EB-2012-0451
EB-2012-0433
EB-2013-0074

ONTARIO ENERGY BOARD

IN THE MATTER OF an application by Enbridge Gas Distribution Inc. for: an order or orders granting leave to construct a natural gas pipeline and ancillary facilities in the Town of Milton, City of Markham, Town of Richmond Hill, City of Brampton, City of Toronto, City of Vaughan and the Region of Halton, the Region of Peel and the Region of York; and an order or orders approving the methodology to establish a rate for transportation services for TransCanada Pipelines Limited;

AND IN THE MATTER OF an application by Union Gas Limited for: an Order or Orders for pre-approval of recovery of the cost consequences of all facilities associated with the development of the proposed Parkway West site; an Order or Orders granting leave to construct natural gas pipelines and ancillary facilities in the Town of Milton; an Order or Orders for pre-approval of recovery of the cost consequences of all facilities associated with the development of the proposed Brantford-Kirkwall/Parkway D Compressor Station project; an Order or Orders for pre-approval of the cost consequences of two long term short haul transportation contracts; and an Order or Orders granting leave to construct natural gas pipelines and ancillary facilities in the City of Cambridge and City of Hamilton.

SCHOOL ENERGY COALITION CROSS-EXAMINATION COMPENDIUM (Union Gas Panels)

Jay Shepherd P.C.
2300 Yonge Street, Suite 806
Toronto, Ontario M4P 1E4

Mark Rubenstein
mark.rubenstein@canadianenergylawyers.com
Tel: 416-483-3300
Fax: 416-483-3305

Counsel to the School Energy Coalition

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Ref: EB-2012-0451, Pipeline Proposal
EB-2013-0074, Section 7 – New Dawn-Parkway System Demands, Page 10 of 14, Lines 13-14

Preamble: Union notes that it entered into a TCPL open season for transportation starting November 1, 2014 to support natural gas deliveries to Union North. However, in September 2012, Union was informed by TCPL that the incremental capacity to serve the TCPL open season bids would not be available for November 1, 2014 as provided in the open season but rather it would be available November 1, 2015. Union notes that it is expecting TCPL to expand capacity between Parkway and Maple to serve this incremental interest.

a) To what extent are the subject OEB applications dependent on any TCPL facilities expansions, such as the Parkway to Maple Expansion Project noted above? Please explain how any delays in TCPL's facilities expansions will affect the Union and Enbridge proposals?

b) Please discuss the potential risks of a further delay of incremental capacity from TCPL past November 1, 2015.

c) Please discuss Union's plans to mitigate any risks from a further delay.

d) Please discuss the potential effects of TCPL not expanding capacity between Parkway and Maple to serve the incremental interest.

Response:

(a) Gaz Métro and Union require expansion of the pipeline capacity between Parkway and Maple to realize the benefits of reduced natural gas costs for their customers. These gas cost savings are estimated to be $103-$138 million annually and are a result of Ontario and Québec customers having increased access to the liquid Dawn Hub.In order to support an efficient marketplace for energy, it is critical that natural gas be able to flow unimpeded to meet market demands. Restricting flow into, within and out of Ontario undermines the development of an efficient marketplace to the detriment of all energy consumers. The expansion of the Parkway to Maple corridor is necessary to provide Ontario industry, power generators, businesses and residents with increased access to the diverse and affordable natural gas supply of the Dawn Hub. The depth and liquidity of the Dawn Hub depends on the ability to move natural gas supplies to and from that trading point.

Union filed a letter with the National Energy Board dated April 29, 2013 that was received from TransCanada (see Exhibit I.A4.UGL.CCC.23) providing notice to Union that TransCanada did not receive its own Board of Directors approval to construct the proposed expansion project downstream of Parkway as expected in 2015, and as a result TransCanada had suspended further work. Union is very concerned by TransCanada's decision to suspend development activities for the 2015 build between Parkway and Maple.
The following is an assessment of the impacts of the suspension of TransCanada's 2015 Parkway to Maple expansion.

Impact on Union's Parkway West Project

The facilities and timing of the proposed Parkway West Project are not impacted by a lack of pipeline capacity expansion downstream of Parkway or a delay in such a project. The Parkway West Project does not depend on system growth, but rather is predicated on providing loss of critical unit coverage for the compression at Parkway and increased reliability for the substantial interconnection with Enbridge at Parkway.

As discussed in response to Exhibit I.A5.UGL.CCC.26, Union and TransCanada are discussing an alternative to the NPS 42 pipeline proposed as part of the Parkway West Project to connect the existing Parkway Compressor Station to the new Parkway West Compressor Station. This alternative would provide a new interconnection between Union and TransCanada on the west side of Highway 407 and will require new facilities to be built by TransCanada at an existing valve site. Union considers the construction of this interconnection independent of expansion of the Parkway-Maple corridor.

Impact on Union's Brantford-Kirkwall Pipeline/Parkway D Compressor Projects

The incremental Dawn-Parkway transportation demands of Gaz Métro and Union require expansion of the pipeline capacity downstream of Parkway to serve markets beyond the GTA in northern and eastern Ontario and Québec. Without expansion of the Parkway-Maple corridor and, as such, without these incremental Dawn-Parkway demands, Union would not construct the Brantford-Kirkwall pipeline project. The Parkway D Compressor would still be required to meet the gas supply needs of Enbridge.

Impact on Proposed Enbridge GTA Project

It is Union's understanding that the only potential impact to the proposed Enbridge GTA Project as a result of a TransCanada delay in the Parkway to Maple expansion could be the size of the pipe that Enbridge builds in Segment A between Parkway and the Albion Road Station. Enbridge has identified this line as being either an NPS 36 line or an NPS 42 line. It is Union's view that this line should be built as NPS 42 given the one time opportunity to right size this critical pipeline to facilitate future expansion of the Parkway-Maple corridor, allowing Ontario customers the opportunity to increase access to the liquidity and diversity of the Dawn Hub and to new affordable supply sources such as Marcellus and Utica shale production.

(b) Delay of the expansion of the Parkway to Maple corridor beyond 2015 creates a number of risks:

i. Gas Cost Savings - The customers in northern and eastern Ontario and Québec that initially requested access to Dawn in 2014, would have a further delay in increased access to the diversity, liquidity and affordability of supply at the Dawn Hub. Without access to the Dawn Hub and new supply sources, natural gas cost savings in the order of \$103-\$138 million annually, will not be realized for Union North and Gaz Métro customers.

ii. Access to Dawn - Without expansion of the Parkway to Maple corridor, Ontario customers in Union North will lose the benefit of increased access to the diversity of the Dawn Hub. As discussed in Exhibit I.A1.UGL.Staff.1 part a), the proposed crude oil pipeline conversion will leave eastern markets short of capacity to meet firm demand and to meet the significant demand for discretionary services (interruptible service and short term firm service) from northern and eastern Ontario industrials and power generators. As a result, Union expects that some Ontario customers will seek access to the Dawn Hub as well as firm transportation capacity from Dawn to the market area. It is unclear at this time given TransCanada's decision to suspend development of its 2015 Parkway to Maple expansion whether TransCanada's next open season for new capacity will allow access to Dawn and other points upstream of Parkway, such as Niagara and Chippawa (and if they do, under what terms and conditions), or just long haul paths back to Empress. Restricting access only to Empress should be a concern to Ontario and Québec industrials and power generators that would go without increased access to the diverse and economic supply of the Dawn Hub.

iii. Liquidity at Dawn - Another risk associated with delay of incremental pipeline capacity downstream of Parkway is the impact on liquidity at the Dawn Hub. The Dawn Hub gets its liquidity today from being an attractive place to transact for both buyers (customers) and sellers (producers and marketers). The constraint in pipeline capacity between Parkway and Maple creates risk to the liquidity at Dawn because it restricts the market driven movement of supply away from Dawn making Ontario and the Dawn Hub a less attractive trading point for both buyers and sellers. Any further delay in expansion of the Parkway-Maple corridor increases risk to the health and liquidity of the Dawn Hub. Increasing access to the Dawn Hub will help attract new supply sources to Ontario supporting a more competitive marketplace to the benefit of all Ontario energy consumers.

iv. Turn Back Management - A delay in removing the constraints downstream of Parkway will impact Union's ability to manage future turn back of Dawn-Kirkwall capacity by limiting the ability to resell it as Dawn-Parkway capacity. A discussion of this impact can be found in Exhibit I.A1.UGL.CME.14 a).

In summary, a significant delay would compromise a number of project benefits, which are summarized at EB-2013-0074, Section 9, pages 8-11.

(c) Union remains committed to serving the needs of its Union North customers and the requested demands of Gaz Métro in 2015. Union has stated in the past that a TransCanada expansion through the Parkway to Maple corridor is preferred. To that end, Union is continuing discussions with TransCanada and other market participants to determine if a build in 2015 is possible. Given the significant risk that TransCanada is not able to or not prepared to build, Union and Gaz Métro, have initiated an environmental assessment for a pipeline between Enbridge's Albion Road Station (the end of Segment A of the proposed GTA Project) and a point at or near Maple. If required, this will support an application for regulatory approval and preserve an expansion of the Parkway-Maple corridor in 2015.

(d) Please see parts a)-c) above.

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Ref: EB-2013-0074, Section 8 – Proposed Facilities, General Questions

a) Please discuss the effects of either the Board rejecting Enbridge's proposed GTA Project facilities and/or TCPL's system expansion projects not proceeding.

b) In the event that Enbridge's GTA Project is denied and/or TCPL's system expansion does not proceed please discuss if Union will still require the facilities it has requested in this application in order to adequately serve its in-franchise and ex-franchise customers. Please discuss if the project would be scaled back with regard to pipeline size, contract length, compressor size, etc.

Response:

a) and b)

1. Effects of Rejection or Delayed Approval of the Proposed Enbridge GTA Project

Impact to Union's Parkway West Project
A rejection of the proposed Enbridge GTA Project or a delay in the proposed Enbridge GTA Project does not impact the facilities or timing of Union's proposed Parkway West Project. As provided in Exhibit I.A1.UGL.CCC.26, Union expects that Enbridge would build its proposed Parkway West Gate Station for November 2014 to connect to Parkway West and provide security of supply for current Parkway(Consumers) and Lisgar deliveries.

Impact to Union's Brantford-Kirkwall Pipeline and Parkway D Compressor

Board Rejects Proposed Enbridge GTA Project
If the Board rejects all or a portion of the proposed Enbridge GTA Project then Union assumes that:

- Enbridge could not shift natural gas supply to the Dawn Hub as planned and would not require its incremental 400 TJ/d of Dawn-Parkway capacity
- Enbridge would no longer require the shift of 400 TJ/d of current Dawn-Parkway demand from Parkway(Consumers) deliveries to Parkway(TCPL) deliveries

In this case, Union would not build either the Parkway D Compressor or the Brantford-Kirkwall pipeline.

Without the construction of the proposed Enbridge GTA Project then the expansion of the Parkway-Maple pipeline capacity required by Gaz Métro and Union will also be impacted. Specifically, the efficiencies of sharing usage of Segment A of the proposed GTA Project would be lost resulting in no pipeline build from the Enbridge Albion Road Station to Maple or a point along the Parkway-Maple corridor. TransCanada or third parties would be forced to look at other alternatives to expand the Parkway-Maple corridor.

Once the Parkway-Maple corridor was expanded by TransCanada or a third party, Union would be able to flow the Gaz Métro and Union volumes without either the Brantford to Kirkwall pipeline or the Parkway D Compressor.

Board Delays Approval of Proposed Enbridge GTA Project

If the Board delays the approval of the proposed Enbridge GTA Project, then the Parkway D Compressor and the Brantford-Kirkwall pipeline projects would be delayed as well.

2. Effects of Suspension of TCPL System Expansion

The effects of TCPL's system expansion projects not proceeding is discussed in Exhibit I.A1.UGL.Staff.7.

Ontario

ONTARIO ENERGY BOARD

Filing Guidelines on the Economic Tests for Transmission Pipeline Applications (EB-2012-0092)

February 21, 2013

The Report of the Board on the Expansion of the Natural Gas System in Ontario, the E.B.O. 134 Report, forms the basis of the filing requirements on the economic feasibility test to be applied to leave to construct applications for pipeline transmission projects.

These requirements apply to all Ontario Energy Board regulated gas utilities requesting approval to construct new transmission facilities. For the purpose of these Guidelines transmission pipelines are defined as any planned or proposed pipeline project that would provide transportation services to move natural gas on behalf of other shippers within Ontario. Distribution system expansion pipelines that are subject to the filing guidelines set in the EBO 188 would not be subject to the proposed filing requirement.

The Board recognizes the difficulties an applicant may encounter in obtaining reliable and accurate information to conduct an assessment as defined in the new filing requirement. However, the Board expects the applicants to employ the best efforts to obtain the necessary information and data. In the Board's view, consultation with other transmitters operating in the Province is an appropriate vehicle for an applicant to use to assess the impact of its proposal on existing pipelines. The results of these consultations should be filed with the Board as part of the application pre-filed evidence.

When it is demonstrated that data for a quantitative assessment is not available, the Board expects that prospective applicants will provide an assessment of qualitative and directional impacts of the proposed pipelines on the existing transportation pipeline infrastructure in Ontario, including an assessment of the impacts on Ontario consumers in terms of cost, rates, reliability, and access to supplies.

The Board believes that the economic feasibility test outlined in the E.B.O 134 Report continues to form the basis of sound filing requirements for new pipeline transmission projects, and these requirements are incorporated into this filing guideline.

1. The Board finds that of the tests currently in use by the utilities, the Discount Cash Flow ("DCF") analysis provides a superior measure of the subsidy required from existing customers for a particular project.

2. The Board directs all utilities to employ DCF analysis as part of its assessment of the feasibility of projects for system expansion.

3. The Board encourages the use of more formal risk measurement in the feasibility test and it would not discourage the use of sensitivity analyses of variables being regularly employed in the test.

4. The Board finds that incremental costs should be used in evaluating the feasibility of system expansion.

5. The Board will continue to assess the adequacy of the DCF analysis and any other tests used for project evaluation at the time of a utility's rate case hearing.

6. The Board finds that Union's three-stage test has considerable merit. The Board requires each utility to develop a three-stage process as outlined below to aid the Board in its determination of the public interest.

7. The first stage is a test based on a DCF analysis.

8. The second stage should be designed to quantify other public interest factors not considered at stage one. All quantifiable other public interest information as to costs and benefits should be provided at this stage.

9. The third stage should take into account all other relevant public interest factors plus the results from stage one and stage two.

10. A project could, therefore, be accepted if it passed the DCF analysis of stage one and if the disadvantages and quantifiable costs from stages two and three do not disqualify it. If a project is not acceptable because it fails the DCF analysis or has significant other disadvantages, then stages two and three must be completed before the project can be said to be fully evaluated.

11. The Board is aware that each utility will continue to approve internally projects that lie within areas for which a franchise and a certificate of public convenience and necessity have been issued. At subsequent rate hearings the Board may assess the analyses employed before approving the inclusion in rate base of any specific project.

12. Any project brought before the Board for approval should be supported by all data used by the Applicant in reaching its conclusion that the project is viable. The utilities and other interested parties may use alternative analyses, but these and the results must be presented at the relevant hearing. The Board will continue to weigh the various benefits against the various disadvantages as it always has in reaching its decision in the public interest.

13. The Board continues to hold the opinion that it is appropriate for existing customers to subsidize, through higher rates, financially non-sustaining extensions that are in the overall public interest if the subsidy does not cause an undue burden on any individual, group or class.

14. Any project brought before the Board for approval should be supported by an assessment of the potential impacts of the proposed natural gas pipelines on the existing transportation pipeline infrastructure in Ontario, including an assessment of the impacts on Ontario consumers in terms of cost, rates, reliability, and access to supplies.

2015 DAWN-PARKWAY FACILITIES EXPANSION PROGRAM
(Project Specific DCF Analysis - Section 9, Schedule 3)

Stage 1 DCF - Listing of Key Input Parameters, Values and Assumptions

Discounting Assumptions	
Project Time Horizon	30 years commencing November 1, 2015 (maximum 30 years revenue recognition from in-service date of facility)
Discount Rate	Incremental after-tax weighted average cost of capital of 5.1%
Key DCF Input Parameters, Values and Assumptions	
Net Cash Inflow:	
Incremental Transportation Revenue:	Refer to Section 9, Schedule 4
Rate M12 Demand Charges	Approved per EB-2011-0210 Effective January 1, 2013
Total M12 transportation demands served by 2015 proposed facilities	363 TJ/d per Section 8, Schedule 4, Note 1
Gas Supply Purchase Cost Savings	\$28.2 Million/year for first 10 Years Years 11-30 M12 Margin applied = \$1.8 Million/year
Total transportation demands to serve Union in-franchise EDA/NDA markets	70 TJ/d per Section 9, Schedule 4, Note 1
Operating and Maintenance Expense	Estimated incremental cost
Incremental Tax Expenses:	
Municipal Tax	Estimated incremental cost
Income Tax Rate	26.5%
CCA Rates (Transmission Plant):	
CCA Classes:	Declining balance depreciation rates by CCA class:
ECE - Eligibile Capital Expenditure (Land Rights)	7% applicable to 75% of the cost as 25% cannot be recovered for tax purposes.
Class 1 (Structures)	6%
Class 49 (Mains)	8%
Class 7 (Compressor Equipment)	15%
Transmission Plant Depreciation Rates:	Approved per EB-2011-0210
Land Rights	1.76%
Structures	2.03%
Mains	1.98%
Compressor Equipment	3.23%
Cash Outflow:	
Incremental Capital Costs	Refer to Section 9, Schedules 1 and 2
Change in Working Capital	5.051% applied to O&M expenses and 0.168% applied to cost of gas purchase savings based on EB-2011-0210 cash working capital estimates

Project Year ($000's)	1	2	3	4	5	6	7	8	9	10
Cash Inflow										
Revenue	9,204	9,204	9,204	9,204	9,204	9,204	9,204	9,204	9,204	9,204
Expenses:										
Gas Supply Cost Savings	28,200	28,200	28,200	28,200	28,200	28,200	28,200	28,200	28,200	28,200
O & M Expense	(642)	(642)	(642)	(642)	(642)	(642)	(642)	(642)	(642)	(642)
Municipal Tax	(853)	(853)	(853)	(853)	(853)	(853)	(853)	(853)	(853)	(853)
Income Tax	(5,265)	(3,906)	(4,570)	(5,187)	(5,720)	(6,183)	(6,585)	(6,934)	(7,238)	(7,503)
Net Cash Inflow	30,644	32,003	31,339	30,723	30,189	29,726	29,324	28,975	28,671	28,406
Cash Outflow										
Incremental Capital	200,069	4,007	-	-	-	-	-	-	-	-
Change in Working Capital	(15)	-	-	-	-	-	-	-	-	-
Cash Outflow	200,054	4,007	-	-	-	-	-	-	-	-
Cumulative Net Present Value										
Cash Inflow	29,891	59,593	87,268	113,081	137,216	159,826	181,049	201,002	219,787	237,496
Cash Outflow	200,054	203,867	203,867	203,867	203,867	203,867	203,867	203,867	203,867	203,867
NPV By Year	(170,163)	(144,273)	(116,599)	(90,785)	(66,651)	(44,040)	(22,817)	(2,864)	15,921	33,629
Project NPV	94,035									
Profitability Index										
By Year PI	0.1494	0.2923	0.4281	0.5547	0.6731	0.7840	0.8881	0.9859	1.0781	1.1650
Project PI	1.4612									

Project Year ($000's)	11	12	13	14	15	16	17	18	19	20
Cash Inflow										
Revenue	9,204	9,204	9,204	9,204	9,204	9,204	9,204	9,204	9,204	9,204
Expenses:										
Gas Supply Cost Savings	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775
O & M Expense	(642)	(642)	(642)	(642)	(642)	(642)	(642)	(642)	(642)	(642)
Municipal Tax	(853)	(853)	(853)	(853)	(853)	(853)	(853)	(853)	(853)	(853)
Income Tax	(732)	(934)	(1,111)	(1,266)	(1,402)	(1,522)	(1,627)	(1,720)	(1,802)	(1,875)
Net Cash Inflow	8,752	8,550	8,373	8,218	8,082	7,963	7,857	7,764	7,682	7,609
Cash Outflow										
Incremental Capital	-	-	-	-	-	-	-	-	-	-
Change in Working Capital	44	-	-	-	-	-	-	-	-	-
Cash Outflow	44	-	-	-	-	-	-	-	-	-
Cumulative Net Present Value										
Cash Inflow	242,688	247,513	252,010	256,209	260,138	263,821	267,279	270,530	273,591	276,475
Cash Outflow	203,894	203,894	203,894	203,894	203,894	203,894	203,894	203,894	203,894	203,894
NPV By Year	38,794	43,620	48,116	52,315	56,244	59,927	63,385	66,636	69,697	72,582
Project NPV										
Profitability Index										
By Year PI	1.1903	1.2139	1.2360	1.2566	1.2759	1.2939	1.3109	1.3268	1.3418	1.3560
Project PI										

Project Year ($000's)	21	22	23	24	25	26	27	28	29	30
Cash Inflow										
Revenue	9,204	9,204	9,204	9,204	9,204	9,204	9,204	9,204	9,204	9,204
Expenses:										
Gas Supply Cost Savings	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775
O & M Expense	(642)	(642)	(642)	(642)	(642)	(642)	(642)	(642)	(642)	(642)
Municipal Tax	(853)	(853)	(853)	(853)	(853)	(853)	(853)	(853)	(853)	(853)
Income Tax	(1,939)	(1,997)	(2,048)	(2,093)	(2,133)	(2,170)	(2,202)	(2,231)	(2,257)	(2,280)
Net Cash Inflow	7,545	7,487	7,437	7,391	7,351	7,315	7,282	7,253	7,227	7,204
Cash Outflow										
Incremental Capital	-	-	-	-	-	-	-	-	-	-
Change in Working Capital	-	-	-	-	-	-	-	-	-	-
Cash Outflow	-	-	-	-	-	-	-	-	-	-
Cumulative Net Present Value										
Cash Inflow	279,197	281,766	284,195	286,491	288,664	290,721	292,670	294,517	296,268	297,929
Cash Outflow	203,894	203,894	203,894	203,894	203,894	203,894	203,894	203,894	203,894	203,894
NPV By Year	75,303	77,873	80,301	82,597	84,770	86,828	88,777	90,624	92,375	94,035
Project NPV										
Profitability Index										
By Year PI	1.3693	1.3819	1.3938	1.4051	1.4158	1.4258	1.4354	1.4445	1.4531	1.4612
Project PI										

uniongas
A Spectra Energy Company

August 23, 2013

BY COURIER & RESS

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

Dear Ms. Walli:

RE: Union Gas Limited ("Union")
Brantford- Kirkwall/Parkway D Compressor Addendum (EB-2013-0074)
EB-2012-0451/EB-2012-0433/EB-2013-0074

Further to Union's Application and pre-filed evidence filed on April 2nd, 2013, and as noted in Union's response at Exhibit I.A1.UGL.LPMA.3, Union is enclosing an addendum to provide an update following the NEB's TCPL Toll Decision (RH-003-2011) on March 27th, 2013 and the denial of TransCanada's application to Review and Vary this decision by the NEB on June 11th, 2013.

The NEB's TCPL Toll Decision results in a reduction to the gas cost savings identified in Section 11 from \$18 to \$28 million per year to \$15.4 million per year. This change results in an annual bill decrease of approximately \$21 to \$22 for the average Rate 01 residential customer in Union North, as compared to the annual bill decrease of \$42 to \$43 described in Union's pre-filed evidence. The Addendum has been prepared for attachment to Section 11 with updated supporting schedules also attached.

Hard copies of these updates are enclosed, and the black lined updates have been incorporated into the overall evidence package and re-filed in RESS.

In the event that you have any questions on the above or would like to discuss in more detail, please do not hesitate to contact at 519-436-5473.

Yours truly,

[original signed by]

Karen Hockin
Manager, Regulatory Initiatives
Encl.

cc: Pascale Duguay, Manager Facilities Applications

P.O. Box 2001, 50 Keil Drive North, Chatham, ON, N7M 5M1 www.uniongas.com
Union Gas Limited

SECTION 11 - ADDENDUM

UPDATING GAS COST SAVINGS AND BILL IMPACTS TO REFLECT FINAL 2013 TCPL TOLLS DECISION

Introduction

The purpose of this evidence is to update the gas costs savings calculation and resulting bill impacts evidence found under Section 11 to reflect the 2013 TCPL tolls approved by the National Energy Board (NEB) in RH-003-2011 effective July 1, 2013.

These economic benefits are in addition to the improvement in security and diversity of supply in the Union North Portfolio.

Union has determined that there will continue to be significant gas cost savings of $15.4 million per year that will accrue to Union North sales service and bundled direct purchase customers over the 10 year term. Therefore, the aggregate level of expected gas cost savings that will accrue to these customers over the 10 year term is $154 million.

To determine the economic benefit of the Contracts, Union has updated the analysis of overall projected gas cost savings modeled using the SENDOUT[1] application and the standard landed cost analysis as referenced in the Board's Filing Guidelines using approved 2013 TCPL transportation tolls. For comparison and ease of reference, Union has provided the current 2012 approved tolls versus the 2013 approved tolls in Figure 1 (Addendum) below.

---

[1] SENDOUT is a program developed by VENTYX, and is a widely recognized gas supply planning tool used by a number of LDC's in North America. Union has used this software for 26 years and it has been presented in a number of rate applications since 1987.

Figure 1 (Addendum)

TCPL Toll Scenarios

100 % Load Factor Tolls ($/GJ/d)	**Approved 2012 TCPL Tolls**	**Approved 2013 TCPL Tolls**
Empress to Union EDA	2.2429	1 .6504
Empress to Union NDA	1.7422	1 .3169
Parkway Belt to Union EDA	0.2836	0 .2505
Parkway Belt to Union NDA	0.4301	0 .3580

The results of the overall projected gas cost savings analysis using SENDOUT and the standard landed cost analysis are described below.

<u>Calculation of Overall Projected Gas Cost Savings Using SENDOUT</u>

The overall projected gas cost savings associated with Union's proposed contract changes using current approved 2013 TCPL tolls are expected to be $15.4 million per year. Accordingly over the initial 10-year term, the projected gas cost savings are approximately $154 million.

This analysis assumes the contract changes plus the costs associated with purchasing gas supply at Dawn versus Empress and also the incremental cost of Dawn-Parkway transmission capacity for Union North customers.

Figure 2 (Addendum) below provides a summary of the overall updated projected gas cost savings as a result of the savings related to Union's proposed TCPL contract changes.

Figure 2 (Addendum)

Current Approved 2013 TCPL Tolls

Summary - Cost of Gas (Average Annual Savings/(Cost))

(Cdn $ Millions)

Supply Transportation		
Demand	33.1	
Commodity/Fuel	2.3	35.4
Supply Commodity		(18.4)
		17.0
Storage - STS and Related Services		1.1
		18.1
Union Dawn-Parkway		(2.7)
Union North - Average Annual Savings		**15.4**

<u>Landed Cost Analysis</u>

To evaluate upstream transportation options, Union uses a standard landed cost analysis as established in EB-2005-0520. This analysis incorporates changes in both gas commodity and upstream transportation costs.

Union has updated the landed costs using the 2013 TCPL approved tolls and is provided at Schedule 1 (Addendum). The results of the standard landed cost analyses for both 2012 approved TCPL tolls and 2013 approved TCPL tolls are summarized in Figure 3 (Addendum).

Figure 3 (Addendum)

Standard Landed Cost Analysis

$/GJ

Delivery Area	TCPL 2012 Approved Tolls			TCPL 2013 Approved Tolls		
	Dawn	Empress	Impact	Dawn	Empress	Impact
NDA	7.22	7.56	(0.34)	7.15	7.13	0.02
EDA	7.07	8.09	(1.02)	7.03	7.50	(0.47)

Using the approved 2013 TCPL tolls, the standard landed cost analysis indicates that buying gas supply at Dawn and transporting the supply from Dawn to the Union EDA and the Union NDA using the Dawn-Parkway System and TCPL transportation contracts from Parkway to the delivery areas results in a net savings of $0.47/GJ in the Union EDA and net increase of $0.02/GJ in the Union NDA.

Rate and Bill Impacts

As described above, Union estimates that there is an overall reduction in gas supply costs of $15.4 million for Union North sales service and bundled direct purchase customers. The following analyses are based on gas cost savings of $15.4 million as provided at Figure 2 (Addendum) assuming final 2013 TCPL tolls, effective July 1, 2013, and Union's proposed 2013 Gas Supply Plan, as of May 2012.

Updating the gas cost savings to reflect the current approved 2013 Gas Supply Plan per the Board's Decision in EB-2011-0210 reduces the gas cost savings to approximately $13.0 million.

For the purposes of calculating rate impacts, Union estimates the overall gas cost savings to be $18.7 million per year. The difference between the gas cost savings of $13.0 million and $18.7 million (or $5.7 million) is due to $5.5 million in bundled direct purchase gas supply commodity costs (which are not included in Union's gas supply commodity rates), and $0.2 million in Dawn- Parkway costs.

The reconciliation of the upstream transportation cost savings and gas supply commodity cost increases described above are provided at Schedule 2 (Addendum).

To calculate rate impacts, the overall gas cost savings of $18.7 million are comprised of $31.2 million per year in upstream transportation cost savings and $12.5 million in additional gas supply commodity costs resulting from the purchase of gas supply at Dawn versus Empress.

Based on Union's current Board-approved cost allocation methodology, the upstream transportation cost savings of $31.2 million per year will be allocated to Union North sales service and bundled direct purchase customers in all zones. The additional gas supply commodity costs of $12.5 million per year will be allocated to Union North sales service customers only.

Rate and Bill Impacts

To calculate the Union North gas supply transportation and storage rate and bill impacts associated with Union's proposal, Union started with the Board-approved 2013 Gas Supply Plan, updated for final 2013 TCPL tolls, and made the changes to reflect the replacement of long haul TCPL FT transportation contracts and STS contracts with short haul TCPL FT transportation contracts. The detailed cost comparison of the Board-approved 2013 Gas Supply Plan and the revised Gas Supply Plan is provided at Schedule 3 (Addendum).

Subsequently, Union included the revised Gas Supply Plan in its 2013 Board-approved cost allocation study. The upstream transportation costs were allocated to rate classes using Union's Board-approved cost allocation methodology. The cost allocation impact by rate class in Union North is provided at Schedule 4 (Addendum). As shown at Schedule 4 (Addendum), Line 7, column (f) the upstream transportation cost savings for Union North sales service and bundled direct purchase customers are $31.2 million, of which approximately $21.3 million are allocated to the Rate 01 rate class (Line 7, column (a)).

The resulting Rate 01 gas supply transportation and storage rates by zone using Union's Board-approved rate design compared to current approved rates (per EB-2011-0210) are provided at

Schedule 5 (Addendum), columns (a) and (c). Union has also estimated the Rate 01 gas supply transportation and storage rates by zone associated with final 2013 TCPL tolls only (column b). Union has done so in order to distinguish the Rate 01 gas supply transportation and storage rate changes resulting from final 2013 TCPL tolls (column b) from the gas supply transportation and storage rate changes associated with Union's proposal to replace long haul TCPL FT transportation contracts and STS contracts with short haul TCPL FT transportation contracts (column c).

To determine bill impacts for the average Rate 01 residential customer, Union has used the gas supply transportation and storage rates as calculated per Schedule 5 (Addendum). In addition, Union has estimated the bill impact on the average sales service residential customer associated with the $9.4 million in gas supply commodity costs allocated to the Rate 01 rate class (Schedule 4 (Addendum), Line 10, column (a)). The bill impacts also include the impacts associated with the Brantford to Kirkwall and Parkway D Compressor project. The bill impacts for the average Rate 01 residential customer by zone and Rate M1 residential customer as compared to Union's estimated rates, updated for final 2013 TCPL tolls, are provided at Schedule 6 (Addendum).

The bill impacts for the average Rate 01 sales service residential customer by zone in Union North are also provided in Figure 4 (Addendum) below. For the average Rate 01 sales service residential customer consuming 2,200 m^3 per year, the bill impact is a reduction of ($21.00 to $22.00) per year as per Schedule 6 (Addendum), line 14, column e). For the average Rate M1 residential customer in Union South consuming 2,200 m^3 per year, the bill impact is a reduction of approximately ($1.12) per year.

Figure 4 (Addendum)

Estimated Bill Impact

Average Rate 01 Sales Service Residential Customer by Zone

Includes Brantford to Kirkwall and Parkway D Compressor Project,

Long Term Contracting Proposal and Final 2013 TCPL Tolls

Rate 01 Zone	**EB-2011-0210 Updated for Final 2013 TCPL Tolls Bill ($)**	**EB-2013-0074 Estimated Bill ($)**	**Bill Impact ($)**	**Bill Impact (%)**
Fort Frances	877.00	855.44	(21.56)	(2.5)
Western	880.73	859.15	(21.58)	(2.5)
Northern	934.57	912.94	(21.63)	(2.3)
Eastern	945.97	924.38	(21.59)	(2.3)

As described in EB-2012-0433 (Union's Parkway West Project July 2013 Update), the rate impacts associated with the Parkway West Project result in rate decreases for Union North and Union South in-franchise customers. For the average Rate 01 residential customer in Union North consuming 2,200 m^3 per year the bill impact is a reduction of approximately ($0.35) per year, while for the average Rate M1 residential customer in Union South consuming 2,200 m^3 per year the bill impact is a reduction of approximately ($0.83) per year.

To calculate final rate impacts Union included the largest annual revenue requirement for Parkway West ($16.6 million), the largest annual revenue requirement for the Brantford to Kirkwall and the Parkway D Compressor project ($15.9 million) and the modified 2013 Gas Supply Plan, including final 2013 TCPL tolls, in its 2013 Board-approved cost allocation study. The bill impacts for the average Rate 01 residential customer by zone and Rate M1 residential customer as compared to Union's estimated rates, updated for final 2013 TCPL tolls, are provided at Schedule 7 (Addendum).

The bill impacts for the average Rate 01 sales service residential customer by zone in Union North are also provided in Figure 5 (Addendum) below. For the average Rate 01 sales service residential customer consuming 2,200 m^3 per year, the bill impact is a reduction of approximately ($21.00 to $22.00) per year as per Schedule 7 (Addendum) line 14, column e). For the average Rate M1 residential customer in Union South consuming 2,200 m^3 per year, the bill impact is a reduction of approximately ($1.90) per year.

Figure 5 (Addendum)

Estimated Bill Impact

Average Rate 01 Sales Service Residential Customer by Zone

Includes Brantford to Kirkwall and Parkway D Compressor Project,

Parkway West Project, Long Term Contracting Proposal,

and Final 2013 TCPL Tolls

Rate 01 Zone	EB-2011-0210 Updated for Final 2013 TCPL Tolls Bill ($)	EB-2013-0074 Estimated Bill ($)	Bill Impact ($)	Bill Impact (%)
Fort Frances	877.00	855.58	(21.42)	(2.4)
Western	880.73	859.29	(21.44)	(2.4)
Northern	934.57	913.11	(21.46)	(2.3)
Eastern	945.97	924.55	(21.42)	(2.3)

Long term Transportation Contracting analysis – TCPL 2013 Approved Tolls

Route (A)	Point of Supply (B)	Basis Differential $US/mmBtu (C)	Supply Cost $US/mmBtu (D) = Nymex + C	Unitized Demand Charge $US/mmBtu (E)	Commodity Charge $US/mmBtu (F)	Fuel Charge $US/mmBtu (G)	100% LF Transportation Inclusive of Fuel $US/mmBtu (I) = E + F + G	Landed Cost $US/mmBtu (J) = D + I	Landed Cost $Cdn/Gj (K)	Point of Delivery (L)
Dawn to NDA	Dawn	0.58	7.09	0.4643	0.0000	0.0878	0.5521	$7.65	**$7.15**	NDA
Dawn to MDA	Dawn	0.58	7.09	1.2329	0.0000	0.1691	1.4020	$8.50	**$7.95**	MDA
Dawn to NCDA	Dawn	0.58	7.09	0.2736	0.0000	0.0661	0.3397	$7.43	**$6.95**	NCDA
Dawn to EDA	Dawn	0.58	7.09	0.3494	0.0000	0.0752	0.4245	$7.52	**$7.03**	EDA
Dawn to SSMDA	Dawn	0.58	7.09	0.6297	0.0000	0.1043	0.7339	$7.83	**$7.32**	SSMDA
Dawn to WDA	Dawn	0.58	7.09	0.9796	0.0000	0.1424	1.1219	$8.22	**$7.69**	WDA
TCPL to NDA	Empress	-0.40	6.11	1.4077	0.0000	0.1049	1.5126	$7.63	**$7.13**	NDA
TCPL to MDA	Empress	-0.40	6.11	0.6392	0.0000	0.0397	0.6789	$6.79	**$6.35**	MDA
TCPL to NCDA	Empress	-0.40	6.11	1.5984	0.0000	0.1368	1.7352	$7.85	**$7.34**	NCDA
TCPL to EDA	Empress	-0.40	6.11	1.7642	0.0000	0.1368	1.9010	$8.01	**$7.50**	EDA
TCPL to SSMDA	Empress	-0.40	6.11	1.2768	0.0000	0.1049	1.3817	$7.49	**$7.01**	SSMDA
TCPL to WDA	Empress	-0.40	6.11	0.9152	0.0000	0.0688	0.9840	$7.10	**$6.64**	WDA

Assumptions used in Devleoping Long-term Transportation Contracting Analysis:

Annual Gas Supply & Fuel Ratio Forecasts	Point of Supply Col (B) above	2014 $US/mmBtu	2015 $US/mmBtu	2016 $US/mmBtu	2017 $US/mmBtu	2018 $US/mmBtu	2019 $US/mmBtu	2020 $US/mmBtu	2021 $US/mmBtu	2022 $US/mmBtu	2023 $US/mmBtu	Average Annual Gas Supply Cost $US/mmBtu Col (D) above	Fuel Ratio Forecasts Col (G) above
Henry Hub (NYMEX) $US/mmBtu		$4.49	$4.96	$6.42	$6.75	$6.24	$6.28	$6.83	$7.32	$7.79	$8.08	$6.52	
Dawn to NDA	Dawn	$5.03	$5.49	$6.95	$7.32	$6.82	$6.88	$7.42	$7.91	$8.41	$8.72	$7.09	1.23%
Dawn to MDA	Dawn	$5.03	$5.49	$6.95	$7.32	$6.82	$6.88	$7.42	$7.91	$8.41	$8.72	$7.09	2.35%
Dawn to NCDA	Dawn	$5.03	$5.49	$6.95	$7.32	$6.82	$6.88	$7.42	$7.91	$8.41	$8.72	$7.09	0.93%
Dawn to EDA	Dawn	$5.03	$5.49	$6.95	$7.32	$6.82	$6.88	$7.42	$7.91	$8.41	$8.72	$7.09	1.05%
Dawn to SSMDA	Dawn	$5.03	$5.49	$6.95	$7.32	$6.82	$6.88	$7.42	$7.91	$8.41	$8.72	$7.09	1.46%
Dawn to WDA	Dawn	$5.03	$5.49	$6.95	$7.32	$6.82	$6.88	$7.42	$7.91	$8.41	$8.72	$7.09	1.90%
TCPL Empress to Union NDA	Empress	$4.12	$4.56	$6.00	$6.33	$5.82	$5.91	$6.43	$6.91	$7.38	$7.68	$6.11	1.72%
TCPL Empress to Union MDA	Empress	$4.12	$4.56	$6.00	$6.33	$5.82	$5.91	$6.43	$6.91	$7.38	$7.68	$6.11	0.65%
TCPL Empress to Union NCDA	Empress	$4.12	$4.56	$6.00	$6.33	$5.82	$5.91	$6.43	$6.91	$7.38	$7.68	$6.11	2.24%
TCPL Empress to Union EDA	Empress	$4.12	$4.56	$6.00	$6.33	$5.82	$5.91	$6.43	$6.91	$7.38	$7.68	$6.11	2.24%
TCPL Empress to Union SSMDA	Empress	$4.12	$4.56	$6.00	$6.33	$5.82	$5.91	$6.43	$6.91	$7.38	$7.68	$6.11	1.72%
TCPL Empress to Union WDA	Empress	$4.12	$4.56	$6.00	$6.33	$5.82	$5.91	$6.43	$6.91	$7.38	$7.68	$6.11	1.13%

Sources for Assumptions:

Gas Supply Prices (Col D):	ICF International : April 2012.
Fuel Ratios (Col G):	Average ratio over the previous 12 months or Pipeline Forecast
Transportation Tolls (Cols E & F):	Tolls in effect on Alternative Routes at the time of Union's Analysis (TCPL tolls as of May 1, 2013 Compliance Filing)
Foreign Exchange (Col K)	$1 US = $0.987 CDN
Energy Conversions (Col K)	1 dth = 1 mmBtu = 1.055056 GJ
Union's Analysis Completed:	Jun-12 (Updated May 2013)
Pressure Charges:	Assumed not applicable to paths evaluated
Commodity:	Assumes no changes to ICF forecast driven by toll decision

UNION GAS LIMITED
Union North - Reconciliation of Gas Transport, Storage and Commodity Cost Savings

Line No.	Particulars ($ Millions)	Cost of Gas TCPL Toll Update Figure 2 (Addendum) (1)	Variance	Board-Approved Gas Supply Plan Toll Update (2)	Variance	Cost of Gas for Rate Impacts
		(a)	(b) = (a - c)	(c)	(d) = (c - e)	(e)
	Transportation					
1	FT Demand	(33.1)	(1.2)	(31.9)	0.0	(31.9)
2	FT Commodity	0.0	(0.0)	0.0	0.0	0.0
3	Total Transportation (3)	(33.1)	(1.2)	(31.9)	0.0	(31.9)
	Storage					
4	STS and Related Services (3)	(1.1)	0.6	(1.8)	0.0	(1.8)
5	Union Dawn-Parkway (4)	2.7	0.0	2.7	0.2	2.5
6	Total Storage	1.6	0.6	0.9	0.2	0.7
7	Total Storage and Transportation (line 3 + line 6)	(31.5)	(0.5)	(31.0)	0.2	(31.2)
	Commodity					
8	Commodity (5)	18.4	(0.3)	18.7	5.5	13.3
9	FT Fuel (3)	(2.3)	(1.6)	(0.7)	0.0	(0.7)
10	Total Commodity	16.1	(1.9)	18.0	5.5	12.5
11	Union North Annual Savings (line 7 + line 10)	(15.4)	(2.4)	(13.0)	5.7	(18.7)

Notes:
(1) The cost of gas savings provided at Figure 2 (Addendum) are based on the forecast information available at May 2012 for the respective gas year.
(2) The cost of gas savings from Figure 2 (Addendum) updated to reflect the Board-approved 2013 Gas Supply Plan in EB-2011-0210.
(3) The gas purchase storage and transportation details used to calculate rate impacts are provided at Schedule 1 (Addendum).
(4) The estimated Dawn to Parkway transportation cost from Figure 2 (Addendum) was based on the 2013 Board approved M12 D-P toll of $0.078 per GJ and winter fuel of $0.7 million. The Dawn to Parkway transportation costs used for rate impact calculations have been updated to reflect the allocated Dawn to Parkway costs for Union North, including the incremental costs for the Parkway Growth project in the highest year revenue requirement.
(5) The supply commodity from Figure 2 (Addendum) includes gas supply purchases of $12.9 million for system customers and $5.5 million for direct purchase bundled customers. The bundled customer commodity costs are excluded from rate calculations. There is also an incremental $0.3 million in commodity costs associated with the change in Union North inventory as compared to the Board approved gas supply plan.

UNION GAS LIMITED
Union North - Gas Transport and Storage Cost Savings Detail

Line No.	Particulars	Annual Volume TJ	Board-Approved Gas Supply Plan Including Final 2013 TCPL Tolls Rates ($ / GJ)	Board-Approved Gas Supply Plan Including Final 2013 TCPL Tolls Costs ($000's)	Annual Volume TJ	Proposed Update to Gas Supply Plan Including Final 2013 TCPL Tolls Rates ($ / GJ)	Proposed Update to Gas Supply Plan Including Final 2013 TCPL Tolls Costs ($000's)	Variance Costs ($000's)
		(a)	(b)	(c) = (a x b)	(d)	(e)	(f) = (d x e)	(g) = (f - c)
	Transportation Costs							
	Demand Costs							
1	TCPL NCDA	3,211	45.483	4,801	3,211	45.483	4,801	-
2	TCPL EDA	21,473	50.201	35,441	365	50.201	602	(34,838)
3	TCPL MDA	1,651	18.188	987	1,651	18.188	987	-
4	TCPL NDA	17,913	40.057	23,591	14,263	40.057	18,784	(4,807)
5	TCPL SSMDA	730	36.332	872	730	36.332	872	-
6	TCPL WDA	13,352	26.042	11,431	13,352	26.042	11,431	-
7	TCPL PKWY EDA	0	7.618	-	21,108	7.618	5,286	5,286
8	TCPL PKWY NDA	0	10.889	-	3,650	10.889	1,307	1,307
9	Michcon/TCPL SSMDA	2,242	6.084	448	2,242	6.084	448	-
10	CTHI/CPMI	3,093	6.986	710	3,093	6.986	710	-
11	LBA			1,200			1,200	-
12	TCPL Minimum Flow Charge			54			54	-
13	Supply Transportation Demand			79,535			46,483	(33,052)
14	Company Used	(226)	46.857	(348)	(226)	46.857	(348)	-
15	Inventory Change	(293)	46.857	(451)	(161)	46.857	(248)	204
16	Adjustment			(139)			(139)	-
17	Demand Costs in Rates			78,596			45,748	(32,848)
18	Union North FT Diversion Costs			386			1,349	963
19	Total Demand Costs Including FT Diversions (line 17 + line 18)			78,982			47,097	(31,886)
	Commodity Costs							
20	TCPL NCDA	3,063	0.000	-	3,211	0.000	-	-
21	TCPL EDA	20,184	0.000	-	365	0.000	-	-
22	TCPL MDA	518	0.000	-	782	0.000	-	-
23	TCPL NDA	16,724	0.000	-	14,263	0.000	-	-
24	TCPL SSMDA	713	0.000	-	730	0.000	-	-
25	TCPL WDA	8,811	0.000	-	10,938	0.000	-	-
26	TCPL PKWY EDA	0	0.000	-	5,933	0.000	-	-
27	TCPL PKWY NDA	0	0.000	-	0	0.000	-	-
28	Michcon/TCPL SSMDA	1,275	0.009	11	1,373	0.009	12	1
29	CTHI/CPMI	577	0.000	-	782	0.000	-	-
30	Supply Transportation Commodity			11			12	1
31	Company Used	(226)	0.000	-	(226)	0.000	-	-
32	Inventory Change	(293)	0.000	-	(161)	0.000	-	-
33	Adjustment			(4)			(4)	-
34	Commodity Costs in Rates			7			8	1
35	**Total Union North Transporation Costs (line 19 + line 34)**			$ 78,989			$ 47,104	$ (31,885)
	Storage Costs							
	Demand Costs							
36	TCPL NDA STS Injection	17,922	10.889	6,416	14,263	10.889	5,106	(1,310)
37	TCPL WDA STS Injection	1,150	25.550	966	1,150	25.550	965	(0)
38	TCPL EDA STS Withdrawal	25,010	7.618	6,264	9,845	7.618	2,466	(3,798)
39	TCPL Pkwy to EDA	12,775	7.618	3,200	12,775	7.618	3,200	-
40	TCPL PKWY to EDA Redelivery (bi-directional)	0	8.380	-	9,125	8.380	2,514	2,514
41	TCPL PKWY to EDA Redelivery	0	7.618	-	6,267	7.618	1,570	1,570
42	TCPL Dawn to Pkwy	3,801	0.216	819	0	0.216	-	(819)
43	3rd Party Storage			42			40	(2)
44	Storage Demand Costs in Rates			17,707			15,861	(1,846)
	Commodity Costs							
45	TCPL NDA STS Injection	5,789	0.000	-	3,810	0.000	-	-
46	TCPL WDA STS Injection	769	0.000	-	769	0.000	-	-
47	TCPL NCDA STS Injection	749	0.000	-	749	0.000	-	-
48	TCPL EDA STS Withdrawal	3,559	0.000	-	0	0.000	-	-
49	TCPL PKWY to EDA Redelivery	-	0.000	-	9,604	0.000	-	-
50	Storage Commodity Costs in Rates			-			-	-
	Fuel Costs							
51	TCPL NDA STS Injection	5,789	0.584%	163	3,810	0.584%	107	(56)
52	TCPL WDA STS Injection	769	1.240%	46	769	1.240%	46	-
53	TCPL EDA STS Withdrawal	3,559	0.359%	62	0	0.359%	-	(62)
54	TCPL PKWY to EDA Redelivery	0	0.400%	-	9,604	0.400%	185	185
55	Storage Fuel Costs in Rates			271			339	68
56	Total Union North STS and Related Services (line 44 + line 55)			17,977			16,199	(1,778)
57	Allocation of Dawn to Parkway Demand Costs			8,136			10,653	2,517
58	**Total Union North Storage Costs (line 56 + line 57)**			$ 26,113			$ 26,852	$ 739

UNION GAS LIMITED
Union North - Gas Transport and Storage Cost Savings Detail

		Board-Approved Gas Supply Plan Including Final 2013 TCPL Tolls			Proposed Update to Gas Supply Plan Including Final 2013 TCPL Tolls			Variance
Line No.	Particulars	Annual Volume TJ	Rates ($ / GJ)	Costs ($000's)	Annual Volume TJ	Rates ($ / GJ)	Costs ($000's)	Costs ($000's)
		(a)	(b)	(c) = (a x b)	(d)	(e)	(f) = (d x e)	(g) = (f - c)
	Commodity Costs							
	FT Transportation Fuel Costs							
59	TCPL NCDA	1,586	2.092%	84	1,733	2.092%	92	8
60	TCPL EDA	13,888	2.092%	734	365	2.092%	19	(715)
61	TCPL MDA	331	0.603%	5	595	0.603%	9	4
62	TCPL NDA	10,150	1.603%	411	7,689	1.603%	311	(100)
63	TCPL SSMDA	0	1.603%	-	0	1.603%	-	-
64	TCPL WDA	5,206	1.049%	138	7,333	1.049%	194	56
65	TCPL PKWY EDA	0	0.000%	-	3,502	0.340%	57	57
66	TCPL PKWY NDA	0	0.000%	-	0	0.560%	-	-
67	Michcon/TCPL SSMDA	1,275	1.693%	115	1,373	1.693%	59	(57)
68	CTHI/CPMI	577	0.153%	2	782	0.153%	3	1
69	Supply Transportation Fuel	32,435		1,490	22,590		745	(745)
70	Company Used			(12)			(12)	-
71	Inventory Change			(16)			(9)	7
72	Deferral Adjustment			-			-	-
73	Fuel Costs in Rates			1,463			725	(738)
	Gas Supply Commodity							
74	Commodity							12,928
75	Inventory Change							335
76	Commodity Costs in Rates							13,263
77	**Total Union North Commodity Costs (line 73 + line 76)**							$ 12,525
78	**Total Union North Cost Savings (line 35 + line 58 + line 77)**							$ (18,621)

UNION GAS LIMITED
Gas Transport, Storage and Commodity Cost Savings by Rate Class

Line No.	Particulars ($ Millions)	R01	R10	R20	R100	R25	Total
		(a)	(b)	(c)	(d)	(e)	(f)
	Transportation						
1	FT Demand & Diversions	(21.8)	(7.5)	(2.6)	0.0	0.0	(31.9)
2	FT Commodity	0.0	0.0	0.0	0.0	0.0	0.0
3	Total Transportation	(21.8)	(7.5)	(2.6)	0.0	0.0	(31.9)
	Storage						
4	STS and Related Services	(1.3)	(0.3)	(0.1)	(0.0)	0.0	(1.8)
5	Union Dawn-Parkway	1.9	0.5	0.1	0.0	0.0	2.5
6	Total Storage	0.5	0.1	0.0	0.0	0.0	0.7
7	Total Storage and Transport (line 3 + line 6)	(21.3)	(7.4)	(2.6)	0.0	0.0	(31.2)
	Commodity						
8	Commodity	10.0	2.4	0.2	0.0	0.7	13.3
9	FT Fuel (1)	(0.6)	(0.1)	(0.0)	0.0	0.0	(0.7)
10	Total Commodity	9.4	2.3	0.2	0.0	0.7	12.5
11	Union North Annual Savings (line 7 + line 10)	(11.9)	(5.1)	(2.4)	0.0	0.7	(18.7)

UNION GAS LIMITED
Rate 01 Gas Transportation and Storage Rate Impacts
Including Brantford to Kirkwall and Parkway D Compressor Project, Parkway West Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls

Line No.	Rate 01 Particulars	EB-2011-0210 Approved Rate (1) (cents/m³)	EB-2011-0210 Including Final 2013 TCPL Tolls (2) (cents/m³)	EB-2013-0074 Estimated Rate Including Final 2013 TCPL Tolls (3) (cents/m³)	Variance due to Tolls (cents/m³)	Variance due to Tolls (%)	Variance due to Parkway Projects and LTC (cents/m³)	Variance due to Parkway Projects and LTC (%)	Total Variance (cents/m³)	Total Variance (%)
		(a)	(b)	(c)	(d) = (b-a)	(e) = (d/a)	(f) = (c-b)	(g) = (f/a)	(h) = (c-a)	(i) = (h/a)
	Gas Transportation									
1	Fort Frances Zone	4.9387	4.0047	1.5377	(0.9340)	-18.9%	(2.4670)	-50.0%	(3.4010)	-68.9%
2	Western Zone	5.5401	4.0854	1.6184	(1.4547)	-26.3%	(2.4670)	-44.5%	(3.9217)	-70.8%
3	Northern Zone	7.6275	5.7887	3.3217	(1.8388)	-24.1%	(2.4670)	-32.3%	(4.3058)	-56.5%
4	Eastern Zone	8.5153	6.1260	3.6590	(2.3893)	-28.1%	(2.4670)	-29.0%	(4.8563)	-57.0%
	Gas Storage									
5	Fort Frances Zone	2.1507	2.3919	2.5045	0.2412	11.2%	0.1126	5.2%	0.3538	16.5%
6	Western Zone	2.3910	2.4242	2.5368	0.0332	1.4%	0.1126	4.7%	0.1458	6.1%
7	Northern Zone	3.2252	3.1048	3.2174	(0.1204)	-3.7%	0.1126	3.5%	(0.0078)	-0.2%
8	Eastern Zone	3.5799	3.2396	3.3522	(0.3403)	-9.5%	0.1126	3.1%	(0.2277)	-6.4%

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 21, Page 2, lines 1-10, column (j).
(2) Includes update to FT Demand, FT Commodity and Diversions to Transportation rates and STS Demand and STS Commodity to Storage Rates.
(3) Includes Brantford to Kirkwall and Parkway D Compressor Project, Parkway West Project, Long Term Contracting Proposal and Final 2013 TCPL Tolls.

UNION GAS LIMITED
General Service Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project,
Long Term Contracting Proposal and Final 2013 TCPL Tolls
Annual Consumption of 2,200 m³

(Fort Frances)
Rate 01 - Residential
(Annual Consumption of 2,200 m³)

Line No.		EB-2011-0210 Approved 01-Jan-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2011-0210 Updated for Tolls 01-Oct-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (1)
		(a)	(b) = (d - a)	(c) = (b / a)	(d)	(e) = (g - d)	(f) = (e / d)	(g)
	Delivery Charges							
1	Monthly Charge	252.00	-		252.00	-		252.00
2	Delivery Commodity Charge	207.52	-		207.52	(1.16)		206.36
3	Total Delivery Charge	459.52	-	0.0%	459.52	(1.16)	-0.3%	458.36
	Supply Charges							
4	Transportation to Union	108.65	(20.56)		88.09	(54.27)		33.82
5	Prospective Recovery - Transportation	-	-		-	-		-
6	Storage Services	47.32	5.30		52.62	0.64		53.26
7	Prospective Recovery - Storage	-	-		-	-		-
8	Subtotal	155.97	(15.26)	-9.8%	140.71	(53.63)	-38.1%	87.08
9	Commodity & Fuel	276.77	-		276.77	33.23		310.00
10	Prospective Recovery - Commodity & Fuel	-	-		-	-		-
11	Subtotal	276.77	-		276.77	33.23		310.00
12	Total Gas Supply Charge (line 8 + line 11)	432.74	(15.26)		417.48	(20.40)		397.08
13	Total Bill	892.26	(15.26)	-1.7%	877.00	(21.56)	-2.5%	855.44
14	Impacts for Customer Notices - Sales (line 13)		(15.26)			(21.56)		

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).

UNION GAS LIMITED
General Service Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls
Annual Consumption of 2,200 m³

(Western)
Rate 01 - Residential
(Annual Consumption of 2,200 m³)

Line No.		EB-2011-0210 Approved 01-Jan-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2011-0210 Updated for Tolls 01-Oct-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (1)
		(a)	(b) = (d - a)	(c) = (b / a)	(d)	(e) = (g - d)	(f) = (e / d)	(g)
	Delivery Charges							
1	Monthly Charge	252.00	-		252.00	-		252.00
2	Delivery Commodity Charge	207.52	-		207.52	(1.16)		206.36
3	Total Delivery Charge	459.52	-	0.0%	459.52	(1.16)	-0.3%	458.36
	Supply Charges							
4	Transportation to Union	121.88	(32.00)		89.88	(54.26)		35.62
5	Prospective Recovery - Transportation	-	-		-	-		-
6	Storage Services	52.60	0.75		53.35	0.62		53.97
7	Prospective Recovery - Storage	-	-		-	-		-
8	Subtotal	174.48	(31.25)	-17.9%	143.23	(53.64)	-37.5%	89.59
9	Commodity & Fuel	277.98	-		277.98	33.22		311.20
10	Prospective Recovery - Commodity & Fuel		-		-	-		-
11	Subtotal	277.98	-		277.98	33.22		311.20
12	Total Gas Supply Charge (line 8 + line 11)	452.46	(31.25)		421.21	(20.42)		400.79
13	Total Bill	911.98	(31.25)	-3.4%	880.73	(21.58)	-2.5%	859.15
14	Impacts for Customer Notices - Sales (line 13)		(31.25)			(21.58)		

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).

UNION GAS LIMITED
General Service Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls
Annual Consumption of 2,200 m³

Line No.		(Northern) Rate 01 - Residential (Annual Consumption of 2,200 m³)						
		EB-2011-0210 Approved 01-Jan-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2011-0210 Updated for Tolls 01-Oct-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (1)
		(a)	(b) = (d - a)	(c) = (b / a)	(d)	(e) = (g - d)	(f) = (e / d)	(g)
	Delivery Charges							
1	Monthly Charge	252.00	-		252.00	-		252.00
2	Delivery Commodity Charge	207.44	-		207.44	(1.17)		206.27
3	Total Delivery Charge	459.44	-	0.0%	459.44	(1.17)	-0.3%	458.27
	Supply Charges							
4	Transportation to Union	167.80	(40.45)		127.35	(54.27)		73.08
5	Prospective Recovery - Transportation	-	-		-	-		-
6	Storage Services	70.97	(2.65)		68.32	0.62		68.94
7	Prospective Recovery - Storage	-	-		-	-		-
8	Subtotal	238.77	(43.10)	-18.1%	195.67	(53.65)	-27.4%	142.02
9	Commodity & Fuel	279.46	-		279.46	33.19		312.65
10	Prospective Recovery - Commodity & Fuel	-	-		-	-		-
11	Subtotal	279.46	-		279.46	33.19		312.65
12	Total Gas Supply Charge (line 8 + line 11)	518.23	(43.10)		475.13	(20.46)		454.67
13	Total Bill	977.67	(43.10)	-4.4%	934.57	(21.63)	-2.3%	912.94
14	Impacts for Customer Notices - Sales (line 13)		(43.10)			(21.63)		

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).

UNION GAS LIMITED
General Service Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls
Annual Consumption of 2,200 m³

(Eastern)
Rate 01 - Residential
(Annual Consumption of 2,200 m³)

Line No.		EB-2011-0210 Approved 01-Jan-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2011-0210 Updated for Tolls 01-Oct-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (1)
		(a)	(b) = (d - a)	(c) = (b / a)	(d)	(e) = (g - d)	(f) = (e / d)	(g)
	Delivery Charges							
1	Monthly Charge	252.00	-		252.00	-		252.00
2	Delivery Commodity Charge	207.15	-		207.15	(1.17)		205.98
3	Total Delivery Charge	459.15	-	0.0%	459.15	(1.17)	-0.3%	457.98
	Supply Charges							
4	Transportation to Union	187.35	(52.58)		134.77	(54.24)		80.53
5	Prospective Recovery - Transportation	-	-		-	-		-
6	Storage Services	78.75	(7.47)		71.28	0.61		71.89
7	Prospective Recovery - Storage	-	-		-	-		-
8	Subtotal	266.10	(60.05)	-22.6%	206.05	(53.63)	-26.0%	152.42
9	Commodity & Fuel	280.77	-		280.77	33.21		313.98
10	Prospective Recovery - Commodity & Fuel	-	-		-	-		-
11	Subtotal	280.77	-		280.77	33.21		313.98
12	Total Gas Supply Charge (line 8 + line 11)	546.87	(60.05)		486.82	(20.42)		466.40
13	Total Bill	1,006.02	(60.05)	-6.0%	945.97	(21.59)	-2.3%	924.38
14	Impacts for Customer Notices - Sales (line 13)		(60.05)			(21.59)		

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).

UNION GAS LIMITED
General Service Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project,
Long Term Contracting Proposal and Final 2013 TCPL Tolls
Annual Consumption of 2,200 m³

Line No.	Rate M1 - Particulars ($)	EB-2011-0210 Approved 01-Jan-13 Total Bill ($) (1)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (1)	Impact ($)	
		(a)	(b)	(c) = (b) - (a)	
	Delivery Charges				
1	Monthly Charge	252.00	252.00	-	
2	Delivery Commodity Charge	78.66	77.69	(0.97)	
3	Storage Services	16.23	16.09	(0.14)	
4	Total Delivery Charge (line 1 + line 2 + line 3)	346.89	345.78	(1.11)	-0.3%
	Supply Charges				
5	Transportation to Union	96.80	96.80	-	
6	Commodity & Fuel (2)	280.77	280.76	(0.01)	
7	Total Gas Supply Charge (line 5 + line 6)	377.57	377.56	(0.01)	
8	Total Bill (line 4 + line 7)	724.46	723.34	(1.12)	-0.2%
9	Impacts for Customer Notices - Sales (line 8)			(1.12)	

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).
(2) Reflects changes in the Gas Supply Administration charge only.

UNION GAS LIMITED
General Service Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project, Parkway West Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls
Annual Consumption of 2,200 m³

(Fort Frances)
Rate 01 - Residential
(Annual Consumption of 2,200 m³)

Line No.		EB-2011-0210 Approved 01-Jan-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2011-0210 Updated for Tolls 01-Oct-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (1)
		(a)	(b) = (d - a)	(c) = (b / a)	(d)	(e) = (g - d)	(f) = (e / d)	(g)
	Delivery Charges							
1	Monthly Charge	252.00	-		252.00	-		252.00
2	Delivery Commodity Charge	207.52	-		207.52	(2.84)		204.68
3	Total Delivery Charge	459.52	-	0.0%	459.52	(2.84)	-0.6%	456.68
	Supply Charges							
4	Transportation to Union	108.65	(20.56)		88.09	(54.28)		33.81
5	Prospective Recovery - Transportation	-	-		-	-		-
6	Storage Services	47.32	5.30		52.62	2.47		55.09
7	Prospective Recovery - Storage	-	-		-	-		-
8	Subtotal	155.97	(15.26)	-9.8%	140.71	(51.81)	-36.8%	88.90
9	Commodity & Fuel	276.77	-		276.77	33.23		310.00
10	Prospective Recovery - Commodity & Fuel	-	-		-	-		-
11	Subtotal	276.77	-		276.77	33.23		310.00
12	Total Gas Supply Charge (line 8 + line 11)	432.74	(15.26)		417.48	(18.58)		398.90
13	Total Bill	892.26	(15.26)	-1.7%	877.00	(21.42)	-2.4%	855.58
14	Impacts for Customer Notices - Sales (line 13)		(15.26)			(21.42)		

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).

UNION GAS LIMITED
General Service Customer Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project, Parkway West Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls
Annual Consumption of 2,200 m³

(Western)
Rate 01 - Residential
(Annual Consumption of 2,200 m³)

Line No.		EB-2011-0210 Approved 01-Jan-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2011-0210 Updated for Tolls 01-Oct-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (1)
		(a)	(b) = (d - a)	(c) = (b / a)	(d)	(e) = (g - d)	(f) = (e / d)	(g)
	Delivery Charges							
1	Monthly Charge	252.00	-		252.00	-		252.00
2	Delivery Commodity Charge	207.52	-		207.52	(2.84)		204.68
3	Total Delivery Charge	459.52	-	0.0%	459.52	(2.84)	-0.6%	456.68
	Supply Charges							
4	Transportation to Union	121.88	(32.00)		89.88	(54.28)		35.60
5	Prospective Recovery - Transportation	-	-		-	-		-
6	Storage Services	52.60	0.75		53.35	2.46		55.81
7	Prospective Recovery - Storage	-	-		-	-		-
8	Subtotal	174.48	(31.25)	-17.9%	143.23	(51.82)	-36.2%	91.41
9	Commodity & Fuel	277.98	-		277.98	33.22		311.20
10	Prospective Recovery - Commodity & Fuel		-		-	-		-
11	Subtotal	277.98	-		277.98	33.22		311.20
12	Total Gas Supply Charge (line 8 + line 11)	452.46	(31.25)		421.21	(18.60)		402.61
13	Total Bill	911.98	(31.25)	-3.4%	880.73	(21.44)	-2.4%	859.29
14	Impacts for Customer Notices - Sales (line 13)		(31.25)			(21.44)		

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).

UNION GAS LIMITED
General Service Customer Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project, Parkway West Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls
Annual Consumption of 2,200 m³

		(Northern) Rate 01 - Residential (Annual Consumption of 2,200 m³)						
Line No.		EB-2011-0210 Approved 01-Jan-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2011-0210 Updated for Tolls 01-Oct-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (1)
		(a)	(b) = (d - a)	(c) = (b / a)	(d)	(e) = (g - d)	(f) = (e / d)	(g)
	Delivery Charges							
1	Monthly Charge	252.00	-		252.00	-		252.00
2	Delivery Commodity Charge	207.44	-		207.44	(2.84)		204.60
3	Total Delivery Charge	459.44	-	0.0%	459.44	(2.84)	-0.6%	456.60
	Supply Charges							
4	Transportation to Union	167.80	(40.45)		127.35	(54.27)		73.08
5	Prospective Recovery - Transportation	-	-		-	-		-
6	Storage Services	70.97	(2.65)		68.32	2.46		70.78
7	Prospective Recovery - Storage	-	-		-	-		-
8	Subtotal	238.77	(43.10)	-18.1%	195.67	(51.81)	-26.5%	143.86
9	Commodity & Fuel	279.46	-		279.46	33.19		312.65
10	Prospective Recovery - Commodity & Fuel	-	-		-	-		-
11	Subtotal	279.46	-		279.46	33.19		312.65
12	Total Gas Supply Charge (line 8 + line 11)	518.23	(43.10)		475.13	(18.62)		456.51
13	Total Bill	977.67	(43.10)	-4.4%	934.57	(21.46)	-2.3%	913.11
14	Impacts for Customer Notices - Sales (line 13)		(43.10)			(21.46)		

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).

UNION GAS LIMITED
General Service Customer Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project, Parkway West Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls
Annual Consumption of 2,200 m³

(Eastern)
Rate 01 - Residential
(Annual Consumption of 2,200 m³)

Line No.		EB-2011-0210 Approved 01-Jan-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2011-0210 Updated for Tolls 01-Oct-13 Total Bill ($) (1)	Bill Impacts ($)	Bill Impacts (%)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (1)
		(a)	(b) = (d - a)	(c) = (b / a)	(d)	(e) = (g - d)	(f) = (e / d)	(g)
	Delivery Charges							
1	Monthly Charge	252.00	-		252.00	-		252.00
2	Delivery Commodity Charge	207.15	-		207.15	(2.85)		204.30
3	Total Delivery Charge	459.15	-	0.0%	459.15	(2.85)	-0.6%	456.30
	Supply Charges							
4	Transportation to Union	187.35	(52.58)		134.77	(54.25)		80.52
5	Prospective Recovery - Transportation	-	-		-	-		-
6	Storage Services	78.75	(7.47)		71.28	2.47		73.75
7	Prospective Recovery - Storage	-	-		-	-		-
8	Subtotal	266.10	(60.05)	-22.6%	206.05	(51.78)	-25.1%	154.27
9	Commodity & Fuel	280.77	-		280.77	33.21		313.98
10	Prospective Recovery - Commodity & Fuel	-	-		-	-		-
11	Subtotal	280.77	-		280.77	33.21		313.98
12	Total Gas Supply Charge (line 8 + line 11)	546.87	(60.05)		486.82	(18.57)		468.25
13	Total Bill	1,006.02	(60.05)	-6.0%	945.97	(21.42)	-2.3%	924.55
14	Impacts for Customer Notices - Sales (line 13)		(60.05)			(21.42)		

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).

UNION GAS LIMITED
General Service Customer Bill Impacts
Includes Brantford to Kirkwall and Parkway D Compressor Project, Parkway West Project,
Long Terrm Contracting Proposal and Final 2013 TCPL Tolls
Annual Consumption of 2,200 m³

Line No.	Rate M1 - Particulars ($)	EB-2011-0210 Approved 01-Jan-13 Total Bill ($) (1)	EB-2013-XXXX Approved XX/XX/2013 Total Bill ($) (1)	Impact ($)	
		(a)	(b)	(c) = (b) - (a)	
	Delivery Charges				
1	Monthly Charge	252.00	252.00	-	
2	Delivery Commodity Charge	78.66	77.02	(1.64)	
3	Storage Services	16.23	15.98	(0.25)	
4	Total Delivery Charge (line 1 + line 2 + line 3)	346.89	345.00	(1.89)	-0.5%
	Supply Charges				
5	Transportation to Union	96.80	96.80	-	
6	Commodity & Fuel (2)	280.77	280.76	(0.01)	
7	Total Gas Supply Charge (line 5 + line 6)	377.57	377.56	(0.01)	
8	Total Bill (line 4 + line 7)	724.46	722.56	(1.90)	-0.3%
9	Impacts for Customer Notices - Sales (line 8)			(1.90)	

Notes:
(1) EB-2011-0210, Rate Order, Working Papers, Schedule 16, excluding Prospective Recovery and Temporary Charges/(Credits).
(2) Reflects changes in the Gas Supply Administration charge only.

UNION GAS LIMITED

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

Ref: EB-2012-0433, Schedule B paragraphs 4 and 5

The referenced paragraphs state:

4. Union is seeking an order from the Board, pursuant to section 36 of the Act, for pre-approval of recovery of the cost consequences of all facilities associated with the development of the Project from ratepayers. Union is seeking pre-approval of the recovery of the costs consequences of the Project because: i) it is the single largest project in the history of Union, requiring a significant capital outlay, without any new, incremental contractual commitments or revenues; ii) it would be more efficient for the Board to address all known impacts from the Project at once, and provide a predictable rate impact to Union's customers and other stakeholders; iii) the ex-franchise customers who will pay for the cost of the Project support the Project; and, iv) a finding on the rate impacts from the Project will help inform the parameters of Union's next regulatory framework. Given the magnitude of this project, Union is not able to proceed with the development of the Project without reasonable certainty of cost recovery.

5. The first full-year cost of service directly attributable to the Project (rate base, return, interest, tax, depreciation and O&M) to the Project is approximately $15.3 million. Using the allocation of Dawn-Parkway costs per the 2013 Board approved cost allocation study results in: (i) a reduction of approximately $2.1 million, allocated to in-franchise rate classes, and (ii) an increase of approximately $17.4 million, allocated to ex-franchise rate classes.

a) Can Union confirm that it has never before applied for pre-approval of recovery of the cost consequences for any project proposal?

b) If the requested pre-approval of cost consequences is granted by the Board, would there be any future review of costs possible under any circumstances prior to recovery from ratepayers?

c) Given that "the ex-franchise customers who will pay for the cost of the Project support the Project" and that the impact on ratepayers, i.e., in-franchise rate classes, is "a reduction of approximately $2.1 million," what is the significance to ratepayers of Union seeking "pre-approval of recovery of the cost consequences of all facilities associated with the development of the Project from ratepayers" and why does Union need this pre-approval to "recover from ratepayers" what amounts to a $2.1M credit to ratepayers?

d) Would Union undertake this Project if the Board either disallowed pre-approval to recover the cost consequences from ratepayers or conditioned its approval by requiring an after the fact prudence review?

Response:

a) Confirmed. Union has never applied for pre-approval to recover the cost consequences of a project as part of a leave to construct application. The Parkway West Project, however, represents a significant capital outlay without any incremental contractual commitments or revenues. Under these circumstances requesting cost recovery at the same time that leave to construct approval is being sought is a reasonable, efficient and appropriate course of action.

b) Union is requesting the Board approve the inclusion in rates of the annual revenue requirement related to the Parkway West Project per Exhibit I.A3.UGL.LPMA.7 Attachment 2, the term of the next Incentive Regulation Mechanism. To the extent that there are any differences between the revenue requirement built into rates and the actual revenue requirement, those variances will be captured in the deferral account and reviewed as part of the annual deferral account disposition process.

c) For the Board to approve Union's request for pre-approval to recover the costs consequences associated with the Parkway West Project, the Board needs to understand how the total revenue requirement increase impacts all rate classes. Although in-franchise rate classes in total will see a reduction of approximately $2.1 million, some individual in-franchise rate classes will see rate increases.

   Further, the ex-franchise rate classes will see an increase of approximately $17.4 million. The fact that in-franchise rate classes receive a rate reduction in total and that ex-franchise shippers support the project does not negate the Board's requirement to understand the rate impacts to all ratepayer groups.

   Please see EB-2012-0433, Schedule 12-2 for the 2016 Parkway West Project rate impacts by rate class.

d) Union will not proceed with the Parkway West Project without pre-approval to recover the cost consequences or reasonable assurances that it will receive approval to recover the costs consequences. If Union receives the facilities approvals requested under Sections 90 and 91, and the Board and intervenors accept Union's proposal to pass through the annual revenue requirement associated with the project as part of Union's next IRM, Union would proceed.

If, on the other hand, Union receives facilities approvals under Sections 90 and 91 but does not receive Section 36 approval in this proceeding and does not receive approval to pass through the costs associated with this project as part of Union's next IRM, Union will not proceed.

Union is proposing to capture the difference between the revenue requirement built into rates and the actual revenue requirement in a deferral account for future review and disposition by the Board and intervenors. If the actual revenue requirement is less than what is built into rates, the differences will be credited to ratepayers. If the actual revenue requirement is greater than what is built into rates, the differences will be debited to ratepayers. In either case there will be a full review of the balance in the deferral account. No further condition around a prudence review is required.

Please also see Exhibit I.B5.UGL.CCC.29.

As part of Union's 2014-2018 IRM, total UFG cost changes resulting from a difference between the UFG volume included in rates and the actual UFG volume would be recorded in a new UFG volume deferral account. The amount to be recorded in the UFG volume deferral account would be calculated using the most recent Board-approved WACOG. The amount of the UFG volume deferral account to be cleared to customers would be subject to a symmetrical dead-band of $5 million, with amounts within such dead-band being to Union's account only.

The Board approved a total cost of $14.7 million for UFG in 2013 base rates (EB-2011-0210) calculated by multiplying the Board-approved total UFG volume of 70,253 10^3m^3 by a WACOG of \$210.506/ 10^3m^3 (the cost of gas used in Union's January 1, 2013 QRAM). This means that for 2014 UFG, a volume variance less than \$9.7 million or greater than \$19.7 million would be subject to deferral. To illustrate, if the volume variance is \$25.7 million, \$6 million would be deferred and recovered from ratepayers.

4.7.5 MAJOR CAPITAL ADDITIONS

Union would include a capital pass-through mechanism in its 2014-2018 IRM. This mechanism is intended to adjust rates during the IRM term to reflect the associated impacts of significant capital investments made throughout the IRM term deemed "not-business-as-usual". "Not-business-as-usual" refers to capital expenditures that are significant and cannot be managed within Union's Board-approved capital budget.

At the time Union was developing its 2014-2018 IRM proposals, it identified three major facility expansion projects that it considered "not-business-as-usual" that it proposed to pass-through when the facilities go in to service. The projects Union identified were i) the development at the Parkway West site; ii) the Brantford-Kirkwall transmission pipeline and Parkway D compressor station; and, iii) the Burlington-Oakville transmission pipeline. The Parkway West project and the Brantford-Kirkwall pipeline/Parkway D compressor station are currently the subjects of Leave-to-Construct applications (EB-2012-0433 and EB-2013-0074). The Burlington-Oakville transmission pipeline Leave-to-Construct application has yet to be filed. As context, the Parkway West project and Brantford-Kirkwall/Parkway D projects have associated capital expenditures of $203 million and $204 million, respectively, and are the largest capital projects in Union's history by a significant measure.

Through discussions with Stakeholders, Union has developed eight criteria, which, if met by a major capital project, would be included in rates during the IRM term. Both the Parkway West and Brantford-Kirkwall/Parkway D projects currently meet the criteria. Although application for approval of the Burlington-Oakville transmission pipeline has not been filed, Union expects that it will also qualify for capital pass-through, subject to the outcome of that Leave-to-Construct proceeding.

The key features of the major capital pass-through mechanism would be:

- Any qualifying project must exceed two financial thresholds, related to both revenue shortfall and capital cost;
- Any qualifying project would be subject to a full regulatory review, either in a Leave-to-Construct proceeding or in a rates proceeding, but prior to being included in rates; and,
- Any qualifying project would be subject to both annual revenue requirement true-ups during the IRM term and an end-of-term qualification assessment.

As a result, significant new capital projects can be made to serve customers on a timely basis, and included in rates when the project is used or useful.

The criteria that must be met for any capital project to quality for Y factor treatment are as follows:

i) A minimum increase, or a minimum decrease, of $5 million in net delivery revenue requirement for a single new project (the "Rate Impact Threshold"). For the purposes of making this determination, capital costs are those costs relating to that capital project as defined under the applicable accounting rules. The net delivery revenue requirement associated with a capital project for any given year is the costs associated with incremental operating and maintenance expenses, depreciation expense, municipal property taxes expense, incremental long-term debt costs, and required return and income taxes net of any incremental delivery revenues arising from, associated with, or enabled by the project. Should the net delivery revenue requirement exceed the Rate Impact Threshold in any year, the project would meet the Rate Impact Threshold criterion. The rate adjustment for each year would be based on the forecast net delivery revenue requirement impacts for each specific year, subject to true-up to actual as discussed in section (viii) below.

To determine the net delivery revenue requirement for any year, the following parameters would be applied:

- Depreciation expense would be calculated using the 2013 Board-approved depreciation rates;
- The required return would assume a capital structure of 64% long-term debt and 36% common equity;
- The incremental long-term debt cost would be calculated based on expected financing costs for the incremental borrowing required by the project, at market rates in effect at the time the project is approved;
- The return would be calculated using the 2013 Board-approved return on equity of 8.93%;
- The income and other taxes related to the equity component of the return would be calculated using the 2013 Board-approved tax rate of 25.5%;
- The incremental delivery revenues associated with the project would be calculated as an offset to the delivery revenue requirement;

- For the in-service year, all components of the calculation except taxes (but including, without limitation, depreciation, cost of debt, and return) would be calculated only for the period from the month of in-service to the end of the year; and,
- These parameters would not change during the IRM term.

ii) The capital cost of the project, using the same capitalization policies as were in place for the purposes of the 2013 Board-approved (EB-2011-0210) revenue requirement, must exceed $50 million. Provided, however, that in the event that Union is required to change its accounting standard from USGAAP to any other standard (including IFRS), and as a result its capitalization policies must change, the capitalization policies under the new accounting standard would apply;

iii) The project is outside the base rates on which this incentive regulation framework is set;

iv) The project must be needed to serve customers and/or to maintain system safety, reliability or integrity, and cannot reasonably be delayed, and is demonstrated to be the most cost-effective manner of achieving the project's objective relative to the reasonably available alternatives;

v) The project would be identified to stakeholders and the Board as soon as possible, including in that year's stakeholder review session where practical (see Section 12.2);

vi) The project would be subject to a full regulatory review equivalent to a Leave-to-Construct proceeding, in which the applicant must demonstrate need, safety or reliability purposes, and economic viability prior to inclusion in rates. For any project that requires Leave-to-Construct approval of the Board, the full regulatory review would be conducted in that proceeding. For any project that does not require Leave-to-Construct approval of the Board, Union commits to filing its annual rate adjustment application with the Board by July 1 of the year prior to the rate impacts of the project going into effect, to allow sufficient time for a full regulatory review of the project in its rates application;

vii) Subject to direction otherwise from the Board, Union would allocate the net revenue requirement using the 2013 Board-approved cost allocation methodologies. Any party, including Union, may take any position with respect to the proposed allocation for any particular capital project during review of the project, or its rate impacts, by the Board; and,

viii) The project would include a deferral account request to capture any differences between the forecast annual net delivery revenue requirement and the actual net delivery revenue requirement for each year of the IRM term for which the project is included in rates. The true-up will occur annually during the period the project is subject to Y factor treatment. Furthermore, if, at the end of the 2018 year, the actual net delivery revenue requirement, for any year the project has been in service, has not exceeded the $5 million minimum, the project would be deemed not to have qualified, and all amounts collected thereon would be refunded/charged to ratepayers through the mechanism of an End-of-IRM-term true-up deferral account.

4.8 Z FACTORS

A Z factor provides for rate adjustments intended to safeguard customers and the gas utility against unexpected material costs that are outside of management's control, out of the realm of the basic undertaking of a utility and not included in the proposed price cap. As was the case in the 2008-2012 IRM, Z factors would be subject to five criteria. The criteria are the same as those agreed to in the EB-2007-0606 Settlement Agreement with two modifications. First, the second criterion has been expanded to refer to the Board's EB-2011-0277 Decision on Union's request for Z factor approval of the costs associated with Sewer Lateral Cross Bores. Second, the materiality threshold has been increased to $4.0 million.

For prospective or historical cost increases/decreases to qualify for pass through as a Z factor, the cost increases/decreases must:

1. causally relate to an external event that is beyond the control of utility's management;
2. result from, or relate to, a type of risk:
    a. for which a prudent utility would not be expected to take risk mitigation steps; and,
    b. which is out of the realm of the basic undertaking of the utility (per EB-2011-0277 Decision, page 13).

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

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

The following parties take no position: Six Nations, TCPL

6.6 Major Capital Additions

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

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

Y-factor treatment also applies to additional capital projects that result in net delivery revenue requirement impacts over the IRM term which meet the requisite criteria specified below.

The criteria that must be met for any capital project to quality for Y factor treatment are as follows:

i) A minimum increase, or a minimum decrease, of $5 million in net delivery revenue requirement for a single new project (the "Rate Impact Threshold"). For the purposes of making this determination, capital costs are those costs relating to that capital project as defined under the applicable accounting rules. For the purpose of determining whether the Rate Impact Threshold is met, the net delivery revenue requirement associated with the capital project for each of the years from the in-service year until 2018 shall be calculated; should the net delivery revenue requirement exceed the Rate Impact Threshold in any year, the project would meet the Rate Impact Threshold criterion. The rate adjustment for each year will be based on the forecast net delivery revenue requirement impacts for each specific year, subject to true-up to actual as discussed in subparagraph (viii) below.

   In determining net delivery revenue requirement for any year, the following parameters will be applied:

   - Depreciation expense will be calculated using 2013 Board-approved depreciation rates;
   - Required return assumes a capital structure of 64% long-term debt and 36% common equity;

- The incremental long-term debt cost will be calculated based on expected financing costs for the incremental borrowing required by the project, at market rates in effect at the time the project is approved;
- The return will be calculated using the 2013 Board-approved return on equity of 8.93%;
- Income and other taxes related to the equity component of the return will be calculated using the 2013 Board-approved tax rate of 25.5%;
- Incremental delivery revenues associated with the project will be calculated as an offset to the delivery revenue requirement;
- For the in-service year, all components of the calculation except taxes (but including, without limitation, depreciation, cost of debt, and return) will be calculated only for the period from the month of in-service to the end of the year; and,
- Union agrees to make no changes to these parameters during the IRM term.

ii) The capital cost of the project, using the same capitalization policies as were in place for the purposes of the approved EB-2011-0210 revenue requirement, must exceed $50 million. Provided, however, that in the event that Union is required to change its accounting standard from USGAAP to any other standard (including IFRS), and as a result its capitalization policies must change, the capitalization policies under the new accounting standard shall apply;

iii) The project is outside the base rates on which this incentive regulation framework is set;

iv) The project must be needed to serve customers and/or to maintain system safety, reliability or integrity, and cannot reasonably be delayed, and is demonstrated to be the most cost effective manner of achieving the project's objective relative to the reasonably available alternatives;

v) The project will be identified to stakeholders and the Board as soon as possible, including in that year's stakeholder review session where practical (see Section 12.2);

vi) The project will be subject to a full regulatory review equivalent to a leave to construct proceeding, in which the applicant must demonstrate need, safety or reliability purposes, and economic viability prior to inclusion in rates. For any project that requires leave-to-construct approval of the Board, the full regulatory review will be conducted in that proceeding. For any project that does not require leave-to-construct approval of the Board, Union commits to filing its annual rate adjustment application with the Board by July 1 of the year prior to rate impacts of the project going into effect, to allow sufficient time for a full regulatory review of the project in its rates application;

vii) Subject to direction otherwise from the Board, Union will allocate the net revenue requirement using 2013 Board-approved cost allocation methodologies. Any party, including Union, may take any position with respect to the proposed allocation for any particular capital project during review of the project, or its rate impacts, by the Board; and,

viii) The project will include a deferral account request to capture any differences between the forecast annual net delivery revenue requirement and the actual net delivery revenue requirement for each year of the IRM term for which the project is included in rates. The true-up will occur annually during the period the project is subject to Y factor treatment. If, at the end of the 2018 year, the actual net delivery revenue requirement has not exceeded the $5 million minimum for every year the project has been in service, then the project will be deemed not to have qualified, and all amounts collected thereon shall be refunded/debited to ratepayers through an end of IRM term true-up deferral account mechanism.

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

The following parties take no position: Six Nations, TCPL

7 <u>DEFERRAL AND VARIANCE ACCOUNTS</u>

(Complete Settlement)

The parties agree that the Deferral and Variance Accounts described and listed in Appendix H will continue during the term of the IRM. It is understood and agreed that Union will make no changes in the manner in which it administers and clears the Deferral and Variance Accounts during the course of the IRM without first fully disclosing the proposed changes to the parties, and then obtaining prior Board approval for such proposals. Moreover, it is understood and agreed that Union will administer the pass through items of expenses and savings in a manner that is compatible with the principle that neither Union nor its ratepayers should gain or lose on such pass through items.

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

The following parties take no position: Six Nations, TCPL

**TransCanada PipeLines Limited Response to
Union Gas Limited Interrogatory #6**

Reference: TransCanada Supplemental Evidence Page 4 Line 25

Request:

a) Please list what facilities are included in the approximately $310 million in costs for TransCanada to build a new pipeline from Albion to Maple area, specifically identifying size and length of pipe, station facilities, compressor facilities and land, etc.

Response:

The Facilities included in the $310 million of costs are 13 km NPS 36 Kings North Project, 13 km NPS 42 Vaughan Loop, and a compressor unit addition at Station 130 (Maple).

PARKWAY WEST PROJECT TOTAL ESTIMATED COSTS

	Filed Costs Jan/2013		Revised Costs August 23, 2013		Variance
NPS 42 Pipeline					
Materials, Buildings and Equipment	$3,000,000		$2,963,000		
Construction and Labour	$4,350,000		$11,523,000		
Contingencies	$1,100,000		$2,897,000		
Interest During Construction	$200,000		$283,000		
		$8,650,000		**$17,666,000**	$9,016,000
Enbridge Measurement					
Materials, Buildings and Equipment	$9,750,000		$6,614,000		
Construction and Labour	$6,650,000		$7,117,000		
Contingencies	$2,500,000		$2,060,000		
Interest During Construction	$300,000		$229,000		
		$19,200,000		**$16,020,000**	-$3,180,000
Station Infrastructure					
Materials, Buildings and Equipment	$4,300,000		$3,137,000		
Construction and Labour	$17,800,000		$24,262,000		
Contingencies	$3,300,000		$3,479,000		
Interest During Construction	$1,150,000		$955,000		
		$26,550,000		**$31,833,000**	$5,283,000
Station Header					
Materials and Equipment	$3,400,000		$5,068,000		
Construction and Labour	$11,200,000		$10,874,000		
Contingencies	$2,200,000		$2,383,000		
Interest During Construction	$700,000		$585,000		
		$17,500,000		**$18,910,000**	$1,410,000
Pipeline Replacement					
Materials and Equipment	$1,900,000		$2,497,000		
Construction and Labour	$4,600,000		$6,481,000		
Contingencies	$950,000		$1,347,000		
Interest During Construction	$100,000		$119,000		
		$7,550,000		**$10,444,000**	$2,894,000
Dawn - Parkway Valve Nest					
Materials, Buildings and Equipment	$2,900,000		$3,393,000		
Construction and Labour	$5,000,000		$7,020,000		
Contingencies	$1,200,000		$1,562,000		
Interest During Construction	$100,000		$154,000		
		$9,200,000		**$12,129,000**	$2,929,000
Land and Easement					
Land and Land Rights	$28,600,000		$28,610,000		
Contingencies	$0				
Interest During Construction	$1,250,000		$1,339,000		
		$29,850,000		**$29,949,000**	$99,000
LCU Compressor					
Materials, Buildings and Equipment	$33,950,000		$33,906,000		
Construction and Labour	$37,400,000		$38,568,000		
Contingencies	$10,700,000		$7,903,000		
Interest During Construction	$2,550,000		$2,102,000		
		$84,600,000		**$82,479,000**	-$2,121,000
Total Estimated Station Capital Costs – 2014/2015 Construction					
		$203,100,000		**$219,430,000**	$16,330,000

TransCanada PipeLines Limited Response to School Energy Coalition Interrogatory #5

Reference: TCPL Supplementary Evidence p.2, Ex.M.TCPL.Staff.L.8, EB-2011-0210 Written Evidence of TCPL (May 16, 2012)

Request: Considering the termination by Enbridge of the Memorandum of Understanding ("MOU"), does TCPL still believe that it is prudent for Union to build its Parkway West loss of critical unit compressor?

Response:

It is TransCanada's view that the MOU remains in full force and effect, and TransCanada has filed a Statement of Claim in Ontario Superior Court seeking adherence by Enbridge to the terms and conditions of the MOU.

TransCanada believes that the facilities proposed by Union in this application will be required if:

- All of the capacity requests included in the application actually materialize
- All of the downstream pipeline facilities are in fact approved and built
- All expiring Union M12 contracts are renewed at current levels

However, if any of the above requirements do not come to pass, there should be a complete reassessment of the facility requirement to ensure that redundant capacity is not constructed.