal and provide a copy to the customer approximately 1 week after receiving the signed amendment from customer.

UNION GAS LIMITED

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

Reference: Exhibit G3, Tab 1, Page 15, Transmission – Dawn Trafalgar Easterly

Union describes the Transmission – Dawn Trafalgar Easterly demand costs for a Union North customer as follows: "Costs are allocated to customers in the North using excess peak over annual average demand (i.e., the difference between what a rate class takes on an average day and what it requires on its peak day)."

a) This transmission capacity is presumably used to transport gas from storage to the North. Is this cost allocation methodology consistent with the way a new Union North customer is able to contract for storage space?

Response:

a) Yes, Union's methodology for allocating Dawn-Trafalgar Easterly demand costs to Union North rate classes is consistent with how a new Union North customer's bundled storage space allocation is determined. Please see J.G-4-13-1 Attachment 1 for the Union North storage space allocation policy.

UNION GAS LIMITED

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

Ref: Exhibit G1, Tab 1, pages 12-13 & Appendix B

Please explain why the proposed change to the Union North Distribution Customer Stations Plant results in increased costs allocated to Rate M1 and M2. In particular, if no Rate 01 customers are being allocated any of these costs, why are Rate M1 customers being allocated greater costs. Similarly if only a small percentage of Rate 10 customers incur this costs, please explain the increase in costs allocated to M2 customers.

Response:

The cost allocation study filed on November 23, 2011 allocated DSM costs for Low-income programs based on 2013 forecast rate base. In Union North, DSM costs for Low-income were allocated to rate classes Rate 01, Rate 10, Rate 20 and Rate 100, while the Rate 25 rate class was excluded.

Union's proposed methodology for Union North distribution customer station plant results in a shift in rate base between Union North rate classes, including Rate 25. Consequently, the Union North rate base used for the allocation of Low-income DSM programs decreased slightly. This resulted in a small increase in the allocation of Low-income DSM program costs to Union South, including Rate M1 and Rate M2.

In accordance with the DSM settlement in EB-2011-0327, the updated cost allocation study filed on February 23, 2012 allocates DSM costs for Low-income programs based on 2013 distribution revenue, rather than on 2013 forecast rate base. As a result, Union's proposed methodology for Union North distribution customer station plant does not result in any revenue requirement change for Union South rate classes, including Rate M1 and Rate M2.

Union did not update Exhibit G1, Tab 1, Appendix B to reflect the updated cost allocation study filed on March 27, 2012. The updated schedule is provided at J.G-1-3-1 Attachment 2.

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe

Ref: Exhibit G1, Tab 1, Appendix B

a) Please explain the basis of the proposed change to the allocation of Union North Distribution Customer Stations Plant.

b) In particular, please explain why Rate M1 is allocated more costs.

Response:

a) The basis for the proposed change to the allocation of Union North Distribution Customer Stations Plant is to better reflect cost causality.

Union's Board-approved allocation of Union North Distribution Customer Stations Plant costs is based on the average number of customers in each rate class, excluding Rate 01. The current approved methodology would allocate 94 percent of these costs to Rate 10 customers, based on the 2013 average number of customers.

However, a customer station is a station that is constructed for customers that have hourly consumption in excess of 320 m^3. Assuming a typical industrial customer load factor of 40 percent and 20 hours of flow per day, the annual consumption for customers with a customer station would be a minimum of 934,400 m^3. Only a small percentage of Rate 10 customers consume 934,400 m^3 or more per year.

Accordingly, Union is proposing to allocate Union North Distribution Customer Stations Plant based on the average number of customers in each rate class, excluding Rate 01 and excluding the Rate 10 customers that do not consume 934,400 m^3 or more per year. As all Rate 20 and Rate 100 customers exceed the hourly customer station requirement of 320 m^3, all customers in these rate classes are included in the allocation.

b) Union's proposed methodology change to the allocation of Union North Distribution Customer Stations Plant does not result in an increase in costs allocated to Rate M1. Please see the response at J.G-5-2-1 and the updated version of Exhibit G1, Tab 1, Appendix B at J.G.1-3-1 Attachment 2.

UNION GAS LIMITED

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

Ref: Exhibit G1, Tab 1, Pages 11-15

Union seeks to change the methodology for allocating Union North customer station costs. Union defines a customer station as one having an hourly consumption in excess of 320 m^3/h. Union proposes to use a threshold annual consumption of 934,400 m^3/year (based on annual consumption of 320 m^3/h X 20 h/d X 365 X 0.40 LF) as the criteria to determine whether a customer station has been constructed for the customer for the purposes of allocating customer station costs to various rate classes in Union North. Union concludes that no Rate 1 customers and a small percentage of Rate 10 customers consume more than 934,400 m^3/year.

a) Please confirm that customer stations incorporate the use of meters and regulators on customer premises to measure and reduce the pressure being delivered to the customers.

b) Please confirm that this cost item relates to the capital cost of the equipment. If not confirmed, explain.

c) Please confirm that the design criteria Union uses to size and install meters and regulators for individual customer loads is the maximum peak hourly load and not the estimated annual consumption. If not confirmed, explain.

d) If two customer stations are constructed to meet the same peak hourly demand, and have similar equipment installed and one consumes more than 934,400 m^3/year and one consumes less than 934,400 m^3/year, please confirm that the customer station with the lower annual consumption would not attract the same customer station costs.

e) Please identify the number of customer meter stations in Union North in each rate class that have a design hourly load in excess of 320 m^3/h.

f) Please provide the total customer station costs for the North by rate category as proposed by Union for 2013 based on annual consumption of 934,400 m^3/year.

g) Please recalculate the customer station costs allocated by rate class if they were allocated on the basis of hourly load in excess of 320 m^3/h.

Response:

a) Confirmed.

b) Confirmed.

c) Confirmed. Maximum peak hourly load and customer delivery pressure are used as design criteria.

d) Union is proposing to allocate Union North Distribution Customer Stations Plant costs based on the average number of customers in each rate class, excluding Rate 01 and excluding the Rate 10 customers that do not consume 934,400 m^3 or more per year.

A Rate 10 customer with a customer station designed to meet an hourly demand of 320 m^3 that does not exceed an annual consumption of 934,400 m^3 is not included in the allocator described in the paragraph above. However, the customer station plant costs allocated to Rate 10 are recovered from all Rate 10 customers in Union's proposed delivery rates.

e) There are 468 Union North customer stations that exceed the design capacity of 320 m^3. The breakdown by rate class is provided in Attachment 1, column (a).

f) Please see Attachment 2.

g) Please see Attachment 1.

Allocation Change of Customer Stations Plant Based on Number of Stations

Line No.	Particulars ($000's)	Number of Customer Stations > 320 m^3/hr[1]	Allocated Union North Customer Stations Costs: Customer Stations Gross Plant	Accumulated Depreciation	Customer Stations Net Plant
		(a)	(b)	(c)	(d) = (b - c)
1	R01	0	0	0	0
2	R10	337	21,578	8,661	12,916
3	R20	100	6,403	2,570	3,833
4	R100	29	1,857	745	1,111
5	R25[2]	2	128	51	77
6	Total	468	29,965	12,028	17,937

Notes:

1 The number of stations in a rate class is based on the current customer rate classes and has not been updated to reflect changes to the forecasted number of customers.

2 The number of Rate 25 customers is based on the the actual number of customers that only have a Rate 25 service. No adjustment has been made to reflect the actual number of customers who have a companion Rate 25 service.

Proposed Allocation of Union North Customer Stations Plant

Line No.	Particulars ($000's)	Proposed Allocation N_CUSTSTATIONS	Allocated Union North Customer Stations Costs		
			Customer Stations Gross Plant	Accumulated Depreciation	Customer Stations Net Plant
		(a)	(b)	(c)	(d) = (b - c)
1	R01	0	0	0	0
2	R10	37	6,223	2,498	3,725
3	R20	62	10,456	4,197	6,259
4	R100	18	2,999	1,204	1,795
5	R25	61	10,287	4,129	6,158
6	Total	178	29,965	12,028	17,937

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe

Ref: Exhibit G1, Tab 1, Page 13 5(ii)

a) On average how much cost did Union incur for Residential Meter repair -2007-2011?

b) Please provide details -amount of costs and split between customer and customer demand North and South before and gross plant allocation after the change.

c) Reconcile to revenue requirement impact in G1 Tab Appendix B.

Response:

a) Union does not repair residential meters. Once they are removed from service they are retired.

b) Please see Attachment 1.

c) Please see Attachment 1 (column e) and J.G-1-3-1 Attachment 2 (line 4). J.G-1-3-1 includes the updated Revenue Requirement Impact to reflect the cost allocation study filed on March 27, 2012.

The small shift in costs from Union South to Union North is the result of the allocation of indirect general costs. The allocation is based on distribution-related O&M costs classified to Distribution Demand and Distribution Customer, which has shifted as a result of the meter and regulator repair proposal.

Revenue Requirement for Distribution Maintenance Meter and Regulator Repair

Line No.	Particulars ($000's)	Board-Approved Methodology Meter and Regulator Repair		Proposed Methodology Meter and Regulator Repair		Total Difference
		Distribution Demand	Distribution Customer	Distribution Demand	Distribution Customer	
		(a)	(b)	(c)	(d)	(e) = (a + b - c - d)
1	South In-Franchise		738	0	745	(7)
2	North In-Franchise	93	18	15	89	7
3	Total	93	755	15	834	0

UNION GAS LIMITED

Answer to Interrogatory from
Energy Probe

Ref: Exhibit G1, Tab 1, Page 14 5(iii)

a) Why has Union decided that for maintenance of equipment on customer premises the costs are primarily related to customer station maintenance and a time based allocation is no longer appropriate?

b) Please provide details -amount of costs before and after the change.

c) Reconcile to Appendix B.

Response:

a) The internal work orders mapped to Distribution Maintenance - Equipment on Customer Premises primarily relate to customer station maintenance. The Board-approved cost allocation methodology allocates equipment on customer premises maintenance costs to general service customers in Union South based on service call time and general service customers in Union North based on a historic allocator. There are no maintenance costs related to equipment on customer premises allocated to contract rate customers, despite contract rate customers having customer stations requiring maintenance.

   Union is proposing to allocate these maintenance costs to both general service and contract rate customers in Union South and Union North in proportion to the allocation of customer stations plant. An allocation of maintenance costs based on the allocation of customer stations plant better reflects cost incurrence than a time-based allocation.

b) Please see Attachment 1.

c) Please see Attachment 1 (column c) and J.G-1-3-1 Attachment 1. J.G-1-3-1 includes the updated Revenue Requirement Impact to reflect the cost allocation study filed on March 27, 2012.

Revenue Requirement for Distribution Maintenance Equipment on Customer Premises by Rate Class

Line No.	Particulars ($000's)	Board-Approved Allocation Equipment on Customer Premises	Proposed Allocation Equipment on Customer Premises	Difference
		(a)	(b)	(c) = (b - a)
1	M1	3,386	3,063	(323)
2	M2	77	169	92
3	M4 Firm	0	35	35
4	M5 Firm	0	1	1
5	M5 Interruptible	0	39	39
6	M7 Firm	0	15	15
7	M7 Interruptible	0	2	2
8	M9	0	3	3
9	M10	0	0	0
10	T1 Firm	0	101	101
11	T1 Interruptible	0	24	24
12	T3	0	10	10
13	R01	1,488	0	(1,488)
14	R10	30	315	285
15	R20	0	530	530
16	R100	0	152	152
17	R25	0	521	521
18	Total	4,981	4,981	0

UNION GAS LIMITED

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

Ref: Exhibit G1, Tab 1, pages 8-11

Please confirm that no costs incurred for the new ex-franchise transportation services have been allocated to any in-franchise rate class in Union's South or North delivery areas. If this cannot be confirmed, please provide details to the costs allocated to these in-franchise rate classes.

Response:

Confirmed. No costs incurred for the new ex-franchise transportation services have been allocated to any in-franchise rate class in Union's South or North delivery areas.

The costs associated with C1 Dawn to Dawn-TCPL and C1 Dawn to Dawn-Vector firm transportation services have been directly assigned to the C1 rate class. The costs associated with the F24-T transportation service have been directly assigned to the M12 rate class.

UNION GAS LIMITED

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

Reference: Exhibit H3, Tab 8, Schedule 1

Union indicates at footnote (1), that it assumes 6 staff are required at a cost of $1,147,000 plus a further $300,000 in overtime costs. Please:

a) Please confirm that for the 13 nomination windows available for FT-SN, that these nomination windows are also shared with 4 NAESB nomination windows and 4 STS windows (to transport gas under TCPL STS service).

b) Please indicate the number of customers and their respective volumes that contract for F24-T service.

c) Provide actual labour costs directly incurred to provide F24-T service in each of 2009, 2010, 2011 and forecast for 2012.

d) Please provide a crewing plan or other similar supporting material to illustrate the need for 6 staff and the related overtime for 2013.

e) Please explain specifically what is involved in receiving and scheduling a F24 T nomination.

f) Please indicate if any of the staff proposed to manage F24-T services also process any non-F24-T nominations or perform any other duties not related to providing F24-T service. Please provide the proportion of time spent in managing non-F24-T workload.

g) Please indicate if Union allocates any of the costs in Schedule 1 to those parties accessing the TCPL STS windows.

h) Please provide the total number of Union FTE staff employed in receiving and processing all nominations under all services. Please include their job type and/or function.

i) What were the total number of all nominations received in 2011(please include standing nominations that do not change from day to day)?

j) What was the total number of F24-T nominations received in 2011?

k) Union also provides F24 S storage, a non-utility storage service, where customers contracting for this service also have access to 13 nomination windows. Please indicate what portion of the costs noted in Schedule 1 is allocated to Union's non-utility service.

Response:

The footnote on Exhibit H3, Tab 8, Schedule 1 reads as follows:

(1) Assumes 6 staff at an average annual salary and benefits of $124,487 each, $300,000 personnel overtime STO and $100,000 additional compressor maintenance.

a) Yes, the 13 nomination windows available for Union's F24-T share the 4 NAESB and 4 STS windows.

b)

Customer	Contracted F24-T Quantity (GJ/d)
1	85,000
2	140,000
3	49,500
4	80,000
5	76,000
6	11,654

c) Union does not separately track the direct labour costs associated with providing F24-T service.

In EB-2005-0551 the O&M costs for F24-T included $0.945 million for additional staffing requirements (10 roles: Gas Management Services ("GMS") (4), Gas Control (2) and Operations (4)) and $0.090 million for forecasted increases in compressor maintenance resulting from providing firm all day service. The staffing level proposed in EB-2005-0551 was based on the expected level of effort required to provide the F24-T service, including the need for 24/7 coverage.

Union has not filled all the roles proposed in EB-2005-0551. Union has been able to meet the incremental work requirements associated with F24-T with 2 roles in GMS and 2 roles in Gas Control. Field Operations have met the additional workload through overtime. This level of staffing does not provide for 24/7 coverage.

The addition of two staff in GMS allow Union to provided 24/7 coverage as had originally been contemplated in EB-2005-0551.

d) Please see the response at c) above.

e) F24-T nominations received by Union must be validated against contract parameters, must be in balance, and must be confirmed by interconnecting operators before being scheduled

for gas flow. This process is followed for every F24-T nomination for every nomination cycle or window. Any issues with nominations must be addressed and resolved prior to the gas flow.

Support for F24-T also includes on-site customer training, telephone hotline support, troubleshooting nomination issues and troubleshooting nomination system issues.

f) Union's nomination staff supports both F24-T services and non-F24-T services. Union does not track staff time spent on supporting individual services.

g) No. The GMS and Gas Control groups have historically been staffed to provide support for STS. The requirement to provide firm all day service on 13 nomination windows is incremental and drives the costs in Schedule 1.

h) Union employs 21 FTE staff including 1 Manager to support nominations.

There are 12 Specialists and 2 Analysts supervised by 3 Team Leads who receive nominations from Union's shippers and who submit nominations to upstream pipelines.

There is 1 Team Lead and 2 Specialists who provide business systems support to ensure the reliability and integrity of Union's web-based nomination system.

i) Union received and processed approximately 1.1 million nominations in 2011.

j) Union processed approximately 23,000 F24-T nominations in 2011.

k) None of the costs referenced in Schedule 1 are allocated to the F24-S service. As in EB-2005-0551, Union is proposing to recover the total revenue requirement associated with providing firm service on 13 nomination windows from F24-T customers because the firm service on 13 nomination windows will primarily be used by F24-T shippers directly or by other ex-franchise shippers providing storage services to F24-T service shippers.

UNION GAS LIMITED

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

Ref: Exhibit G3, Tab 1, Schedule 1, pages 14-15, Updated

a) Please separate out from the total Dawn Trafalgar Easterly costs any costs associated with the Parkway Station metering and compression and Kirkwall Station metering in the 2013 revenue requirement.

b) Does Union believe that costs for the Parkway Station metering and compression and Kirkwall Station metering should be allocated on the same basis as other Dawn Trafalgar Easterly costs? Please explain.

c) What is the impact on in-franchise customers (South and/or North) of a compression failure at Parkway?

d) What is the impact on ex-franchise customers of a compression failure at Parkway?

Response:

a) The approximate 2013 revenue requirement associated with the Parkway Station metering and compression and Kirkwall Station metering is $22.5 million.

b) Please see the response at Exhibit J.G-1-1-2 part b).

c) A compressor failure at Parkway would directly impact any customers served by Parkway discharge, and would have no effect on volumes up to and including Parkway suction. Following a compressor failure at Parkway, Union would immediately call all available interruptions to volumes supplied by Parkway discharge. The remaining shortfall would be allocated across all customers served by Parkway discharge, both in-franchise and ex-franchise. No customers west of Parkway, including those served by Parkway suction volumes (Parkway (Consumers) and Lisgar), would be impacted by a compressor failure at Parkway. Union expects that on a design day regional gas flow would be significantly impacted by a compressor failure at Parkway without loss of Critical Unit coverage.

d) Please see response at part c) above.

UNION GAS LIMITED

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

Ref: Exhibit B1, Tab 5, page 2
EB-2005-0550 Decision and Order, page 3

We require additional information about the capacity and utilization of the Dawn-Trafalgar transmission system.

a) Please fill in the empty cells in the table below.

	2007/08	2010/11	2011/12	2012/13	2013/14
Dawn-Parkway Demand					
In-franchise		1,703,368	1,690,925	1,657,697	1,648,695
Ex-franchise		5,118,197	5,012,745	4,860,004	4,681,558
Total	6,535,326	6,821,565	6,703,670	6,517,701	6,330,253
Physical Design Capacity	5,805,444				
Obligated Parkway Deliveries	639,419				
Total Physical Capacity	6,535,326				
Shortfall	90,463	383,382	187,141	(30,798)	(209,812)

b) For each year from 2010 through 2013, please provide the actual or forecast quantities of in-franchise design day demand that utilize Parkway compression facilities, by rate schedule.

c) For each year from 2010 through 2013, please provide the actual or forecast quantities of ex-franchise design day demand that utilize Parkway compression facilities, by service.

d) For each year from 2010 through 2013, please provide the actual or forecast quantities of in-franchise design day demand that utilize Parkway metering facilities, by rate schedule.

e) For each year from 2010 through 2013, please provide the actual or forecast quantities of ex-franchise design day demand that utilize Parkway metering facilities, by service.

Response:

a)

	2007/08*	2010/11	2011/12	2012/13	2013/14
Dawn-Parkway Demand					
In-Franchise	1,562,695	1,655,571	1,690,925	1,657,697	1,648,695
Ex-franchise	4,794,631	5,118,197	5,012,745	4,860,004	4,681,558
North and East	178,000	262,587	262,587	262,587	262,587
Total	6,535,326	7,036,355	6,966,258	6,780,289	6,592,840
Physical Design Capacity	5,805,444	5,955,056	6,121,534	6,156,717	6,163,564
Obligated Parkway Deliveries	639,419	697,917	657,583	654,370	639,088
Total Physical Capacity	6,444,863	6,652,973	6,779,117	6,811,087	6,802,652
Shortfall	90,463	383,382	187,141	(30,798)	(209,812)

* Source: EB-2005-0550 - 2007 Trafalgar Facilities Expansion Program

The in-franchise forecasts are developed through a study of historical loads versus temperature, combined with an adjusted use per customer to accommodate increases in heating efficiency. Ex-franchise volumes are forecast based on existing and forecast contracts.

b) In-franchise design day demand is not available by rate schedule. The full volumes of in-franchise design day demand that utilize Parkway compression are listed below:

	Winter 10/11	Winter 11/12	Winter 12/13	Winter 13/14
Southern Ontario	0	0	0	0
North and Eastern Ontario	262,587	262,587	262,587	262,587
Total	262,587	262,587	262,587	262,587

Note: Southern Ontario demands receiving gas east of Parkway include Burlington and Bronte. From a rate perspective, these volumes receive gas from Parkway obligated deliveries on the east side of Parkway compression and as such do not use Parkway compression facilities.

c) As noted in the response at part a) above, ex-franchise volumes are forecast based on existing and forecast contracts.

	Winter 10/11	Winter 11/12	Winter 12/13	Winter 13/14
M12	1,994,286	2,045,772	1,979,722	1,912,722
M12X	0	128,316	391,011	391,011
Kirkwall to Parkway	0	0	88,497	263,249
Ex-franchise Total	1,994,286	2,174,088	2,459,230	2,566,982

d) Please see the response at b) above.

e)

	Winter 10/11	Winter 11/12	Winter 12/13	Winter 13/14
M12	2,826,335	2,877,821	2.811,771	2,744,771
M12X	0	128,316	391,011	391,011
Kirkwall to Parkway	0	0	88,497	263,249
Ex-franchise Total	2,826,335	3,006,137	3,291,279	3,399,031

UNION GAS LIMITED

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

Ref: Exhibit C1, Tab 3, page 6

We require additional information about the winter peaking services at Parkway that have been used to supplement physical transportation capacity on the Dawn-Trafalgar system.

a) Please provide the amount of winter peaking service purchased by Union in each winter session from 2007/08 through 2011/12.

b) What was the cost of this service for each of these years?

c) How is this cost recovered from in-franchise customers?

Response:

a) Union acquired the following volumes for winter peaking service:

Winter	GJ/d
2007/2008	62,959
2008/2009	2,110
2009/2010	324,495
2010/2011	306,000
2011/2012	0

b) The cost of winter peaking service to Union was as follows:

Winter	$000s
2007	$229
2008	$1,575
2009	$4,536
2010	$3,856
2011	$2,437

c) The winter peaking service costs in current approved rates are recovered from Union South in-franchise customers in delivery rates. For Union North, these costs are recovered in storage rates for Rate 01 and Rate 10 customers and gas supply transportation and bundled storage rates for Rate 20 and Rate 100 customers.

There are no winter peaking service costs in Union's 2013 forecast.

UNION GAS LIMITED

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

Preamble: On its website, Union has posted a map that lists recent expansions to the Dawn-Parkway transmission system. This list includes the following projects:

2006 – Dawn Station – Additional Compression
2007 – Parkway Station – Additional Compression
2008 – Bright Station – Additional Compression
2008 – Dawn Deliverability Expansion
2006 – NPS 48 Brooke to Strathroy (18.2 km)
2006 – NPS 48 Hamilton to Milton Tie-in (17.1 km)
2007 – NPS 48 Strathroy to Lobo (18.1 km)

For each of the projects listed above, please provide the following information:

a) The case number for the applicable OEB leave to construct proceeding;

b) The number of compression units and total horsepower added;

c) The estimated project cost included in the leave to construct application;

d) The actual final cost of the project;

e) The amount of plant addition entered to Union's storage and/or transmission accounts by year;

f) The increase in Dawn-Parkway system design day capacity resulting from the project.

Response:

2006 – Dawn Station – Additional Compression

a) Leave to Construct not required.
b) 2 compressors - 20,610 HP added
c) No leave to construct.
d) $48.3 million
e) Please see Attachment 1.
f) The additional compression required to maintain maximum send-out from Dawn. No impact to Dawn-Parkway capacity.

2007 – Parkway Station – Additional Compression

a) EB-2005-0550
b) 1 compressor - 47,000 HP
c) $48.4 million
d) $70.8 million
e) Please see Attachment 1.
f) Completed in conjunction with the Strathroy to Lobo project listed below. The combined capacity increase was estimated in EB-2005-0550 to be 492,175 GJ/day.

2008 – Bright Station – Additional Compression

a) Leave to Construct not required.
b) Upgrade of 2 compressors – 42,000 HP
c) No leave to construct.
d) $73.3 million
e) Please see Attachment 1.
f) The capacity increase was forecast in 2007 prior to construction. Based on the system parameters at that time, the forecast increase was 360,380 GJ/day.

2008 – Dawn Deliverability Expansion

Unregulated storage project.

2006 – NPS 48 Brooke to Strathroy (18.2 km)

a) EB-2005-0201
b) No compression added.
c) $46.7 Million
d) $48.3 million
e) Please see Attachment 1.
f) The NPS 48 Brooke to Strathroy project was completed in conjunction with the NPS 48 Hamilton to Milton Tie-in. The combined Dawn-Parkway capacity increase was estimated at 399,108 GJ/day.

2006 – NPS 48 Hamilton to Milton Tie-in (17.1 km)

a) EB-2005-0201
b) No compression added.
c) $67.9 Million
d) $56.0 million
e) Please see Attachment 1.
f) See comments under NPS 48 Brooke to Strathroy.

2007 – NPS 48 Strathroy to Lobo (18.1 km)

a) EB-2005-0550
b) See comments under the 2007 - Parkway Station project above.
c) $52.9 Million
d) $58.3 million
e) Please see Attachment 1.
f) See comments under the 2007 - Parkway Station project above.

Plant Addition

Line No.	Particulars ($000's)	2006	2007	2008	2009	2010	2011	Total
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Storage							
1	2006 - Dawn Station - Additional Compression [1]	51.1	2.3	(10.6)	1.6	-	-	44.4
2	2008 - Dawn Deliverability Expansion [2]	-	-	-	-	-	-	-
3	Total Storage	51.1	2.3	(10.6)	1.6	-	-	44.4
	Transmission							
4	2007 - Parkway Station - Additional Compression	-	-	79.6	-	-	-	79.6
5	2008 - Bright Station - Additional Compression	-	-	79.3	3.5	0.1	0.1	83.0
6	2006 - NPS 48 Brooke to Strathroy (18.2 km)	51.4	2.9	(0.1)	-	-	-	54.2
7	2006 - NPS 48 Hamilton to Milton Tie-in (17.1 km)	61.8	2.9	-	0.1	-	-	64.8
8	2007 - NPS 48 Strathroy to Lobo (18.1km)	-	61.9	1.4	0.4	-	-	63.7
9	Total Transmission	113.2	67.7	160.2	4.0	0.1	0.1	345.3
10	Total Plant Additions	164.3	70.0	149.6	5.6	0.1	0.1	389.7

Notes:

(1) The negative balance in 2008 relates to the transfer of assets to the unregulated storage operation.

(2) Dawn Deliverability Expansion is an unregulated storage project.

UNION GAS LIMITED

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

Ref: Exhibit G3, Tab 3, Schedule 1

For each account, please break out separately the gross plant and accumulated depreciation amounts for the Parkway Station from the total Dawn-Trafalgar Easterly amounts.

Response:

Please see Attachment 1.

Parkway Station and Dawn-Trafalgar Easterly Transmission Plant

Line No.	Particulars ($000's)	Parkway Station Plant	Other Dawn-Trafalgar Easterly Plant	Dawn-Trafalgar Easterly Transmission Plant[1]
		(a)	(b)	(c) = (a + b)
	Gross Plant - Transmission			
1	Land	1,887	18,082	19,970
2	Land Rights	0	29,611	29,611
3	Mains	0	826,697	826,697
4	Compressor Equipment	96,570	248,815	345,384
5	Measuring and Regulating	17,734	35,770	53,504
6	Structures & Improvements	19,389	24,699	44,088
7	Other	0	0	0
8	Total	135,580	1,183,675	1,319,255
	Accumulated Depreciation			
9	Land	0	0	0
10	Land Rights	0	7,336	7,336
11	Mains	0	348,788	348,788
12	Compressor Equipment	34,689	85,501	120,191
13	Measuring and Regulating	4,684	6,783	11,467
14	Structures & Improvements	9,243	13,387	22,629
15	Other	0	0	0
16	Total	48,616	461,795	510,410
	Net Plant			
17	Land	1,887	18,082	19,970
18	Land Rights	0	22,275	22,275
19	Mains	0	477,910	477,910
20	Compressor Equipment	61,881	163,313	225,194
21	Measuring and Regulating	13,050	28,987	42,037
22	Structures & Improvements	10,146	11,313	21,459
23	Other	0	0	0
24	Total	86,964	721,880	808,844

Note:

1 Transmission plant functionalized to the Dawn-Trafalgar Easterly Demand functional classification only.

UNION GAS LIMITED

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

Ref: Exhibit B1, Tab 9, page 2, line 15

Union states that firm design day demand through Parkway compression could increase from approximately 2.0 PJ/day in 2011 to over 3.0 PJ/day by 2015/2016.

a) Please explain the relationship between the Parkway compression demand of about 2.0 PJ/day in 2011 and the total M12, M12-X, and C1 contract demands for firm transportation service to Parkway shown in Exhibit C1, Tab 3, Schedule 1 and Exhibit C1, Tab 3, Schedule 4.

b) For each year, please break out the total contract demands for each transportation service with delivery at Parkway to show (a) the total contract demands for contracts that have firm rights to deliver into TCPL through Parkway compression, and (b) the total contract demands for contracts that do not have firm rights to deliver into TCPL through Parkway compression.

Response:

Please see Attachment 1.

a) This schedule combines the top sections of Exhibit C1, Tab 3, Schedule 1 and Exhibit C1, Tab 3, Schedule 4. For 2011, the sum of lines 2, 5 and 11 are the contract demands that require 2.0 PJ of Parkway compression.

b) The contracts that have firm rights to deliver into TCPL through Parkway Compression are lines 2, 5 and 11. The contract demands that do not have firm rights to deliver into TCPL through Parkway Compression are referenced in line 3.

M12 / C1 Demands

Line No.	Particulars (GJ/d)		2010 Actual	2011 Actual	2012 Forecast	2013 Forecast
	Total M12 & M12 X Demands as of Nov 1 (GJ/d)					
1	M12	Dawn-Kirkwall	1,496,518	1,211,264	773,381	487,183
2		Dawn-Parkway (TCPL)	1,977,029	2,028,374	1,961,965	1,894,965
3		Dawn-Parkway (Consumers)	1,638,085	1,638,085	1,638,085	1,638,085
4		Total Dawn-Parkway	3,615,114	3,666,459	3,600,050	3,533,050
5		Kirkwall-Parkway	-	-	88,497	263,249
6		Parkway-Dawn	7,076	7,076	7,076	7,076
7	M12X	Bidirectional	-	128,316	391,011	391,011
8	Total M12 Demands		5,118,708	5,013,115	4,860,015	4,681,569
	Total C1 Demands as of Nov 1 (GJ/d)					
9		Dawn to Dawn Vector	92,845	92,845	92,845	92,845
10		Dawn - Dawn(TCPL)	500,000	500,000	500,000	500,000
11		Dawn to Parkway(TCPL)	7,065	7,065	7,065	7,065
12		Ojibway to Dawn	113,254	96,327	85,460	85,460
13		Parkway - Dawn	617,296	617,296	401,728	347,371
14		Parkway - Kirkwall	128,316	-	-	-
15	Total C1 Demands		1,458,776	1,313,533	1,087,098	1,032,741

UNION GAS LIMITED

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

Ref: Exhibit C1, Tab 3, Schedule 1

We require additional information about the contract demands for M12 Dawn-Parkway transportation service.

a) What portion of the M12 Dawn-Parkway contract demand for each year is made up of contracts held by in-franchise customers that are using M12 service to meet Parkway obligated DCQ requirements?

b) What portion of the M12 Dawn-Parkway contract demand for each year is made up of contracts held by in-franchise customers that have elected to avoid Parkway obligated DCQ requirements by assigning M12 capacity to Union under Union Gas Policy #10-DP-DCQS-009?

Response:

a) Please see the response at Exhibit J.G-1-7-2 b) iii).

b) Of the contracts identified as also having in-franchise contracts, 34% of those quantities have elected to assign their M12 capacity to Union under the policy mentioned.

UNION GAS LIMITED

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

Ref: Exhibit G3, Tab 1, Schedule 1, pages 14-15, Updated

a) Please provide the commodity-kilometres used to determine the allocation of the Dawn-Trafalgar Easterly transmission demand costs between in-franchise and ex-franchise customers. Please show the demands and distances in the same format used in Exhibit J27.11 of EB-2005-0520.

b) What is the total commodity-kilometres of the Dawn-Trafalgar system assuming it was fully contracted to the design day demand. Please show all calculations.

Response:

a) Please refer to TCPL J.G-1-7-5 Attachment 1.

b) The total commodity-kilometres of the Dawn-Parkway system assuming it was fully contracted to the design day demand are 33,009 $10^6m^3/d$. The total calculated demand assumes that 5.558 $10^6m^3/d$ of unutilized capacity is contracted M12 Dawn to Parkway service for 228.94 km. The derivation of the 33,009 10^6m^3 design day demands is included in Attachment 1.

Dawn Trafalgar Allocation Units Assuming Additional M12 Demands
Winter 2013/14

Line No.	Particulars	Demand ($10^6m^3/d$) (a)	Kilometre Post (km) (b)	Commodity Kilometre (($10^6m^3/d$)*km) (c)
	Union Demands Supplied by Dawn			
1	Forest, Watford	0.184	44.01	8.094
2	Strathroy	0.204	54.93	11.228
3	Byron	2.935	73.05	214.408
4	Hensall	0.515	85.74	44.161
5	London N	2.542	90.35	229.659
6	Hensall	0.242	85.74	20.754
7	St Mary's	0.169	103.93	17.575
8	Stratford	0.946	121.45	114.898
9	Beachville	1.372	121.45	166.677
10	Oxford	1.129	142.92	161.410
11	Owen Sound Line	6.206	159.39	989.229
12	Cambridge	1.828	175.14	320.219
13	Brantford	2.577	175.14	451.394
14	Guelph	2.177	183.67	399.817
15	Kirkwall- Dominion	2.130	188.67	401.787
16	Gate 3	1.024	188.67	193.188
17	Gates 1 & 2	6.757	199.25	1,346.358
18	Milton	0.202	218.09	44.126
19		33.141		5,134.980
	Union Demands Supplied by Parkway			
20	Milton	1.684	10.85	18.271
21	Halton Hills (dist'n)	0.222	7.33	1.630
22	HH Power Plant	3.480	7.33	25.508
23	Burlington	1.433	0.00	0.000
24	Bronte	2.225	0.00	0.000
25	Greenbelt	0.929	0.00	0.000
26		9.974		45.409
	Union Demands Supplied by Kirkwall			
27	Gate 3	0.559	0.00	0.000
28		0.559		0.000
29	Total Union	43.674		5,180.390
	Storage & Transportation Contracts			
30	Dawn to Parkway	109.694 [1]	228.94	25,113.275
31	Dawn to Kirkwall	12.906	188.67	2,434.883
32	Kirkwall to Parkway	6.973	40.27	280.822
33	Total S & T	129.573		27,828.979
34	Northern & Eastern Areas	6.956		
35	Total Union and S&T	180.203		33,009.369
36	Gross Parkway Firm Deliveries	16.929		
37	Total Design Day Demand	163.273		

Note:

1 Includes an assumption of an additional 5.558 $10^6m^3/d$ of Dawn to Parkway M12 demands.

UNION GAS LIMITED

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

Ref: Exhibit H1, Tab 1, page 51

Union co-sponsored evidence by Mr. Feingold in the TCPL 2012 and 2013 Mainline Tolls proceeding that addressed the classification of transmission costs as distance-based or non-distance based. According to Mr. Feingold:
"My experience is that while there is some latitude in determining if a cost is distance related, the classification is neither arbitrary nor discretionary. Rather, a thorough analysis of the cost is required to determine if a cost is or is not distance-related."

a) Has Union done a cost study of the type described by Mr. Feingold for the Dawn-Trafalgar transmission system to determine which costs are distance-related and which costs are not distance-related? If so, what portion of the Dawn-Trafalgar Easterly costs was found to be not distance-related?

b) If Union has not done such a cost study, please explain why Union considers it appropriate to design transportation rates for C1 services using the Dawn-Trafalgar system that have a Kirkwall receipt point on the basis that all of the costs of providing these services are distance-related.

Response:

a) Union prepared a cost allocation study as directed by the Board in its E.B.R.O. 486 Decision. In October 1995 R.J. Rudden Associates Inc ("RJRA") was retained by Union to undertake an in-depth and comprehensive review of cost allocation and rate design for services offered on the Dawn-Trafalgar transmission system.

   This study was meant to ensure that there is no cross subsidy among rate classes which use the Dawn-Trafalgar system and was presented in Union's 1997 rate case. In its E.B.R.O. 493/494 Decision, the Board-approved Union's cost allocation and rate design.

   Based on the RJRA review, Union's distance-based cost allocation methodology of Dawn-Trafalgar system transmission costs was found to be appropriate for the following reasons:

   i) "Dawn-Trafalgar transmission system has a distinct west to east orientation".
   ii) "There is a general need to transport M12 gas volumes over longer distances during the winter".

iii) "The location of customer demands imposed on the Dawn-Trafalgar transmission system has an impact on the amount of system capacity provided by facilities".

b) C1 easterly Dawn-Trafalgar rates are equivalent to M12 easterly Dawn-Trafalgar rates. C1 Dawn-Trafalgar service, however, is not subject to the Yearly Commodity Required (YCR)/Yearly Commodity Revenue Required (YCRR) true-up.

C1 westerly transportation rates on the Dawn-Trafalgar system (Parkway to Kirkwall/Dawn and Kirkwall to Dawn) are based on Union's M12 easterly transportation rates excluding Dawn compression. C1 westerly transportation rates also reflect the expected number of days of westerly flow.