

November 30, 2010

Ms. Kirsten Walli Board Secretary Ontario Energy Board P.O. Box 2319 2300 Yonge Street, 27th Floor Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: EB-2010-0300 - Union Gas Limited – Pre-Approval of the Cost Consequences of Three Long-Term Transportation Contracts – Responses to Interrogatories

Please find attached Union Gas Limited's responses to the interrogatories in the above noted proceeding.

Please contact me at (519) 436-5473 if you have any questions.

Yours truly,

[Original signed by]

Karen Hockin Manager, Regulatory Initiatives

c.c.: Emily Kirkpatrick, Torys Mark Kitchen, Union Gas Neil McKay, Board Staff

UNION GAS LIMITED

Answer to Interrogatory from Board Staff

Compliance with the Filing Guidelines for the Pre-Approval of Long-Term Natural Gas Supply an/or Upstream Transportation Contracts

Reference: EB-2008-0280 Filing Guidelines for the Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts

As per Part VI of the filing guidelines, please file the signed Precedent Agreement for the three contracts.

Response:

Union has not yet received the final Precedent Agreements from TCPL. It is Union's intent to file the signed Precedent Agreements as soon as they are available.

UNION GAS LIMITED

Answer to Interrogatory from Board Staff

Union Gas Limited's In-Franchise Customers

Reference: page 2, paragraph 4

At page 2, paragraph 4 of Union Gas Limited's ("Union") Application, Union states that "all three contracts are aimed at improving the security of supply for Union's infranchise customers".

- a) Please confirm that each of the proposed long-term transportation contracts is to serve in-franchise customers only.
- b) If not, please explain how serving ex-franchise customers under these proposed long-term transportation contracts improve security for Union's in-franchise customers.

Response:

Confirmed. Each of these long term contracts will be used to serve in-franchise system supply demand only.

UNION GAS LIMITED

Answer to Interrogatory from Board Staff

Long-Term Transportation Contracting Analysis

Reference: Exhibit A, Appendix D

Union has provided a Long-term Transportation Contracting Analysis at Exhibit A, Appendix D.

Please provide the landed costs of the status quo (e.g., purchasing natural gas from the Western Canadian Sedimentary Basin ("WCSB") and moving the gas along the TransCanada PipeLines Limited ("TCPL") system to Ontario)?

Response:

The landed costs for the status quo is available in Appendix F as denoted by the lines TCPL EDA, TCPL NDA and TCPL WDA.

Filed: 2010-11-30 EB-2010-0300 Exhibit B1.4 Page 1 of 2

UNION GAS LIMITED

Answer to Interrogatory from Board Staff

Marcellus Shale

Reference: Exhibit A, page 4, Exhibit A, Appendix E

At Exhibit A, page 4 of 14, Union states that "Union's Niagara contract will allow the utility to purchase a portion of these Marcellus supplies at Niagara". On page 5 of 14, Union also states that the "Niagara contract fits into Union's overall gas supply portfolio in terms of contract length".

In the Report of the Board entitled *Draft LTC Filing Guidelines for the Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts* (the "LTC Report") dated February 11, 2009, the Board indicated that it needed to understand "how the contract fits into the utility's overall transportation and natural gas supply portfolio".

- a) Please provide, in table format, a breakdown of Union's natural gas supply portfolio itemized by contract length, volume, services, supply source, price, effective date, and expiration date for each of its supply contracts in its portfolio.
- b) Please provide a description of the natural gas supply contracts that Union will purchase at Niagara from the Marcellus supplies (that correspond with the proposed transportation contracts) in terms of contract length, volume, services, price, effective date, and expiration date.
- c) Over the 10-year term of the proposed long-term transportation contracts, what is the percentage of natural gas supply coming from the Marcellus supplies to serve Union's in-franchise customer?
- d) Over the 10-year term of the proposed long-term transportation contracts, what is the percentage of natural gas supply coming from the WCSB to serve Union's in-franchise customers?
- e) In addition to the chart found at Exhibit A, Appendix E, please provide a detailed table that itemizes Union's transportation portfolio (including name of pipeline and route, service, term, volume (in GJ/day), receipt / delivery points, cost per year (in CDN \$), effective date, and expiration date for each of the transportation contracts).
- f) What is the percentage of Union's proposed long-term transportation contracts (in terms of volume (GJ/d)) compared to Union's total portfolio of transportation contracts for firm transportation service (as outlined in Exhibit A, Appendix E)? Will the percentage change over the 10-year term of the proposed long-term transportation contracts?

Filed: 2010-11-30 EB-2010-0300 Exhibit B1.4 Page 2 of 2

Response:

- a) See attachment 1.
- b) Union has not yet contracted for natural gas supply to fill the Niagara to Kirkwall transportation contract. All purchases will follow the System Gas Procurement Policy and Procedures. All purchases will be bid competitively and it is expected that contracts will settle on a monthly index that has not yet been negotiated with suppliers. (NYMEX, Dawn, Niagara).
- c) Based on Union's current transportation portfolio outlook, Marcellus supplies will represent 6% of the total North and South System Supply over the 10 year term of the proposed long-term transportation contracts.
- d) Based on Union's current transportation portfolio outlook, WCSB supplies will represent 35% of the total North and South System Supply over the 10 year term of the proposed long-term transportation contracts.
- e) See attachment 2.
- f) The 51,101 GJ/d in proposed new long term transportation contracts is 5.3% of all firm transportation currently contracted for both the North and South portfolio. This percentage can change if the size of the overall transportation portfolio changes.

Filed: 2010-11-30 EB-2010-0300 Exhibit B1.4 a) Attachment

Union Gas System Supply Portfolio - Contracted Supply Effective November 1, 2010

North TCPL-Empress Firm-Variable Volume Acc North TCPL-Empress Firm Acc North TCPL-Empress Firm Acc South TCPL-Empress Firm Nymex South TCPL-Empress Firm Nymex South PEPL-FZ Firm Nymex South PEPL-FZ Firm Nymex South ANR-Burdette Firm Nymex South Vector-Chicago Firm Nymex South Vector-Chicago Firm Nymex South Vector-Chicago Firm Nymex South Vector-Chicago <th>Aeco Daily - \$0.05 C/GJ</th> <th></th> <th>Effective Date</th> <th>Expiration Date</th> <th>Contract Length</th>	Aeco Daily - \$0.05 C/GJ		Effective Date	Expiration Date	Contract Length
TCPL-Empress Firm TCPL-Empress		0.15,000	November 1, 2010	October 31, 2011.	l year
TCPL-Empress Firm TCPL-Empress Firm TCPL-Empress Firm TCPL-Empress Firm-Variable Volume TCPL-Empress Firm TCPL-Empress F	Aeco Monthly - \$0.0806 C/GJ	20,000	November 1, 2010	October 31, 2011	l year
TCPL-Empress Firm TCPL-Empress Firm-Variable Volume TCPL-Empress Firm TCPL-Empress	Aeco Monthly - \$0.0671 C/GJ	000,09	November 1, 2010	March 31, 2011	5 months
TCPL-Empress Firm-Variable Volume TCPL-Empress Firm ANR-Burdette Firm ANR-Burdette Firm Vector-Chicago Firm-Variable Volume Vector-Chicago Firm-Variable Volume Alliance-CREC Firm Alliance-CREC Firm Alliance-CREC Firm Alliance-CREC Firm	\$3.1807 C/GJ	35,000	November 1, 2010	November 30, 2010	1 month
TCPL-Empress Firm-Variable Volume TCPL-Empress Firm TCPL-Empress F		115,000 - 130,000	:		
TCPL-Empress Firm	Aeco Daily - \$0.05 C/GJ	0-5,000	November 1, 2010	October 31, 2011	l year
TCPL-Empress Firm TCPL-Empress Firm TCPL-Empress Firm TCPL-Empress Firm Trunkline-Zone 1A Firm Trunkline-Zone 1A Firm PEPL-FZ Firm PEPL-FZ Firm ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm Vector-Chicago Firm	Aeco Monthly - \$0.0806 C/GJ	20,000	November 1, 2010	October 31, 2011	l year
TCPL-Empress TCPL-Empress TCPL-Empress Trunkline-Zone 1A Firm PEPL-FZ PEPL-FZ Firm ANR-Burdette ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Alliance-CREC Firm	Aeco Monthly - \$0.0633 C/GJ	15,000	November 1, 2010	March 31, 2011	5 months
TCPL-Empress Trunkline-Zone 1A Trunkline-Zone 1A Trunkline-Zone 1A Trunkline-Zone 1A Firm PEPL-FZ PEPL-FZ ANR-Burdette ANR-Burdette ANR-Burdette Vector-Chicago Vector-Chicago Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Alliance-CREC	\$3.025 C/GJ	5,000	November 1, 2010	November 30, 2010	1 month
Trunkline-Zone 1A Trunkline-Zone 1A Trunkline-Zone 1A Trunkline-Zone 1A Firm PEPL-FZ PEPL-FZ Firm ANR-Burdette ANR-Burdette ANR-Burdette Vector-Chicago Vector-Chicago Vector-Chicago Firm Vector-Chicago Vect		40,000 - 45,000			
Trunkline-Zone 1A Trunkline-Zone 1A PEPL-FZ PEPL-FZ PEPL-FZ PEPL-FZ Firm ANR-Burdette ANR-Burdette ANR-Burdette Vector-Chicago Vector-Chicago Vector-Chicago Vector-Chicago Vector-Chicago Vector-Chicago Vector-Chicago Vector-Chicago Firm Vector-Chicago Vector-Chi	Nymex Last Day - \$0.06 US/MIMBtu	5,275	November 1, 2010	March 31, 2011	5 months
PEPL-FZ Firm	Nymex Last Day - \$0.0575 US/MMBtu	5,429	November 1, 2010	November 30, 2010	1 month
PEPL-FZ Firm PEPL-FZ Firm ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm Vector-Chicago Firm-Variable Volume Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Alliance-CREC Firm-Variable Volume Alliance-CREC Firm-Variable Volume Alliance-CREC Firm-Variable Volume Alliance-CREC Firm Alliance-CREC Firm		10,704			
PEPL-FZ ANR-Burdette ANR-Burdette ANR-Burdette ANR-Burdette ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm Vector-Chicago Firm-Variable Volume Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Alliance-CREC	Nymex Last Day - \$0.0225 US/MMBtu	10,551	November 1, 2010	March 31, 2011	5 months
ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm Vector-Chicago Firm-Variable Volume Firm Vector-Chicago Firm Alliance-CREC Firm-Variable Volume Alliance-CREC Firm Alliance-CREC Firm	Nymex Last Day - \$0.23 US/MMBtu	17,040	November 1, 2010	November 30, 2010	1 month
ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm ANR-Burdette Firm Vector-Chicago Firm-Variable Volume Firm Vector-Chicago Firm Vector-Chicago Firm Alliance-CREC Firm-Variable Volume Firm Alliance-CREC Firm-Variable Volume Firm Alliance-CREC Firm-Variable Volume Firm Alliance-CREC Firm-Variable Volume		27,591			
ANR-Burdette ANR-Burdette ANR-Burdette Vector-Chicago Firm-Variable Volume Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Alliance-CREC Firm-Variable Volume Alliance-CREC Firm-Variable Volume Alliance-CREC Firm Alliance-CREC Firm Alliance-CREC Firm	Nymex Last Day - \$0.065 US/MMBtu	5,534	November 1, 2010	March 31, 2011	5 months
ANR-Burdette Vector-Chicago Firm-Variable Volume Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Alliance-CREC Firm-Variable Volume Alliance-CREC Firm-Variable Volume Alliance-CREC Firm-Variable Volume Alliance-CREC Firm Alliance-CREC Firm	Nymex Last Day - \$0.05 US/MMBtu	16,520	November 1, 2010	November 30, 2010	l month
Vector-Chicago Firm-Variable Volume Vector-Chicago Firm Alliance-CREC Firm Alliance-CREC Firm		22,054			
Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Alliance-CREC Firm-Variable Volume Alliance-CREC Firm Alliance-CREC Firm	Chicago Daily + \$0.0275 US/MMBtu	0-21,101	November 1, 2010	October 31, 2011	l year
Vector-Chicago Firm Vector-Chicago Firm Vector-Chicago Firm Alliance-CREC Firm-Variable Volume Alliance-CREC Firm Alliance-CREC Firm	Nymex Last Day + \$0.0475 US/MMBtu	5,275	November 1, 2010:	October 31, 2011	1 year
Vector-Chicago Firm Vector-Chicago Alliance-CREC Alliance-CREC Alliance-CREC Firm Alliance-CREC Firm Alliance-CREC	Nymex Last Day + \$0.0819 US/MMBtu	42,202	November 1, 2010:	March 31, 2011	5 months
Vector-Chicago Alliance-CREC Firm-Variable Volume Alliance-CREC Firm Alliance-CREC Firm	Nymex Last Day + \$0.1225 US/MMBtu	26,376	November 1, 2010	November 30, 2010	1 month
Alliance-CREC Firm-Variable Volume Alliance-CREC Firm Alliance-CREC Firm		73,853 - 94,954			
Alliance-CREC Firm Alliance-CREC Firm Alliance-CREC	Aeco Daily - \$0.15 C/GJ	0-25,000	November 1, 2010	October 31, 2011	1 year
Alliance-CREC Firm Alliance-CREC	Aeco Monthly - \$0.1514 C/GJ	50,992	November 1, 2010	October 31, 2011	l year
	Aeco Monthly - \$0.135 C/GJ	16,360	November 1, 2010	March 31, 2011	5 months
•		67,352 - 92,352			
South Union-Dawn Firm Nymex	Nymex Last Day + \$0.47 US/MMBtu	10,551	November 1, 2010	November 30, 2010	l month
Firm	Dawn Monthly Index + \$0.0 US/MMBtu	10,899	November 1, 2010.	November 30, 2010	l month
South Union-Dawn Firm	\$3.815 US/MMBtu	10,551	November 1, 2010	November 30, 2010	1 month
South Union-Dawn Variable-Ontario Production N	Niagara Index - \$0.24 C/GJ	2390 - 3145			ongoing

115,000 - 130,000 GJ/day 275,945 - 327,801 GJ/day

TOTAL NORTH TOTAL SOUTH

Utility Transportation Portfolio for November 1, 2010 Union Gas Limited

North Portfolio

Pipeline Prim	Primary Receipt Point	Point	Service	Term	Volume (GJ/d)	Year SCDN	Commencement Date	Current End Date	Utilization
Empress	ress	Union NCDA	ᇤ	One Year - renewable	1,545	885,673	April 1, 1989	October 31, 2011	100%
Empress	ress	Union EDA	Ħ	One Year - renewable	8,675	4,972,955	November 1, 1993	October 31, 2011	100%
Empress	ress	Union NDA	FT	One Year - renewable	76,546	33,734,006	January 1, 1989	December 31, 2011	100%
Empress	ress	Union WDA	Ħ	One Year - renewable	39,880	11,385,454	January 1, 1989	December 31, 2011	100%
Empress	ress	Union SSMDA	F	One Year - renewable	9,443	4,161,553	January 1, 1989	December 31, 2011	100%
Empress	ress	Union EDA	탠	One Year - renewable	52,481	30,084,800	January 1, 1989	December 31, 2011	100%
Empress	ress	Union NCDA	Ħ	One Year - renewable	9,494	5,442,448	January 1, 1989	December 31, 2011	100%
Empress	ress	Union MDA	Ħ	One Year - renewable	4,522	777,535	April 1, 1990	December 31, 2011	100%
Parkway	way	Union EDA	FT	6 Years Remaining	30,000	2,120,555	November 1, 2006	October 31, 2016	100%
Parkway	way	Union EDA	Ħ	7 Years Remaining	5,000	353,425.80	November 1, 2007	October 31, 2017	100%
Unio	Union WDA	Parkway	STS	One Year - renewable	3,150	883,511.87	April 1, 1992	December 31, 2011	100%
Unio	Union NDA	Parkway	STS	One Year - renewable	49,100	5,265,485.96	April 1, 1992	December 31, 2011	* %2
Parkway	way	Union EDA	STS	One Year - renewable	68,520	4,754,602.80	April 1, 1992	December 31, 2011	* %0
Spruce	ce	Union MDA	FT	One Year - renewable	8,440	494,323	November 1, 1990	October 31, 2011	100%
Sprague	igue	Baudette	Ħ	One Year - renewable	8,440	120,644	November 1, 1990	October 31, 2011	100%
						Demand			
		Primary Delivery				Charge/Year	Service		Current
Prii	Primary Receipt Point	Point	Service	Term	Volume (GJ/d)	SCDN	Commencement Date	Current End Date	Utilization
Emp	Empress	Union CDA	FT	One Year - renewable	3,699	2,120,456	April 1, 1993	January 31, 2011	100%
Emp	Empress	Union CDA	FT	One Year - renewable	13,149	7,537,681	November 1, 1999	October 31, 2011	100%
Emp	Empress	Union CDA	FT	One Year - renewable	40,000	22,930,051	November 1, 2003	October 31, 2011	100%
Emp	Empress	Union CDA	Ħ	One Year - renewable	1,979	1,134,464	November 1, 1996	December 31, 2011	%001
Emp	Empress	Union CDA	Ħ	6 Years Remaining	12,500	7,165,641	November 1, 2010	December 31, 2015	100%
Dawn	E	Parkway	F	One Year - renewable	000'09	34,395,077	November 1, 2003	October 31, 2011	100%
Non	Northern Alberta	Canada/U.S. Border	F	5 Years Remaining	84,405	26,114,510	December 1, 2000	November 30, 2015	100%
Can	Canada/U.S. Border	Chicago	FT	5 Years Remaining	84,405	16,169,472	December 1, 2000	November 30, 2015	100%
Chic	Chicago	Dawn	Ħ	5 Years Remaining	84,405	7,451,840	December 1, 2000	November 30, 2015	100%
Chic	Chicago	Dawn	FT	One Year	15,826	1,411,192	November 1, 2010	October 31, 2011	100%
Chic	Chicago	Dawn	님	5 Years Remaining	85,460	7,544,988	November 1, 2008	November 30, 2015	100%
Shel	Shelbyville	Farwell	FT	One Year	10,656	526,804		October 31, 2011	100%
Far	Farwell	St.Clair	FT	One Year	10,551	447,110		October 31, 2011	100%
St.C	St.Clair	Union SWDA	ㅂ	One Year	10,551	143,789		October 31, 2011	100%
Shel	Shelbyville	Willow Run	FT	One Year	10,762	570,128		October 31, 2011	100%
Will	Willow Run	St. Clair	FT	One Year	10,551	167,666		October 31, 2011	100%
Pan	Panhandle Field Zone	Ojibway	Ħ	7 Years Remaining	26,376	3,879,000		October 31, 2017	100%
Trunkline/Panhandle East	Fact Louciana	Oilbum	L	7 Veers Demaining	101.10	1 307 000	Mossessian 1 2007	0100	10001

Note. The contract volumes noted above is the total firm contract commitment for Union Gas and includes volumes that are allocated to Direct Purchase and Unbundled customers.

UNION GAS LIMITED

Answer to Interrogatory from <u>Board Staff</u>

The Parkway Contracts

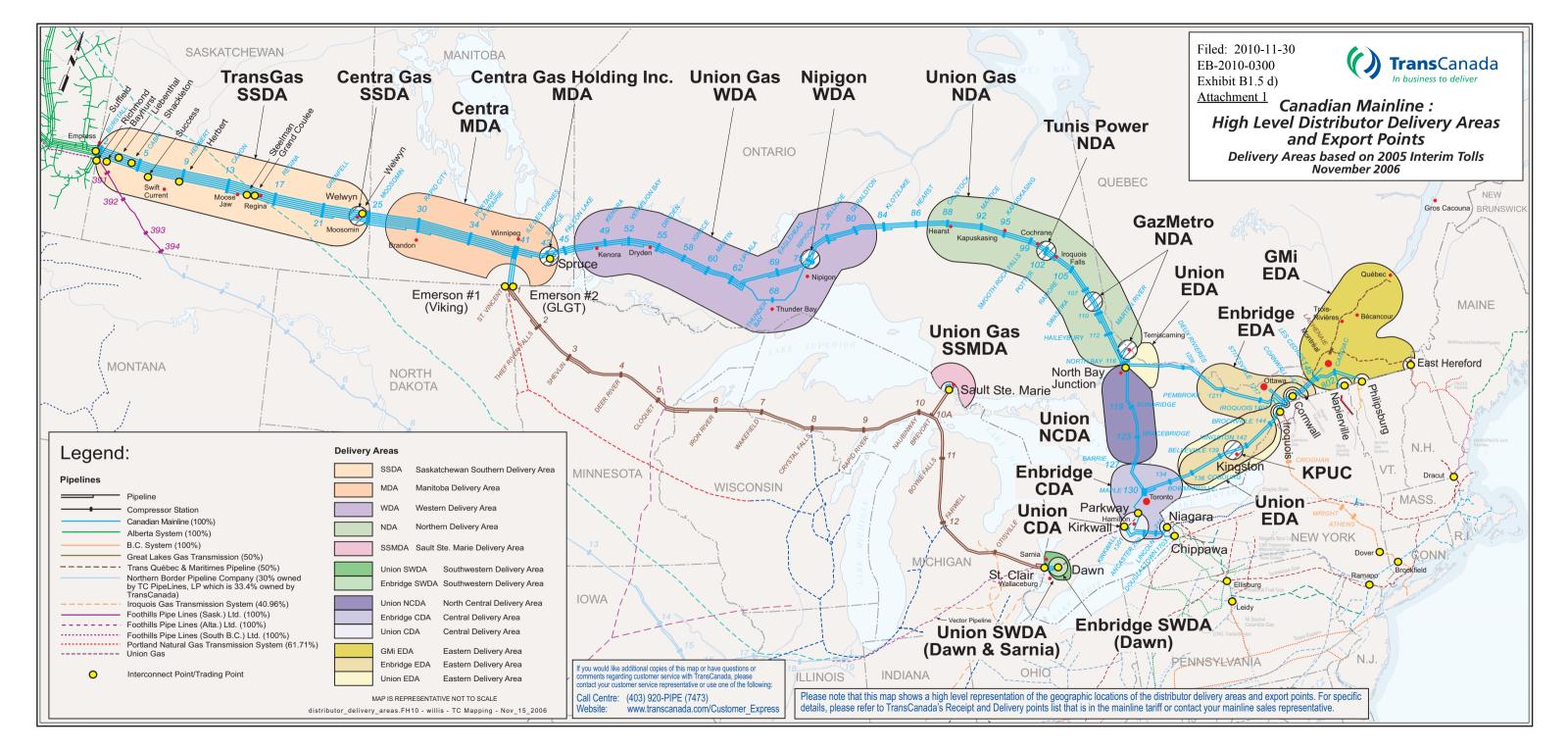
Reference: Exhibit A, page 9

At Exhibit A, page 9 of 14, Union states that the delivery point in the contract from Parkway to Union EDA is the Union EDA.

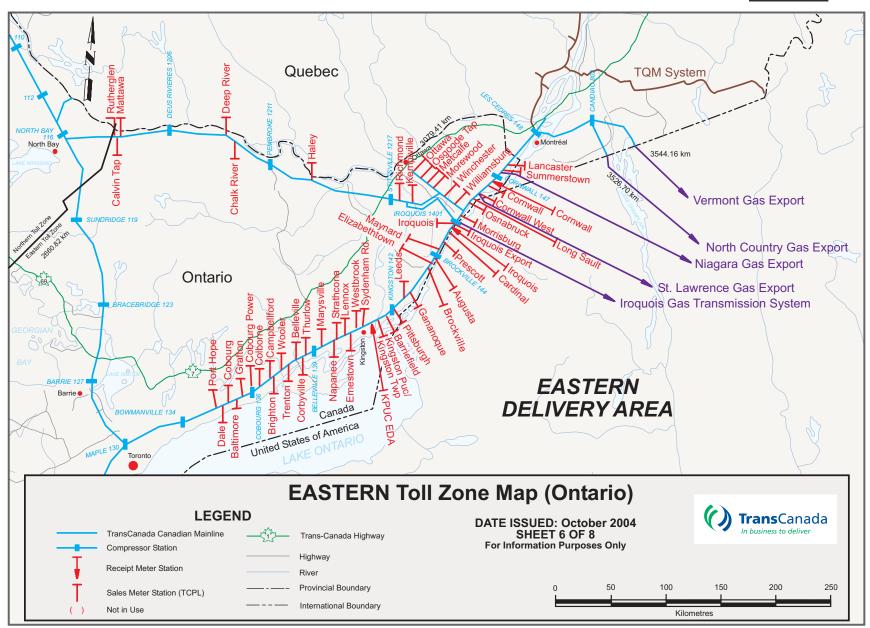
- a) Please provide the exact delivery point or points within Union's EDA.
- b) Please confirm that the TCPL tolls will not vary according to delivery point or points.
- c) Will all in-franchise customers in Union's EDA have direct access to the Marcellus supplies? Please explain.
- d) Please provide a map identifying the delivery points and showing the areas that will have direct access to the new supplies.

Response:

- a) The delivery point for the Parkway EDA contract is the TCPL Union EDA delivery area that covers the following meter stations Augusta, Baltimore, Barriefield, Belleville, Brighton, Calvin Tap, Cardinal, Cobourg, Cobourg Power, Colborne, Corbyville, Cornwall, Cornwall West, Ernestown, Gananoque, Grafton, Iroquois, Kingston Twp, Lennox, Long Sault, Marysville, Mattawa, Maynard, Morewood, Morrisburg, Napanee, Osnabruck, Pittsburgh, Port Hope, Prescott, Rutherglen, Strathcona, Sydenham Road, Thurlow, Trenton, Westbrook, Williamsburg, Winchester and Wooler. Union nominates on TCPL's system to the Union EDA only, not to each individual delivery point/meter.
- b) Confirmed. The TCPL tolls are the same for all delivery points/meter stations within Union EDA.
- c) Adding the supply diversity to the North via the Parkway to EDA contracts will allow all system supply customers in the EDA access to all supply basins to which Union contracts, including Marcellus.
- d) Please see attachments 1, 2.



Filed: 2010-11-30 EB-2010-0300 Exhibit B1.5 d) Attachment 2



UNION GAS LIMITED

Answer to Interrogatory from Board Staff

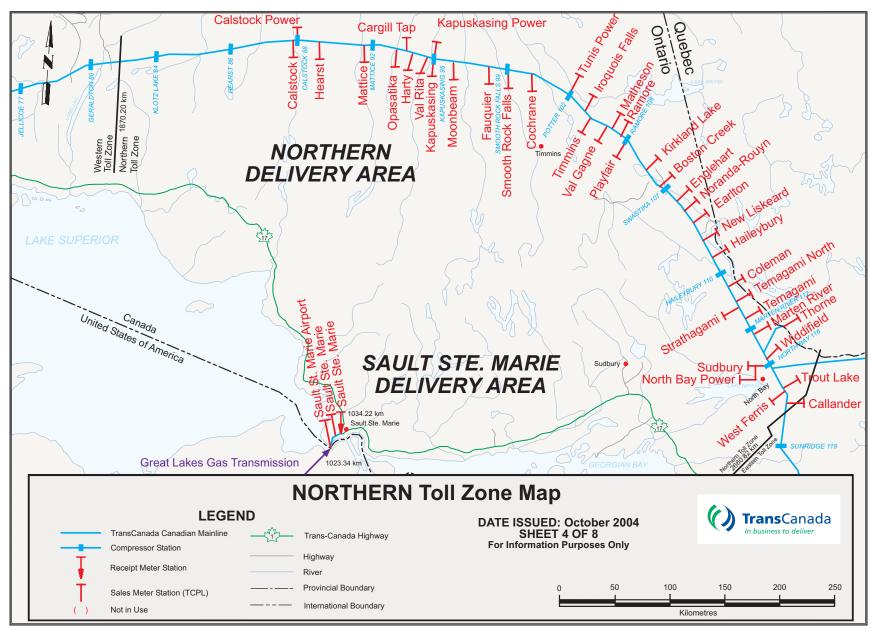
At Exhibit A, page 9 of 14, Union states that the delivery point in the contract from Parkway to Union NDA is the Union NDA.

- a) Please provide the exact delivery point or points within Union's NDA.
- b) Please confirm that the TCPL tolls will not vary according to delivery point or points.
- c) Will all in-franchise customers in Union's NDA have direct access to the Marcellus supplies? Please explain.
- d) Please provide a map identifying the delivery points and showing the areas that will have direct access to the new supplies.

Response:

- a) The delivery point for the Parkway NDA contract is the TCPL Union NDA delivery area that covers the following meter stations Boston Creek, Callander, Calstock, Cargill Tap, Cochrane, Coleman, Earlton, Englehart, Fauquier, Haileybury, Harty, Hearst, Iroquois Falls, Kapuskasing, Kapuskasing Power, Kirkland Lake, Marten River, Matheson, Mattice, Moonbeam, New Liskeard, North Bay Power, Opasatika, Playfair, Ramore, Smooth Rock Falls, Strathagami, Sudbury, Temagami, Temagami North, Thorne, Timmins, Trout Lake, Val Gagne, Val Rita, West Ferris and Widdifield. Union nominates on TCPL's system to the Union NDA only, not to each individual delivery point/meter.
- b) Confirmed. The TCPL tolls are the same for a delivery points/meter stations within Union NDA.
- c) Adding the supply diversity to the North via the Parkway to NDA contracts will allow all sales service customers in the NDA access to all supply basins to which Union contracts, including Marcellus.
- d) Please see attachment and refer to Exhibit B1.5d) attachment 1.

Filed: 2010-11-30 EB-2010-0300 Exhibit B1.6 d) Attachment



Filed: 2010-11-30 EB-2010-0300 Exhibit B1.7 Page 1 of 2

UNION GAS LIMITED

Answer to Interrogatory from Board Staff

Need/Benefits/Costs/Risk Mitigation

Reference: Page 2, Paragraph 4

Please explain how Union's in-franchise customers that are captive to existing pipeline system (e.g., TCPL's Mainline) for natural gas supply and therefore have limited direct access to new supply sources will benefit from the diversity of supply associated with the proposed transportation contracts.

- a) How will Union ensure that only the in-franchise customers that benefit from the diversity of supply pay for these proposed long-term transportation contracts? Please explain.
- b) How will Union ensure that the in-franchise customers that do not benefit from the diversity of supply do not have to pay for these proposed long-term transportation contracts?
- c) Is it possible that pursuing the three proposed long-term contracts could result in greater price differentials between rates in the Northern Delivery Area and those in the Southern Delivery Area? Please explain.

Response:

a) and b)

Union calculates North gas transportation rates based on the allocated costs to serve customers by rate class. Within each rate class, transportation costs to each of the delivery zones are then determined using TCPL zonal differentials (please refer to page 11 of EB-2009-0410, Working Papers Schedule 4) and forecast activity by zone.

The South Transportation rate is calculated using the South Portfolio Cost Differential, which is determined by comparing the projected cost of serving South Sales customers, based on Union's South portfolio, to the cost of serving South Sales service customers based on the Ontario Landed Reference Price. The Ontario Landed Reference Price is calculated by adding the TCPL EDA toll and fuel to the Alberta Border Reference Price.

Filed: 2010-11-30 EB-2010-0300 Exhibit B1.7 Page 2 of 2

Using this approach ensures in-franchise transportation rates appropriately recover costs to serve each zone and is consistent with Union's Board approved Quarterly Rate Adjustment Mechanism.

c) Union's approach outlined in the response to a) & b) above assures transportation customers pay the appropriate transportation costs to serve each zone. Resulting differentials by operating area may be smaller or greater depending on the costs to serve.

UNION GAS LIMITED

Answer to Interrogatory from Board Staff

Reference: Exhibit A, page 6

Will the rate classes that benefit from the proposed long- term contracts be responsible for any additional costs related to these contracts (e.g., decontracting costs, underutilized transportation capacity)?

Response:

Union does not anticipate any additional costs other than the transportation demand and variable charges that will be incurred related to these contracts. Union will make every effort to fully utilize the capacity as a result of the proposed long-term contracts however, to the extent that the transportation contracts are not fully utilized as a result of warmer than expected weather, for example, unabsorbed demand charges ("UDC") will be incurred and recovered through the deferral disposition proceeding. This is the same process used for the recovery of UDC from any other transportation contract.

Filed: 2010-11-30 EB-2010-0300 Exhibit B1.9 Page 1 of 3

UNION GAS LIMITED

Answer to Interrogatory from Board Staff

Reference: Exhibit A, page 6

At Exhibit A, page 6 of 14, Union states that "should Union's purchases on behalf of in-franchise customers decline drastically during the course of the Niagara/Kirkwall supply contract, Union has sufficient flexibility within the balance of its portfolio to decontract supply from other sources".

- a) Are there costs associated with decontracting supply from other sources? If so, what are the costs/
- b) Will Union recover these costs from its in-franchise customers?
 - (i) If so, how will these costs be recovered from Union's in-franchise customers? For example, are these costs allocated evenly across Union's delivery areas and rate classes? Please explain.
- c) Is Union able to decontract transportation from the Niagara/Kirkwall contract? What about the Parkway contracts?
- d) If so, what are the costs from decontracting transportation?
 - (i) Will these costs be recovered from Union's in-franchise customers? For example, are these costs allocated evenly across Union's delivery areas and rate classes? Please explain.
- e) What will happen if the anticipated production at Marcellus does not materialize and as a result the natural gas flows into Niagara decline?
 - (i) Does Union have a risk mitigation plan in place that addresses the risk(s) of underutilized transportation capacity in relation to the three proposed long-term transportation contracts? Please explain.
 - 1. How will Union minimize this transportation risk?
 - 2. Please explain how this risk (of underutilized transportation capacity) will be allocated between ratepayers and/or Union's shareholder.

Filed: 2010-11-30 EB-2010-0300 Exhibit B1.9 Page 2 of 3

Response:

a) Union's integrated supply plan is updated each spring for the upcoming gas year (November – October). In the event that infranchise demands were forecast to decline drastically, Union would readjust the transportation and supply portfolios to meet those reduced demands. The flexibility described above comes from two sources; Gas Supply Flexibility and Transportation Portfolio Flexibility.

Gas Supply Flexibility

As outlined in response to B1.4, Attachment 1, Union currently holds no gas supply contracts with a term greater than one year. Union also currently purchases, month to month, supply at Dawn. Dawn purchases do not require transportation contracts.

Transportation Portfolio Flexibility

As outlined in response to B1.4, Attachment 2, Union holds numerous transportation contracts that renew on an annual basis. If Union forecasts decreased demand, Dawn purchases would be ratcheted back to zero and/or Union would decontract for transportation capacity that was coming up for renewal. There would be no costs incurred as a result.

- b) There are no costs to recover.
- c) No, Union is not able to decontract transportation from any of the three long-term contracts.
- d) See response to B1.9 c) above.
- e) As was discussed in the Natural Gas Market Review, Tenessee Gas Pipeline, Empire Pipeline and National Fuel Gas have all held open seasons and have awarded capacity flowing to Niagara/Chippawa in excess of 800,000 Dth/day.

This capacity has been awarded to producers or marketers who are looking for options to move gas out of the producing basin to the best markets. Empire has since entered into a new open season for an additional 260,000 Dth/day of transport capacity to land at Chippawa.

ICF forecasts the Marcellus production in Pennsylvania alone to grow to 1.5 Bcf/d by 2012. They forecast this production to grow to 2.4 Bcf/d by 2015 and up to 3.5 Bcf/d by 2020.

Filed: 2010-11-30 EB-2010-0300 Exhibit B1.9 Page 3 of 3

Union is requesting permission to contract for 20,000 Gj/day of capacity to move gas from Niagara to Kirkwall. This represents less than 2.0% from the 1,020,000 Dth/day of capacity that will be awarded to move gas from the Marcellus producing region to the Ontario border.

Union currently purchases Indexed Gas with mixed portfolio of terms (one month, winter/summer strip, one year). It is considered highly unlikely that 20,000 Gj/day will not be available at Niagara when contracted for term.

As a result of the above, Union does not believe there is a risk of underutilized transportation capacity with respect to the three long-term contracts. However, Union mitigates risk within its overall transportation portfolio through contract term flexibility.

Further, the Parkway to EDA and Parkway to NDA capacities will be sourced from Dawn. While Dawn purchases will include Marcellus supply as marketers and suppliers move the gas to liquid markets, the Dawn Hub offers supply from across North America. Supplies at Dawn are not reliant on Marcellus production.

Union is applying for the cost consequences of three long term contracts. Any costs associated with those contracts, if approved, would be recovered through rates, similar to any other contract within Union's transportation portfolio.

Filed: 2010-11-30 EB-2010-0300 Exhibit B1.10 Page 1 of 2

UNION GAS LIMITED

Answer to Interrogatory from Board Staff

In the LTC Report, the Board indicated that it needed to understand the potential impacts on existing transportation pipeline facilities when approving long-term contracts for new infrastructure. Section 5.2 of the LTC guidelines states that an assessment of the potential impacts on existing transportation pipelines in the market (in terms of Ontario customers) is required.

- a) Is Union planning to decontract transportation for the equivalent volume associated with the proposed long-term transportation contracts (i.e., 51,101 GJ/d)? If so, when?
- b) Please identify the pipeline(s) and route(s) for decontracting transportation.
 - i) What is the potential financial impact of decontracting transportation capacity of over 50,000 GJ/d on existing transportation pipeline facilities (in terms of Ontario customers)?
 - ii) Will this potential impact affect in-franchise customers similarly across Union's delivery areas? For example, will this potential impact affect Union's captive customers in northern and eastern delivery areas differently than customers in Union's southern delivery area? Please explain.

Response:

- a) Union is planning to decontract the following in the transportation portfolio as a result of these new contracts in order to provide a balanced transportation portfolio:
 - a. Union Parkway Belt to EDA of 20,000 GJ/d will replace Empress to EDA of 10,000 GJ/d and STS EDA of 10,000 GJ/d as of November 1, 2013.
 - b. Union Parkway Belt to NDA of 10,000 GJ/d will replace Empress to NDA of 10,000 GJ/d as of November 1, 2013.
 - c. Niagara to Kirkwall of 21,101 GJ/d will be used to replace a portion of Dawn purchased supply from November 1, 2011 to November 30, 2015. In December 2015, it will replace a portion of Alliance based supply.
- b) Based on the landed cost analysis provided in Appendix D and Appendix F compared to the contracts that are currently serving these infranchise needs, this de-contracting will result in a total cost savings \$11.5 million, that is \$15.6 million in cost savings in the North and incremental cost of \$4.1 million in the South for system supply customers over the 10 year term of the contracts. In future years, South System

Filed: 2010-11-30 EB-2010-0300 Exhibit B1.10 Page 2 of 2

Supply customers could expect to see a savings of approximately \$850,000 per year based on current forecast data. Regarding impacts on TCPL tolls, Union is not aware of how TCPL will respond to this change and whether this capacity would be sold to other shippers.

UNION GAS LIMITED

Answer to Interrogatory from Board Staff

What are the implications and consequences should the Board decide not approve this Application?

Contracting on the paths from Parkway to the EDA and NDA will allow Union to begin offering its NDA and EDA customer base gas supply sourced at Dawn which, in turn, provides access to existing supply sources originating from across the continent as well as new emerging sources of supply. At present, both the EDA and NDA supply portfolios are made up exclusively of Western Canadian sourced supply delivered via the TCPL mainline. Union's System Supply customers in these delivery areas are captive to the price of gas in Western Canada and the cost of transportation to Ontario. The addition of the Parkway contracts brings much needed diversity and security of supply to these customers. Long term markets in Union's franchise help to underpin the expansion of new infrastructure in the province for the benefit of all customers. By acquiring the Parkway to EDA and NDA capacity, Union is supporting the efforts of TransCanada and its other shippers in removing a bottleneck that is impeding the flow of natural gas in the

Contracting on the path from Niagara to Kirkwall will allow Union's system supply customers to access the Marcellus shale, the most rapidly growing supply basin on the continent. Attracting this supply to Ontario will improve the diversity and security of supply to the province and helps to shield Union's customers from declining production in the WCSB. In addition, system integrity benefits result from the connection to more receipt points along Union's system. As with the contracts above, long term markets in Union's franchise help to support the efforts of TransCanada to modify their infrastructure to connect Ontario to a separate supply basin.

The implications and consequences should the Board decide not to approve this application is that the above noted benefits will not materialize.

province.

UNION GAS LIMITED

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

Question:

Please provide copies of the materials TransCanada Pipelines Limited ("TCPL") provided to bidders with respect to the July 5 to August 25 Open Season referenced in paragraph 4 of the Application.

Response:

Please see the attachment.

Canadian Mainline New Capacity Open Season

Revised July 9, 2010

TransCanada is announcing a New Capacity Open Season (the "Open Season") for firm services on its Canadian Mainline System. The Open Season will start on July 5, 2010 and will end on August 25, 2010 at 8:00 a.m. Calgary time.

NEW CAPACITY OPEN SEASON AND BIDDING PROCEDURE HIGHLIGHTS

- Bids must be received by TransCanada no later than 8:00 a.m. MST on August 25, 2010.
- TransCanada is receiving bids for the following services:
 - Firm Transportation (FT),
 - Storage Transportation Service (STS),
 - Storage Transportation Service Linked (STS-L),
 - Firm Transportation Short Notice (FT-SN), and
 - Short Notice Balancing (SNB).

System Segment Capacity:

o TransCanada will accept bids (for evaluation and allocation) for all paths on its Canadian Mainline System.

New Service Commencement Date:

- Transportation services to commence September 1, 2011, or later, for paths with a receipt point of Niagara or Chippawa and a delivery point of Dawn/Union SWDA, St. Clair or Kirkwall.
- Transportation services to commence November 1, 2013 for all other paths on the Canadian Mainline System, including paths out of Parkway

While it is anticipated that firm transportation will be available to points on the Canadian Mainline as of the transportation services commencement dates listed above, there may be factors that limit capacity or may delay the in-service date including without limitation the following:

- a. aggregate new requests being greater than anticipated and/or requiring significant quantities of additional capacity; or
- b. contractual arrangements being required on other pipelines; or
- greater time required for regulatory approvals and/or construction.

• Term:

o Ten (10) year term for New Capacity bids.

· Conditional Bidding:

Canadian Mainline capacity bids can be conditioned on another Canadian Mainline capacity bid.

Toll:

o All capacity is offered at the approved Mainline Toll. The current toll can be found at NEB Approved Mainline Toll

. Minimum Acceptable Quantity:

- o May be specified by Bidder in the event that prorating of capacity is necessary.
- Upon the close of the Open Season, TransCanada will proceed with accommodating Accepted Bids in the most effective manner.
- Please be advised that TransCanada has initiated a rate and service design review to enhance the competitiveness of
 its short & long haul rates and services which may result in changes being proposed to the current rate structure.
- Please refer to the Transportation Access Procedures (<u>TAPs</u>) for additional terms and conditions and information

EB-2010-0300 Exhibit B2.1 Attachment Page 2 of 4

HOW TO BID AND NOTIFICATION

- Bidders must submit a completed bid via the <u>Paper Version</u> or <u>Electronic Version</u> and fax to TransCanada's Mainline Contracting Department at (403) 920-2343.
- Bids must be received by 8:00 a.m. MST on August 25, 2010.
- All bids received will be evaluated together for allocation purposes.
- Notification of successful New Capacity bids will be within fifteen (15) banking days.

OPEN SEASON DEPOSIT INFORMATION & PROCEDURE

Successful Bidders who currently hold a contract with TransCanada are not required to provide a deposit with each bid, although failure to accept awarded capacity will result in a fee charged by TransCanada to Bidder's existing transportation account.

Successful Bidders who do not currently hold a contract with TransCanada shall be required to provide a deposit, within two (2) banking days of the close of the New Capacity Open Season, with each bid provided to TransCanada, equal to the lesser of:

- One (1) month demand charges for the maximum capacity set out on the Bid Form, calculated based on the tolls in place when the Bid Form was submitted; or
- \$10,000 (Cdn).

The deposit can be provided by either wire transfer or cheque. Please contact your Mainline Customer Account Manager to obtain the TransCanada Bank Account information for wire transfers or to obtain the address for mailing cheques.

SUPPORTING DOCUMENTATION FOR NEW SERVICES

For New Capacity bids, Bidders must provide the supporting documentation for their requested services as set out in the National Energy Board's ("NEB") Filing Manual in order to qualify as acceptable bids under (TAPs). This information must be provided to TransCanada within 5 banking days from the date the successful bidder receives a precedent agreement from TransCanada. Bidders are strongly encouraged to contact one of the TransCanada staff listed below to discuss filing requirements. Such information will form the basis of TransCanada's NEB application.

Information provided by bidders will be on a confidential basis up to the time of a regulatory application to the NEB; any specific requirements for confidentiality will be addressed on an individual basis.

QUESTIONS

If you have any questions about this New Capacity Open Season or any other questions related to services on the Canadian Mainline, please contact your Customer Account Manager.

Calgary

Gordon Betts

Phone: 1.403.920.6834

Email: gordon_betts@transcanada.com

Michael Mazier

Phone: 1.403.920.2651

Email: mike mazier@transcanada.com

Toronto

Amelia Cheung

Phone: 1.416.869.2115

Email: amelia cheunq@transcanada.com

Lisa DeAbreu

Phone: 1.416.869.2171

Email: lisa deabreu@transcanada.com

Reena Mistry

Phone: 1.416.869.2159

Email: reena mistry@transcanada.com

Completed bids must be faxed by 8:00 a.m. MST on August 25, 2010 to:

Mainline Contracting Fax Number (403) 920-2343

APPENDIX

LINKS to Additional Information:

- New Capacity Open Season Bid Form (Paper Version)
- New Capacity Open Season Bid Form (Electronic Version)
- . Mainline Tariffs: Toll Schedules & Pro Forma Contracts
- TAPs: Transportation Access Procedure
- 2010 Mainline Tolls Final 2010
- Index of Customers showing recent contracts and renewals
- Other TransCanada Information: http://www.transcanada.com/customerexpress/index.html

GST Procedures for FT, FT-SN, STS, STS-L - FOR EXPORT POINTS ONLY

TransCanada is required to charge the Goods and Services Tax (GST) or Harmonized Sales Tax (HST), whichever is applicable, on transportation of gas that is consumed in Canada. The GST is set at 5% while HST is set at 13% in Ontario.

Shippers may provide a Declaration which notifies TransCanada that the Shipper's STFT contract is intended to serve an export market and should be charged 0% GST or 0% HST, on any Unutilized Demand Charges (UDC).

The Declaration Form is available at the following link:

FT GST/HST Declaration

Shippers may also zero-rate GST or HST on the associated transportation demand, commodity and pressure charges by making a Declaration on the nomination line in NrG Highway.

Please note:

- · Declarations may only take effect on the first day of a month.
- A Declaration cannot be applied retroactively.
- A Declaration supersedes previous Contract Declarations.

EB-2010-0300 Exhibit B2.1 Attachment Page 4 of 4

- A single Declaration form is used for all of a shipper's firm export contracts eligible for zero-rating of UDC.
- If a Shipper zero-rates their nomination but does not execute a Declaration the Shipper will be charged 0% GST or 0% HST on their nomination but all associated UDCs will be charged the current applicable GST or HST rate.

Please refer to the following website for additional information on GST/HST regulations and rebates

http://www.cra-arc.gc.ca/tx/bsnss/tpcs/gst-tps/gnrl/txbl/trnsprttn/menu-eng.html

For more information on TransCanada's GST/HST practices, contact Mainline Contracting@transcanada.com.

UNION GAS LIMITED

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

Question:

What were the overall results of the Open Season in terms of bids for existing unutilized TCPL capacity and yet to be constructed facilities?

Response:

Union does not have the information requested. TCPL is not required to publish the results of their binding open season and, to Union's knowledge, has not done so.

UNION GAS LIMITED

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

Question:

The evidence at Exhibit A, pages 3 and 11 indicates that TCPL is expected to apply to the National Energy Board ("NEB") for approval of new facilities to accommodate Union's proposed 10-year contract for firm service from Niagara to Kirkwall, its proposed 10-year firm service contract for short haul services from Parkway to Union's Eastern Delivery Area ("EDA") and its proposed 10-year short haul contract for service from Parkway to Union's Northern Delivery Area ("NDA"). In connection with this evidence, please provide the following information:

- a) What is Union's current understanding of the total capacity of the incremental facilities TCPL proposes to add between Niagara and Kirkwall?
- b) What is Union's current understanding of the total capacity TCPL is planning to add to accommodate incremental Parkway to EDA firm service? And
- c) What is Union's expectation of the total capacity TCPL plans to add to accommodate incremental Parkway to NDA firm service?

Response:

It is Union's expectation that TCPL will expand its existing facilities from Niagara to Kirkwall, Parkway to EDA and Parkway to NDA commensurate with market support for transportation along those paths. Union is not able to provide specific responses to the above questions as TCPL is not required to publish the results of their binding open season and, to Union's knowledge, has not done so.

UNION GAS LIMITED

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

Question:

Under the contract documents Union proposes to execute with TCPL that are found at Appendices B and C of Exhibit A, are the TCPL tolls Union is agreeing to pay subject to change from time to time by the NEB?

Response:

Yes, TCPL is a cost of service pipeline regulated by the NEB that adjusts tolls annually.

UNION GAS LIMITED

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

Question:

We understand that the issue of TCPL tolling is a matter under intense discussion at the TCPL Tolls Task Force ("TTF") having regard to the increasing degree of underutilization of TCPL long haul capacity. In this connection, please provide the following information:

- a) Is Union a member of the TCPL TTF? And if so, please describe what Union is doing to protect the interests of its ratepayers with respect to TCPL tolling alternatives being discussed?
- b) Please provide copies of any documents pertaining to the tolling options under discussion at the TCPL TTF as soon as the outcome of those discussions can be disclosed on the public record.

Response:

- a) Yes, Union is an active member of TCPL's Tolls Task Force representing the interests of its ratepayers by advancing proposals and positions consistent with these interests.
- b) Discussions at the Tolls Task Force are confidential. If/When an application is filed with the NEB, details relevant to the application will be disclosed as required to the public.

UNION GAS LIMITED

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

Question:

Assume that there is a possibility that, at the request of some interested parties, the NEB could follow the Federal Energy Regulatory Commission ("FERC") approach and require incremental tolling of the new TCPL facilities that Union describes in its evidence. Under this assumption, please provide Union's best estimates of the incremental tolls that would be payable for the following:

- a) The Niagara to Kirkwall facilities for which the current TCPL toll is \$2.75281/GJ per month:
- b) The Parkway to the Union EDA toll compared to the current toll of \$5.889043/GJ per month; and
- c) The Parkway to NDA incremental toll compared to the current toll of \$8.93682/GJ per month.

Response:

Union does not have access to the required information to perform an incremental tolling analysis on TCPL's facilities, or to make a reasonable estimate of the potential changes to tolls relative to the existing rolled-in methodology.

UNION GAS LIMITED

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

Question:

Assume that there is a possibility that, at the request of some interested parties, the NEB could materially decrease the TCPL rolled-in toll for long haul service and materially increase the TCPL rolled-in tolls for short haul services. Under this assumption, please provide copies of Appendix D and Appendix F to show the results in a scenario where TCPL long haul tolls decrease by 25% and its short haul tolls increase by 25%.

Response:

Union does not believe the scenario as described above is an adequate representation of potential future TCPL tolls, however, the requested scenarios are provided at attachments 1 and 2.

Long-term Transportation Contracting Analysis - TCPL Long Haul Demand decreased by 25%, Short Haul Demand increased by 25%

				Unitized			100% LF			
		Basis		Demand	Commodity		Transportation			
		Differential	Supply Cost	Charge	Charge	Fuel Charge	Inclusive of Fuel	Landed Cost	Landed Cost	Point of
Route	Point of Supply	\$US/mmBtn	\$US/mmBtu	\$US/mmBto	\$US/mmBtu	\$US/mmBtu	\$US/mmBtu	\$US/mmBtu	\$Cdn/G	Delivery
(¥)	(8)	(c)	(D) = Nymex + C	(E)	(F)	(9)	(I) = E + F + G	(J) = D + I	(K)	(L)
Vector - 2008	Chicago	0.26	7.61	0.2500	0.0019	0.0822	0.3341	\$7.95	\$8.23	Dawn
Trunkline/Panhandle	Trunkline Field Zone	0.12	7.48	0.1900	0.0274	0.3305	0.5479	\$8.03	\$8.31	Dawn
Panhandle Longhauf	Panhandle Field Zone	-0.34	7.01	0.4251	0.0442	0.3268	0.7961	\$7.81	\$8.09	Dawn
Alliance/Vector	Alliance Field Zone	-0.66	6.70	1.6209	-0.2934	0.3683	1.6957	\$8.39	\$8.69	Dawn
TCPL SWDA	Empress	-0.31	7.05	0.9472	0.0541	0.1974	1.1987	\$8.25	\$8.54	Dawn
TCPL Niagara	Niagara	0.84	8.20	0.1092	0.0000	0.000	0.1092	\$8.31	\$8.61	Dawn

Assumptions used in Devleoping Long-term Transportation Contracting Analysis:	ping Long-term Transportati	on Contracting	Analysis:										
Annual Gas Supply & Fuel Ratlo Forecasts	Point of Supply Col (B) above	2012 \$US/mmBtu	2013 \$US/mmBtu	2014 \$US/mmBtu	2015 \$US/mmBtu	2016 \$US/mmBtu	2017 \$US/mmBtu	2018 \$US/mmBtu	2019 \$US/mmBtu	2020 \$US/mmBtu	2021 \$US/mmBtu	Average Annual Gas Supply Cost \$US/mmBtu Col (D) above	Fuel Ratio Forecasts Col (G) above
Henry Hub (NYMEX) \$US/mmBtu		\$5.91	\$6.18	\$6.45	\$6.99	\$6.98	\$7.05	\$7.85	\$8.25	\$8.66	\$9.24	\$7.36	
Vector - 2008	Chicago	\$6.09	\$6.37	\$6.67	\$7.26	\$7.20	\$7.30	\$8.11	\$8.54	\$8.95	\$9.63	\$7.61	1.08%
Trunkline/Panhandle	Trunkline Field Zone	\$5.95	\$6.24	\$6.54	\$7.11	\$7.10	\$7.19	\$7.99	\$8.41	\$8.82	\$9.42	\$7.48	4.42%
Panhandle Longhaul	Panhandle Field Zone	\$5.62	\$5.87	\$6.10	\$6.63	\$6.58	\$6.69	\$7.49	\$7.90	\$8.32	\$8.93	\$7.01	4.46%
Alliance/Vector	Alliance Field Zone	\$5.27	\$5.53	\$5.78	\$6.31	\$6.25	\$6.42	\$7.19	\$7.60	\$7.99	\$8.62	\$6.70	5.50%
TCPL SWDA	Empress	\$5.56	\$5.84	\$6.12	\$6.68	\$6.63	\$6.78	\$7.56	\$7.97	\$8.37	\$8.99	\$7.05	2.80%
TCPL Niagara	Niagara	\$6.50	\$6.84	\$7.22	\$7.88	\$7.85	\$7.93	\$8.74	\$9.18	\$9.59	\$10.24	\$8.20	%00.0

Sources for Assumptions:

ICF International; April 2010 Gas Supply Prices (Col D):

Average ratio over the previous 12 months or Pipeline Forecast Fuel Ratios (Col G):

Transportation Tolls (Cols E & F Tolls in effect on Alternative Routes at the time of Union's Analysis

\$1.093 CDN 1.055056 1 dth ≈ 1 mmBtu ≈ Energy Conversions (Cal K) Foreign Exchange (Col K)

Union's Analysis Completed:

Long-term Transportation Contracting Analysis - TCPL Long Haul Demand decreased by 25%, Short Haul Demand increased by 25%

1			· · · · · · · · · · · · ·					· · · · · · · · · · · · · · · · · · ·		-	, ,
				Unitized			100% LF				
		Basis		Demand			Transportation				
		Differential	Supply Cost	Charge		Fuel Charge	Inclusive of Fuel	Landed Cost	21	Point of	
Route	Point of Supply	\$US/mmBtn	\$US/mmBtn	\$US/mmBtu	\$US/mmBtn	\$US/mmBta	\$US/mmBtu		\$Cdn/Gi	Delivery	
€	(8)	(c)	(D) = Nymex + C	(E)	(F)	(9)	(I) = E + F + G (J) = D + I	(1) = D + 1	(X)	(F)	
Dawn to EDA	Dawn	0.68	8.39	0.3088	0.0068	0.1051	0.4207	\$8.81	\$9.13	EDA	
Dawn to NDA	Dawn	0.68	8.39	0.4296	0.0111	0.1230	0.5638	\$8.96	\$9.28	NDA	
Dawn to WDA	Dawn	0.68	8.39	0.9938	0.0310	0.2023	1.2272	\$9.62	\$9.97	WDA	
TCPL EDA	Empress	-0.30	7.42	1.1371	0.0652	0.2381	1.4404	\$8.86	\$9.17	EDA	
TCPL NDA	Empress	-0.30	7.42	0.8742	0.0498	0.1876	1.1116	\$8.53	\$8.83	NDA	
TCPL WDA	Empress	-0.30	7.42	0.5663	0.0318	0.1216	0.7198	\$8.14	\$8.43	WDA	

Assumptions used in Devieoping Long-term Transportation Contracting Analysis:

vipply & Fuel Point of Supply 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 sts Col (B) above \$US/mmBtu													Average	
Point of Supply 2013 2014 2016 2016 2019 2020 2021 2022 Col (B) above \$105/mmBtu													Supply Cost	Fuel Ratio
YMEX) Solitary \$10S/mmBtu \$10S/mmBtu <th>Annual Gas Supply & Fuel</th> <th>Point of Supply</th> <th></th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> <th>2018</th> <th>2019</th> <th>2020</th> <th>2021</th> <th>2022</th> <th>\$US/mmBtu</th> <th>Forecasts</th>	Annual Gas Supply & Fuel	Point of Supply		2014	2015	2016	2017	2018	2019	2020	2021	2022	\$US/mmBtu	Forecasts
Dawn \$6.18 \$6.45 \$6.99 \$6.98 \$7.05 \$7.85 \$8.25 \$8.66 \$9.24 \$9.50 Dawn \$6.65 \$7.01 \$7.66 \$7.63 \$7.72 \$8.54 \$8.98 \$9.40 \$10.02 \$10.31 Dawn \$6.65 \$7.01 \$7.66 \$7.63 \$7.72 \$8.54 \$8.98 \$9.40 \$10.02 \$10.31 Dawn \$6.65 \$7.01 \$7.66 \$7.63 \$7.72 \$8.54 \$8.98 \$9.40 \$10.02 \$10.31 Empress \$5.84 \$6.62 \$7.63 \$7.72 \$8.54 \$8.98 \$9.40 \$10.02 \$10.31 Empress \$5.84 \$6.12 \$6.68 \$6.78 \$7.56 \$7.97 \$8.37 \$8.99 \$9.23 Empress \$5.84 \$6.12 \$6.68 \$6.78 \$7.56 \$7.97 \$8.37 \$8.99 \$9.23	Ratio Forecasts	Col (B) above		\$US/mmBtu	\$US/mmBtn	\$US/mmBtn	\$US/mmBtu	\$US/mmBtn	\$US/mmBtn	\$US/mmBtu	\$US/mmBtu	\$US/mmBtn	Col (D) above	Col (G) above
Dawn \$6.65 \$7.01 \$7.66 \$7.72 \$8.54 \$8.98 \$7.72 \$8.54 \$8.98 \$9.24 \$9.50 Dawn \$6.65 \$7.01 \$7.66 \$7.63 \$7.72 \$8.54 \$8.98 \$9.40 \$10.02 \$10.31 Dawn \$6.65 \$7.01 \$7.66 \$7.63 \$7.72 \$8.54 \$8.98 \$9.40 \$10.02 \$10.31 Dawn \$6.65 \$7.01 \$7.66 \$7.63 \$7.72 \$8.54 \$8.98 \$9.40 \$10.02 \$10.31 Empress \$5.84 \$6.12 \$6.63 \$6.78 \$7.56 \$7.97 \$8.98 \$9.40 \$10.02 \$10.31 Empress \$5.84 \$6.12 \$6.63 \$6.78 \$7.56 \$7.97 \$8.93 \$9.23 Empress \$5.84 \$6.12 \$6.63 \$6.78 \$7.56 \$7.97 \$8.99 \$9.23	Henry Hub (NYMEX)													
Dawn \$6.65 \$7.01 \$7.66 \$7.63 \$7.72 \$8.54 \$8.98 \$9.40 \$10.02 \$10.31 Dawn \$6.65 \$7.01 \$7.66 \$7.63 \$7.72 \$8.54 \$8.98 \$9.40 \$10.02 \$10.31 Dawn \$6.65 \$7.01 \$7.66 \$7.63 \$7.72 \$8.54 \$8.98 \$9.40 \$10.02 \$10.31 Empress \$5.84 \$6.12 \$6.68 \$6.78 \$7.56 \$7.97 \$8.99 \$9.23 Empress \$5.84 \$6.12 \$6.68 \$6.53 \$6.78 \$7.56 \$7.97 \$8.37 \$8.99 \$9.23	\$US/mmBtu		\$6.18	\$6.45	\$6.99	\$6.98	\$7.05	\$7.85	\$8.25	\$8.66	\$9.24	\$9.50	\$7.72	
Dawn \$6.65 \$7.01 \$7.66 \$7.63 \$7.72 \$8.54 \$8.98 \$9.40 \$10.02 \$10.31 Dawn \$6.65 \$7.01 \$7.66 \$7.63 \$7.72 \$8.54 \$8.98 \$9.40 \$10.02 \$10.31 Empress \$5.64 \$6.65 \$7.65 \$7.75 \$8.54 \$8.98 \$9.03 Empress \$5.84 \$6.12 \$6.68 \$6.3 \$6.78 \$7.56 \$7.97 \$8.37 \$8.99 \$9.23 Empress \$5.84 \$6.12 \$6.68 \$6.53 \$6.78 \$7.56 \$7.97 \$8.37 \$8.99 \$9.23	Dawn to EDA	Dawn	\$6.65	\$7.01	\$7.66	\$7.63	\$7.72	\$8.54	\$8.98	\$9.40	\$10.02	\$10.31	\$8.39	1.24%
Dawn \$6.65 \$7.01 \$7.66 \$7.72 \$8.54 \$8.98 \$9.40 \$10.02 \$10.31 Empress \$5.84 \$6.12 \$6.68 \$6.63 \$6.78 \$7.56 \$7.97 \$8.37 \$8.99 \$9.23 Empress \$5.84 \$6.12 \$6.68 \$6.63 \$6.78 \$7.56 \$7.97 \$8.37 \$8.99 \$9.23 Empress \$5.84 \$6.12 \$6.68 \$6.63 \$6.78 \$7.56 \$7.97 \$8.37 \$8.99 \$9.23	Dawn to NDA	Dawn	\$6.65	\$7.01	\$7.66	\$7.63	\$7.72	\$8.54	\$8.98	\$9.40	\$10.02	\$10.31	\$8.39	1.45%
Empress \$5.84 \$6.12 \$6.68 \$6.63 \$6.75 \$7.56 \$7.97 \$8.37 \$8.99 \$9.23 Empress \$5.84 \$6.12 \$6.68 \$6.63 \$6.75 \$7.97 \$8.37 \$8.99 \$9.23 Empress \$5.84 \$6.12 \$6.68 \$6.63 \$6.75 \$7.56 \$7.97 \$8.37 \$8.99 \$9.23	Dawn to WDA	Dawn	\$6.65	\$7.01	\$7.66	\$7.63	\$7.72	\$8.54	\$8.98	\$9.40	\$10.02	\$10.31	\$8.39	2.38%
Empress \$5.84 \$6.12 \$6.68 \$6.63 \$6.78 \$7.56 \$7.97 \$8.37 \$8.99 \$9.23 Empress \$5.84 \$6.12 \$6.68 \$6.63 \$6.75 \$7.56 \$7.97 \$8.37 \$8.99 \$9.23	TCPL EDA	Empress	\$5.84	\$6.12	\$6.68	\$6.63	\$6.78	\$7.56	\$7.97	\$8.37	\$8.99	\$9.23	\$7.42	3.21%
Empress \$5.84 \$6.12 \$6.68 \$6.63 \$6.78 \$7.56 \$7.97 \$8.37 \$8.99 \$9.23	TCPL NDA	Empress	\$5.84	\$6.12	\$6.68	\$6.63	\$6.78	\$7.56	25.97	\$8.37	\$8.99	\$9.23	\$7.42	2.53%
	TCPL WDA	Empress	\$5.84	\$6.12	\$6.68	\$6.63	\$6.78	\$7.56	\$7.97	\$8.37	\$8.99	\$9.23	\$7.42	1.64%

Sources for Assumptions:

ICF International; April 2010 Gas Supply Prices (Col D):

Average ratio over the previous 12 months or Pipeline Forecast Fuel Ratios (Col G):

Transportation Tolls (Cols E & F Tolls in effect on Alternative Routes at the time of Union's Analysis

\$1 US= Foreign Exchange (Col K)

1.055056 GJs 1 dth = 1 mmBtu = Energy Conversions (Col K)

Union's Analysis Completed:

UNION GAS LIMITED

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

Question:

What degree of utilization does Union expect to make of the incremental facilities that it has contracted to acquire from TCPL under all of the assumptions described in the evidence, including the landed cost estimates?

Response:

The anticipated utilization of these contracts is 100% Load Factor.

UNION GAS LIMITED

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

Question:

How is the degree of Union's utilization of the incremental TCPL facilities likely to change if the landed cost estimates Union has made are materially low?

Response:

Union does not expect any change to the anticipated utilization of these contracts.

UNION GAS LIMITED

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

Question:

Has Union made commitments to obtain gas supply to support the incremental TCPL facilities on which it has contracted service? If so, then please provide complete details of those incremental gas supply commitments.

Response:

No, Union has not made commitments to obtain gas supply to support the incremental TCPL facilities on which it has contracted service.

UNION GAS LIMITED

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

Question:

If Union has not yet made any gas supply commitments to support its use of the incremental TCPL facilities, then please describe the source and quantity of supply that Union expects to be available to respond to its needs and how and when it proposes to contract for those supplies.

Response:

For Parkway-EDA and Parkway-NDA capacities, Union will source the supply at Dawn. With a robust, liquid market at Dawn, Union anticipates no lack of supply to fill these contracts. Union will contract for the supply using the Request for Proposal Procedure ("RFP") as outlined in System Gas Procurement Policy and Procedures. Union expects to issue a RFP for this gas in October, 2013 for delivery commencing November 1, 2013.

For Niagara – Kirkwall capacity, Union will source the supply at Niagara. Please refer to response to Exhibit B1.9 e) regarding source and quantity of supply. Union will contract for the supply using the RFP Procedure as outlined in System Gas Procurement Policy and Procedures. Union expects to issue a RFP for this gas in October, 2012 for delivery commencing November 1, 2012.

UNION GAS LIMITED

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

Question:

Please provide a complete list of each contract in Union's gas supply portfolio showing, for each gas supply contract, the date of the contract, the gas supplier, the volume purchased, the point of purchase, the adjustment dates, if any, over the duration of the contract and the termination date of each contract.

Response:

Please refer to Exhibit B1.4 a).

UNION GAS LIMITED

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

Question:

With respect to natural gas demand and supply within Union's franchise area, please provide the following information:

- a) Union's long term (at least 10 years) forecast of demand within its franchise area; and
- b) Union's year-by-year forecast of the extent to which it expects the demands in its franchise area to be satisfied with system gas and non-system gas respectively.

Response:

Please see the attachment.

Total Demand by System and Non-System Supplies

	Nov 10	Nov 11	Nov 12	Nov 13	Nov 10 Nov 11 Nov 12 Nov 13 Nov 14 Nov 15 Nov 16 Nov 17 Nov 18 Nov 19	Nov 15	Nov 16	Nov 17	Nov 18	Nov 19
	- Oct 11	- Oct 12	- Oct 13	- Oct 14	Oct 11 - Oct 12 - Oct 13 - Oct 14 - Oct 15 - Oct 16 - Oct 17 - Oct 18 - Oct 19 - Oct 20	- Oct 16	- Oct 17	- Oct 18	- Oct 19	- Oct 20
Total Bundled Demands (PJs)	247	248	248	248	248	248	248	248	248	248
% of Demands met by:										
System Sales Supplies	28%	28%	28%	%85	28%	%85	%85	%85	%85	%85
Non-System Sales Supplies	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%

UNION GAS LIMITED

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

Question:

Please provide a complete list of each contract in Union's transportation contract portfolio showing, for each contract, the date of the contract, the shipper, the receipt and delivery points, the capacity contracted for, the possible adjustment dates, if any, over the duration of the contract, the termination date of each contract, and an estimate of the extent to which Union is currently utilizing the capacity under each contract.

Response:

Please refer to Exhibit B1.4 e).

UNION GAS LIMITED

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

Question:

What is Union's current expectation with respect to the extent to which its existing gas supply and transportation arrangements will be adjusted or terminated when the services that it has contracted for on the incremental facilities to be constructed by TCPL become available?

Response:

Please refer to Exhibit B1.10.

UNION GAS LIMITED

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

Question:

Please describe the adjustments Union expects to make to each of these arrangements, on any adjustment date that is available therein or on their termination dates, as a result of service becoming available on the incremental TCPL facilities described in the evidence.

Response:

Please refer to Exhibit B1.10.

UNION GAS LIMITED

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

Question:

Please describe how Union's current expectations pertaining to adjustments to or termination of existing gas supply and/or transportation contracts would likely change in a scenario where the landed costs at Niagara and in Union's EDA and NDA are materially higher than the amounts Union presents in its evidence.

Response:

If material differences are known prior to the effective date of the Precedent Agreements, which is January 31, 2011, Union would re-evaluate the landed cost analysis and use the following gas supply guiding principles to determine any necessary actions that may be required with regard to the bids.

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

Prior to January 31, 2011, Union could withdraw bids submitted in the Open Season at a potential cost of \$10,000 per bid. Once the Precedent Agreements are effective but prior to the Firm Transportation contracts being signed, Union would be responsible for its portion of the actual project costs incurred at that date if Union withdraws its bids for service. Once the Firm Transportation contracts are signed and the service is available, Union would be responsible for the transportation demand charges for the term of the contracts.

UNION GAS LIMITED

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

Question:

Please elaborate upon the "sufficient flexibility within the balance of its portfolio", described at Exhibit A, page 6, that Union has to decontract in both its gas supply and transportation portfolios.

Response:

Please refer to Exhibit A, Appendix E. Transportation flexibility each year is denoted by the "Uncontracted" portion of each bar. Union currently does not purchase supply for a term longer than one year. Refer to Exhibit B1.9 a).

UNION GAS LIMITED

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

Question:

What are the supply risks relating to the <u>production</u> of Marcellus Shale Gas (as opposed to the delivery of such gas to Niagara)?

Response:

At a high level, some of the supply risks related to the production of Marcellus Shale gas are summarized below. Although these risks can impact the rate of production from the Marcellus Shale, Union does not expect any impact to be significant enough to affect the three long-term contracts Union is seeking approval for.

Supply risks relating to the production of Marcellus Shale Gas:

- Overall market demand
- Infrastructure capacity
- Price of natural gas
- Ability to obtain lease positions
- Rig and oil field services availability
- Regulatory and environmental restrictions such as:
 - o Fractionation chemical restrictions to avoid groundwater contamination
 - o Moratoriums or restrictions on drilling due to environmental concerns
- Increased taxes, such as new severance taxes

UNION GAS LIMITED

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

Question:

What conditions should attach to any approvals that the Board grants in order to assure that Union's shareholder is exposed to the risk that Union's utilization of the incremental TCPL facilities is materially lower than it currently estimates?

Response:

No conditions should be attached to the approval of these contracts.

Union's role as the default system supplier is to enter into prudent transportation contracts to meet the needs of its system supply customers. The provision of the three long term contracts that Union is requesting approval for will benefit system sales customers though increased diversity and security of supply.

Union is seeking Board approval for the cost consequences of the long term contracts within this application. They will form part of the overall portfolio along with other upstream transportation contracts, none of which have conditions attached. Union does not expect any UDC due to underutilization of these contracts however, to the extent that they are not fully utilized, any UDC will be captured in the Unabsorbed Demand Cost Variance Account (179-108). This deferral account is subject to annual review through the deferral account disposition proceeding.

UNION GAS LIMITED

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

Question:

What conditions should attach to any approvals that the Board grants in order to assure that Union's shareholder is exposed to the risk that Union's utilization of other facilities, that it either owns or holds under contract with third parties, materially declines as a consequence of its utilization of the incremental TCPL facilities described in the evidence?

Response:

Please refer to Exhibit B2.20.

UNION GAS LIMITED

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

Question:

Union has made a 100,000 GJ/day commitment for service on the proposed Dawn Gateway Pipeline. Please explain why that transportation contract does not appear in Appendix E?

Response:

The Dawn-Gateway contract is not part of Union's regulated transportation portfolio and therefore is not shown in Appendix E.

UNION GAS LIMITED

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

REF: EX. A, PAGE 1

Preamble: Union has noted that its request for pre-approval uses the EB-2008-0280 guidelines for the cost consequences of long-term contracts that support the development of new natural gas infrastructure.

For the Niagara Contract, to Union's knowledge:

- a) Is there any additional infrastructure required beyond the identified TCPL changes to their Niagara facilities?
- b) What is the order of magnitude of investment required by TCPL?
- c) Is it economically viable for TCPL given the volumes contracted in the open season?

Response:

Union does not have access to the information requested. However, it is Union's assumption that, based on Union being awarded capacity, this project has met TCPL's internal economic thresholds.

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UNION GAS LIMITED

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

REF: EX. A, PAGE 1

Preamble: Union has noted that its request for pre-approval uses the EB-2008-0280 guidelines for the cost consequences of long-term contracts that support the development of new natural gas infrastructure.

For the Parkway Contracts, to Union's knowledge:

- a) Is there any additional infrastructure required to provide these contracted demands?
- b) If infrastructure is required, what is the order of magnitude of investment required by TCPL?
- c) With that level of investment, is it economic to proceed with the level of contracts Union has committed to?

Response:

Please see the response at Exhibit B3.1.

UNION GAS LIMITED

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

NIAGARA CONTRACTS

REF: EX. A., PAGE 4, 5

Union stated that it coordinated its open season for Kirkwall to Dawn capacity with TCPL¹ and that this contracting is necessary to increase diversity and security of supply.

1 EB-2010-0296 Union Application, dated September 30, 2010, Exhibit A, page 5

What amount of interest in capacity was received by TCPL for the Niagara/Kirkwall?

Response:

While the timing of the open seasons was coordinated with TCPL, Union does not have access to TCPL's open season results. TCPL is not required to publish results of its binding open season and, to Union's knowledge, has not done so.

UNION GAS LIMITED

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

NIAGARA CONTRACTS

REF: EX. A., PAGE 4, 5

Union stated that it coordinated its open season for Kirkwall to Dawn capacity with TCPL1 and that this contracting is necessary to increase diversity and security of supply.

1 EB-2010-0296 Union Application, dated September 30, 2010, Exhibit A, page 5

Response:	
d) Marketers?	
c) Producers?	
b) Other utilities?	
a) Union?	
What percentage of the capacity was requested by:	
1 20-2010-0250 Ontoli Application, dated deptended 50, 2010, Bandon At page 5	

Please see the response at Exhibit B3.3.

Filed: 2010-11-30 EB-2010-0300 Exhibit B3.5 Page 1 of 2

UNION GAS LIMITED

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

NIAGARA CONTRACTS

REF: EX. A., PAGE 4, 5

Union stated that it coordinated its open season for Kirkwall to Dawn capacity with TCPL¹ and that this contracting is necessary to increase diversity and security of supply. 1 EB-2010-0296 Union Application, dated September 30, 2010, Exhibit A, page 5

If Union is not able to secure or provide answers to 3) and 4), please provide answers to those questions using Union's Kirkwall/Dawn open season (including amounts contracts for M12-X service).

Response:

Union Gas conducted two non-binding open seasons in 2010 for two new services that will provide Marcellus Shale gas production access to Dawn and the Ontario market. The new services are i) C1 transportation service from Kirkwall to Dawn and ii) M12-X transportation service.

The amount of interest received in Union's January/February non-binding open season is summarized below:

Transportation Service	Total Interest Received
C1 Kirkwall to Dawn	152,750 GJ/d
New M12-X	267,750 GJ/d
Converted M12 to M12-X	413,316 GJ/d
Total	833,816 GJ/d

As a result of the January/February open season, Union Gas executed contracts for 328,316 GJ/d of M12-X transportation service (128,316 GJ/d from TCPL and 200,000 GJ/d from Enbridge), all of which is capacity converted from the existing M12 service.

The amount of interest received in the July/August non-binding open season is summarized below:

Transportation Service	Total Interest Received
C1 Kirkwall to Dawn	350,000 GJ/d
New M12-X	458,809 GJ/d
Converted M12 to M12-X	369,802 GJ/d
New Dawn to Kirkwall M12	29,000 GJ/d
Total	1,207,611 GJ/d

Filed: 2010-11-30 EB-2010-0300 Exhibit B3.5 Page 2 of 2

Union is still working with potential shippers from the July/August non-binding open season to determine the level of interest in the transportation services offered.

UNION GAS LIMITED

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

NIAGARA CONTRACTS

REF: EX. A., PAGE 4, 5

Union stated that it coordinated its open season for Kirkwall to Dawn capacity with TCPL¹ and that this contracting is necessary to increase diversity and security of supply.

1 EB-2010-0296 Union Application, dated September 30, 2010, Exhibit A, page 5

With the expected deliveries to Kirkwall/Dawn by other entities, why does Union believe its proposed level of contracting enhances security of supply to its customers sufficient to pay a premium over other sources for the incremental supply i.e., would the security of supply not be increased by other shippers on the same path and the pipeline being configured to allow reversal of flow?

Response:

Union does not consider the landed cost at Dawn of supply from Marcellus to reflect a premium. The landed cost of Marcellus based supply is well within the range of the other alternatives evaluated, as shown in the landed cost analysis provided at Exhibit A, Appendix D. In determining whether a Niagara to Kirkwall contract should be acquired in order to meet system supply requirements, Union Gas used the following guiding principles:

- Ensure secure & reliable gas supply to Union Gas service territory at a reasonable cost
- Minimize risk by diversifying contract terms, supply basins & upstream pipelines
- Encourage new sources of supply as well as new infrastructure to Union Gas service territory
- Meet planned peak day & seasonal gas delivery requirements
- Deliver gas to various receipt points on Union Gas system to maintain system integrity

Given the guidelines noted above, it is Union's view that adding Marcellus based supply to the system portfolio increases the overall supply diversity at a reasonable cost. Union does not rely on other shippers for security of system supply.

UNION GAS LIMITED

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

NIAGARA CONTRACTS

REF: EX. A., PAGE 4, 5

Union stated that it coordinated its open season for Kirkwall to Dawn capacity with $TCPL^1$ and that this contracting is necessary to increase diversity and security of supply. 1 EB-2010-0296 Union Application, dated September 30, 2010, Exhibit A, page 5

If Union proceeds with contracting for the Niagara/Kirkwall capacity, will it be included in the vertical slice for Direct Purchase customers? If not, why not?

Response:

Yes, the Niagara/Kirkwall capacity will be included in the vertical slice for Direct Purchase customers.

UNION GAS LIMITED

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

NIAGARA CONTRACTS

REF: EX. A., PAGE 6

Preamble: The Niagara capacity represents a 5.7% increase in deliveries for Union's sales service. Union has indicated that it will de-contract supply from other sources before it would be necessary to leave this capacity unfilled.

Does Union forecast that the additional deliveries will be met by system growth by 2012 or would Union expect to de-contract other deliveries by that time?

Response:

Please see the response at Exhibit B1.10.

UNION GAS LIMITED

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

NIAGARA CONTRACTS

REF: EX. A., PAGE 6

Preamble: The Niagara capacity represents a 5.7% increase in deliveries for Union's sales service. Union has indicated that it will de-contract supply from other sources before it would be necessary to leave this capacity unfilled.

If Union de-contracts deliveries at Parkway, what increased costs could ratepayers face on the Dawn Parkway system?

Response:

The Niagara to Kirkwall contract will not replace TCPL long haul contracts. It will not impact deliveries at Parkway nor costs on the Dawn to Parkway system. Refer to Exhibit B1.10.

UNION GAS LIMITED

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

PARKWAY CONTRACTS

REF: EX. A., APPENDIX E

Does Union have renewal decisions between now and November 2011that would allow for de-contracting of deliveries shown in Transportation Portfolio?

- a) If so, how will Union determine the appropriate amount to renew or de-contract?
- b) How will the Board and ratepayers be informed of the decision and the process used to come to the decision?

Response:

Exhibit A, Appendix E highlights the renewal decisions facing Union at November, 2011.

- a) Contracting decisions will be based on the outcomes of the 2012 Gas Supply Plan which will be completed in the spring of 2011.
- b) An Incremental Transportation Contracting Analysis (as defined in the Board's EB-2005-0520 Settlement Agreement) will be filed with the Board for any new or renewed upstream transportation contracts with a term of one year or longer.

UNION GAS LIMITED

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

PARKWAY CONTRACTS

REF: EX. A., PAGE 7

Preamble: Union states that if "TCPL encounters operational obstacles to providing service...Union could purchase an exchange service between the Niagara receipt point and Union's system."

Does Union see the exchange service being an option to the ten year contract? If not, why not?

Response:

No, Union does not see the exchange service being an option to replace the ten year contract. Union uses firm transportation contracts to meet long term firm demand to allow for security of supply and system integrity.

UNION GAS LIMITED

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

PARKWAY CONTRACTS

REF: EX. A., PAGE 9

Preamble: Union presented its concerns that the Parkway to Maple pipeline corridor was constrained². When asked during its presentation about Union's concern, TCPL countered that it did not believe the corridor is "bottlenecked".³

2 EB-2010-0199 Union Gas Presentation to the Stakeholder Conference, Submitted September 21, 2010. 3 EB-2010-0199 Stakeholder Conference Transcript 20101007, pages 72-73

What is the current capacity between Parkway and Maple?

Response:

This information has not been made public by TCPL. TCPL does not have the same informational posting requirements as Union.

UNION GAS LIMITED

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

PARKWAY CONTRACTS

REF: EX. A., PAGE 9

Preamble: Union presented its concerns that the Parkway to Maple pipeline corridor was constrained². When asked during its presentation about Union's concern, TCPL countered that it did not believe the corridor is "bottlenecked".³

2 EB-2010-0199 Union Gas Presentation to the Stakeholder Conference, Submitted September 21, 2010. 3 EB-2010-0199 Stakeholder Conference Transcript 20101007, pages 72-73

What is the contracted capacity between Parkway and Maple?

Response:

This information has not been made public by TCPL. TCPL is not required to post an index of customers or available capacity.

UNION GAS LIMITED

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

PARKWAY CONTRACTS

REF: EX. A., PAGE 9

Preamble: Union presented its concerns that the Parkway to Maple pipeline corridor was constrained². When asked during its presentation about Union's concern, TCPL countered that it did not believe the corridor is "bottlenecked". 3
2 EB-2010-0199 Union Gas Presentation to the Stakeholder Conference, Submitted September 21, 2010.
3 EB-2010-0199 Stakeholder Conference Transcript 20101007, pages 72-73

Please show a calculation for how on a peak day the contracted obligations at Parkway from TCPL north are deducted from northbound flows out of Parkway to determine peak day requirements and potential capacity constraints on the northbound line.

Response:

Union does not know the peak day design assumptions made by TCPL and the flow assumptions used to manage their system.

UNION GAS LIMITED

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

PARKWAY CONTRACTS

REF: EX. A., PAGE 9

Preamble: Union presented its concerns that the Parkway to Maple pipeline corridor was constrained². When asked during its presentation about Union's concern, TCPL countered that it did not believe the corridor is "bottlenecked".³

2 EB-2010-0199 Union Gas Presentation to the Stakeholder Conference, Submitted September 21, 2010. 3 EB-2010-0199 Stakeholder Conference Transcript 20101007, pages 72-73

If Union has a better way of demonstrating its concern about the constraint than question 14 demonstrates, please provide the numeric calculation, explanation and the assumptions made in developing the result.

Response:

TCPL's open season dated August 24, 2009 demonstrates the constraint between Parkway and Maple. The open season outlines that no transportation capacity is available from Parkway with start dates of either November 1, 2009 or March 1, 2010. TCPL has not offered capacity with a Parkway receipt until the most recent open season dated July 5, 2010. That open season specifically indicated that capacity was available for paths out of Parkway commencing November 1, 2013 but was subject to potential limitations, including the construction of facilities. From this information, Union anticipates that the Parkway easterly path (including Parkway to Maple) will remain constrained until at least November 2013, as long as TCPL's contract portfolio remains similar to today's obligations.

UNION GAS LIMITED

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

PARKWAY CONTRACTS

REF: EX. A., PAGE 9

Preamble: Union presented its concerns that the Parkway to Maple pipeline corridor was constrained². When asked during its presentation about Union's concern, TCPL countered that it did not believe the corridor is "bottlenecked".³

2 EB-2010-0199 Union Gas Presentation to the Stakeholder Conference, Submitted September 21, 2010. 3 EB-2010-0199 Stakeholder Conference Transcript 20101007, pages 72-73

For the respective NDA and EDA contracts, please provide:

- a) What percentage of the delivery area Union Gas system sales does the proposed level of contracting provide?
- b) What percentage of the delivery area Union Gas peak day requirements does the proposed level of contracting provide?

Response:

- a) The Parkway to NDA contact represents 35% of the NDA system sales supply volume. The Parkway to EDA contract represents 32% of the EDA system sales supply volume.
- b) The Parkway to NDA contract represents 6% of total NDA peak day supply volume. The Parkway to EDA contract represents 7% of total EDA peak day supply volume.

UNION GAS LIMITED

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

PARKWAY CONTRACTS

REF: EX. A, APPENDIX D

Preamble: Union presented its concerns that the Parkway to Maple pipeline corridor was constrained². When asked during its presentation about Union's concern, TCPL countered that it did not believe the corridor is "bottlenecked".³

2 EB-2010-0199 Union Gas Presentation to the Stakeholder Conference, Submitted September 21, 2010. 3 EB-2010-0199 Stakeholder Conference Transcript 20101007, pages 72-73

Please provide an explanation for the negative commodity charge in column (F) for the Alliance/Vector option.

- a) Are there any other comparable cost mitigation features to the other 5 delivery paths?
- b) If so, how have they been reflected in the analysis?

Response:

The negative value in the commodity charge column for the Alliance/Vector contract represents the Authorized Overrun Service ("AOS") and higher heat value supply that accompanies the Alliance Pipelines service; it is not a cost mitigation feature. AOS represents a right of Firm Shippers to be allocated on a pro-rata basis unused capacity on the pipeline, while paying only associated fuel charges (i.e., no additional demand charges). This right is not available on any other pipeline contract procured by Union.

UNION GAS LIMITED

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

PARKWAY CONTRACTS

REF: EX. A, APPENDIX F

Preamble: Union presented its concerns that the Parkway to Maple pipeline corridor was constrained². When asked during its presentation about Union's concern, TCPL countered that it did not believe the corridor is "bottlenecked".³

2 EB-2010-0199 Union Gas Presentation to the Stakeholder Conference, Submitted September 21, 2010. 3 EB-2010-0199 Stakeholder Conference Transcript 20101007, pages 72-73

Please expand the summary table with option of using Dawn as a supply point and STS to deliver to the respective delivery areas?

- a) What level of STS credits does Union have as of Nov. 1, 2010?
- b) What level of STS credits does Union project to have at March 31, 2011?

Please refer to Exhibit B1.10 a).

STS rights are attached to TCPL long-haul service. Utilizing Dawn as a supply point and STS to deliver the gas to the respective delivery areas is not an option available to Union at this time as current STS rights into each delivery area are fully utilized on a design day.

UNION GAS LIMITED

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

Question:

Reference: Exhibit A, Page 1

Preamble: Union states that its' evidence is "in support (of) its request for pre-approval of the cost consequences of the Niagara and Parkway contracts by the Board."

Request: Please confirm whether Union is seeking approval of just the cost consequences of the Firm Transportation contracts with TransCanada or both the cost consequences of the Firm Transportation contracts and the cost consequences associated with the purchases of gas at Niagara.

Response:

With this application, Union is seeking approval of the cost consequences of the Firm Transportation Contracts with TransCanada only. Gas supply purchases are reviewed through the Quarterly Rate Adjustment Mechanism.

UNION GAS LIMITED

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

Question:

Reference: Exhibit A, Appendix D

Preamble: Union provides its Long-term Transportation Contracting Analysis.

Request: Please provide the following information:

i) What Basis Differential has been assumed for Dawn?

- ii) Please add Dawn as a Point of Supply and amend the two tables accordingly.
- iii) For the Alliance/Vector Route please provide the pipeline specific Unitized Demand Charge, Commodity Charge and Fuel Charge included in the numbers shown on the Alliance/Vector line in the table.
- iv) Please explain and provide the assumptions and calculations underlying the negative Commodity Charge shown on the Alliance/Vector line of the first table.

Response:

- i) The 10 year average basis differential for Dawn, as used, according to ICF is NYMEX + 0.6387 USD/mmbtu.
- ii) Please see Attachment 1.
- iii) Please refer to Exhibit B1.4 e).
- iv) Refer to Exhibit B3.17 for explanation. See Attachment 2 for calculation.

Long-term Transportation Contracting Analysis

											_
		Point of	Delivery	(r)	Dawn	Dawn	Dawn	Dawn	Dawn	Dawn	Dawn
		Landed Cost	\$Cdn/G	(K)	\$8.09	\$8.23	\$8.28	\$8.31	\$8.69	\$8.87	\$8.58
		Landed Cost	\$US/mmBtn	(1) = D + I	\$7.81	\$7.95	\$7.99	\$8.03	\$8.39	\$8.56	\$8.29
100% LF	Transportation	Inclusive of Fuel	\$US/mmBtu	(I) = E + F + G	0.7961	0.3341	0.000	0.5479	1.6957	1.5145	0.0874
		Fuel Charge	\$US/mmBtn	(9)	0.3268	0.0822	0.000.0	0.3305	0.3683	0.1974	0.000
	Commodity	Charge	\$US/mmBtu	(F)	0.0442	0.0019	0.0000	0.0274	-0.2934	0.0541	0.000.0
Unitized	Demand	Charge	\$US/mmBtu	(E)	0.4251	0.2500	0.000	0.1900	1.6209	1.2630	0.0874
		Supply Cost	\$US/mmBtu	(D) = Nymex + C	7.01	7.61	7.99	7.48	6.70	7.05	8.20
	Basis	Differential	\$US/mmBtu	(c)	-0.34	0.26	0.64	0.12	-0.66	-0.31	0.84
			Point of Supply	(B)	Panhandle Field Zone	Chicago	Dawn	Trunkline Field Zone	Alliance Field Zone	Empress	Niagara
			Route	દ્વ	Panhandle Longhaul	Vector - 2008	Dawn	Trunkline/Panhandle	Alliance/Vector	TCPL SWDA	TCPL Niagara

Assumptions used in Devieoping Long-term Transportation Contracting Analysis:	ping Long-term Transportati	on Contracting A	Analysis:										
Annual Gas Supply & Fuel Ratio Forecasts	Point of Supply	2012 \$115/mmBtu	2013 \$115/mmBtu	2014 \$11S/mmBtu	2015 \$115/mmBfu	2016 \$115/mmBfu	2017 \$115/mmBtu	2018 \$115/mmBfu	2019	2020 \$US/mmBfu	2021 \$1!S/mmBtu	Average Annual Gas Supply Cost \$US/mmBtu	Fuel Ratio Forecasts
Henry Hub (NYMEX) \$US/mmBtu		\$5.91	\$6.18	\$6.45	\$6.99	\$6.98	\$7.05	\$7.85	\$8.25	\$8.66	\$9.24	\$7.36	
Vector - 2008	Chicago	\$6.09	\$6.37	\$6.67	\$7.26	\$7.20	\$7.30	\$8.11	\$8.54	\$8.95	\$9.63	\$7.61	1.08%
Trunkline/Panhandle	Trunkline Field Zone	\$5.95	\$6.24	\$6.54	\$7.11	\$7.10	\$7.19	\$7.99	\$8.41	\$8.82	\$9.42	\$7.48	4.42%
Panhandle Longhaul	Panhandle Field Zone	\$5.62	\$5.87	\$6.10	\$6.63	\$6.58	\$6.69	\$7.49	\$7.90	\$8.32	\$8.93	\$7.01	4.46%
Alliance/Vector	Alliance Field Zone	\$5.27	\$5.53	\$5.78	\$6.31	\$6.25	\$6.42	\$7.19	\$7.60	\$7.99	\$8.62	\$6.70	5.50%
TCPL SWDA	Empress	\$5.56	\$5.84	\$6.12	\$6.68	\$6.63	\$6.78	\$7.56	\$7.97	\$8.37	\$8.99	\$7.05	2.80%
Dawn	Dawn	\$6.33	\$6.65	\$7.01	\$7.66	\$7.63	\$7.72	\$8.54	\$8.98	\$9.40	\$10.02	\$7.99	%00.0
TCPL Niagara	Niagara	\$6.50	\$6.84	\$7.22	88.78	\$7.85	\$7.93	\$8.74	\$9.18	\$9.59	\$10.24	\$8.20	%00.0

Sources for Assumptions:

ICF International; April 2010 Gas Supply Prices (Col D):

Average ratio over the previous 12 months or Pipeline Forecast Fuel Ratios (Col G): Transportation Tolls (Cols E & F Tolls in effect on Alternative Routes at the time of Union's Analysis

\$1.093 CDN \$1 US = Foreign Exchange (Col K)

1 dth = 1 mmBtu = Energy Conversions (Col K)

1.055056

Jul-10 Union's Analysis Completed:

Filed: 2010-11-30 EB-2010-0300 Exhibit B4.2 iv) Attachment 2

Alliance Pipelines - Authorized Overrun Service (AOS) and Heat Value Calculation

Assum	ptions

Average Annual AOS %	21%
Additional Heat Value Gas	7%
Total Additional Volume Delivered at Chicago/Vector	28%

Alliance Canada

Contract Volume=2266.20 10³m³ @ 960.29 CN\$/Month

Total Volume Flowing = $2266.20*1.28\% = 2900.726 \cdot 10^3 \text{ m}^3$

Total Cost 2,176,209 CN\$/Month Total Volume 2,901 10^3 m³/day Unit Cost 750.23 CN\$/ 10^3 m³

Monthly Unit Savings $210.0609 \text{ CN}\$/10^3 \text{m}^3/\text{day}$ Unit Cost $6.9061 \text{ CN}\$/10^3 \text{m}^3$ Unit Cost 0.1767 US\$/MMBtu

Alliance U.S.

Contract Volume=80,000 MMBtu 16.5 US\$/Month

Total Volume Flowing = 80000*1.28%=102,400 MMBtu

Total Cost 1,320,000 US\$/Month
Total Volume 102,400 MMBtu/day
Unit Cost 12.89 US\$/MMBtu/day

Monthly Unit Savings 3.6094 US\$/MMBtu
Unit Cost 0.1187 US\$/MMBtu

Total AOS Savings on Alliance 0.2953 US\$/MMBtu

ACA Charge on Vector Pipelines -0.0019 US\$/MMBtu

Total Commodity Charge on Alliance/Vector 0.2934 US\$/MMBtu

UNION GAS LIMITED

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

Question:

Reference: Exhibit A, Appendix E

Request:

- a) Please provide a table in numeric form showing the capacity in GJ/day for each of the transportation paths for each year shown on the chart.
- b) Please confirm that the chart shows Alliance/Vector capacity expiring in October 2015.
- c) Please provide the current status of Union's contract with Alliance including renewal options and associated timelines.
- d) If Union's Alliance capacity is expected to continue beyond October 2015, please provide the justification for this decision including the detailed economic calculations supporting this decision.

- a) Please refer to Exhibit B1.4 e).
- b) No, the Alliance contract expires November 30, 2015.
- c) Union's primary term with Alliance extends until November 30, 2015. Union is required to provide renewal notice by November 30, 2010.
- d) The Alliance contract is not expected to continue beyond the primary term.

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UNION GAS LIMITED

Answer to Interrogatory from <u>TransCanada PipeLines Limited ("TCPL")</u>

Question:

Reference: Exhibit A, Page 1

Preamble: Union states that it is seeking pre-approval of the Niagara and Parkway contracts in accordance with the guidelines issued by the Ontario Energy Board ("OEB") in EB-2008-0280. The Filing Guidelines for Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts include the requirement that "All applicants must complete and file the information requested in Part I, II, III, IV, V and VI."

Part V, Section 5.2 of the guidelines states that the following information should be provided, "An assessment of retail competition impacts and potential impacts on existing transportation pipeline facilities in the market (in terms of Ontario customers)."

Request:

- a) Has Union provided this information?
- b) Please provide the following:
 - The expected impact on TransCanada's Mainline tolls of the Niagara and Parkway contracts and the resulting change in cost of delivered gas to Ontario customers.
 - ii) The expected impact that the Niagara and Parkway contracts will have on Union's Mainline long haul contracts from Empress.
 - The expected change in TransCanada's Mainline tolls and the resulting change in cost of delivered gas to Ontario customers if the Niagara and Parkway contracted volumes were instead contracted as long-haul contracts on TransCanada's Mainline from Empress.
 - iv) For the responses above, if Union does not have more precise information, please use the information provided by TransCanada in Figure 17 entitled "Toll Sensitivity to Reduced Long-haul Volumes" in its November 2, 2010 submission to the OEB's 2010 Natural Gas Market Review (EB-2010-01990).
 - v) Please confirm that Union is aware that Mainline long-haul capacity from Empress to Union's NDA & Union's EDA is currently available.
 - vi) Please confirm that the capacity referred to in v) above is available on a one year renewable basis.
 - vii) Please confirm if it is Union's understanding that facilities on TransCanada's Mainline must be added to provide the capacity required by the Parkway contracts.
 - viii) Please confirm that the Parkway and Niagara contracts are for ten year terms.

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Response:

a) No. Union is not able to reliably determine what the impacts that changes to its gas supply transportation portfolio will have on the retail market sector in the province. In addition, Union cannot reliably anticipate how changes to its gas supply transportation portfolio will affect upstream and downstream pipelines. Accordingly, Union is not in a position to produce evidence on the impacts of these changes on the retail market in the province or on TCPL or any other pipeline.

b)

- i) Union does not have the required information to determine the impact on TCPL mainline tolls.
- ii) As identified in the response to Exhibit B1.10 a), Union will decontract 10,000 GJ/d Empress to NDA and 10,000 GJ/d Empress to EDA. These long haul contracts will be replaced with short haul contracts from Parkway.
- iii) Union does not have the required information to determine the impact on TCPL mainline tolls.
- iv) The information provided by TransCanada in its November 2 filing addresses the impacts of a change in flows of 500,000 GJ/d to the CDA and being replaced by an increase in short haul flow from Niagara to CDA. Union's 20,000 GJ/d in replacement contracts represents 4% of the 500,000 GJ/d example. In addition, given that the NDA longhaul path is shorter than the CDA longhaul, the impacts would not be as great as indicated in the table. In addition, the Niagara to CDA path is much shorter than either the Parkway to EDA or Parkway to NDA and is therefore not representative of the overall impacts of the short haul revenue. The assumptions provided in the table are therefore incomplete and/or incompatible with Union's contract proposal to quantify the impact on Mainline tolls and/or cost of delivered gas to Ontario customers. The other 10,000 GJ/d to the EDA replaces STS, the toll for which is the same hence there is no overall impact to TransCanada's revenue. The Niagara to Kirkwall capacity does not replace any existing long haul capacity and is new revenue to TransCanada, which puts a slight downward pressure on tolls.
- v) Confirmed, Union is aware that Mainline long-haul capacity from Empress to Union's NDA and Union's EDA is currently available. However, within this application Union is looking to bring supply diversity and security to its NDA and EDA customers, who are currently only supplied through WCSB gas. Neither increased security nor diversity of supply can be achieved through TCPL's mainline using long-haul service. As such, Union does not view the availability

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of long-haul capacity along TCPL's mainline as a determining factor in its contracting decisions.

- vi) Confirmed
- vii) Confirmed
- viii) Confirmed

UNION GAS LIMITED

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

Question:

Reference: Exhibit A, Appendix D.

Preamble: The table states that the source for the Gas Supply Prices as "Energy &

Environmental Analysis: April 2010."

Request: Please provide this report.

Response:

Union wishes to make a correction to the company name referenced in evidence. ICF International is the source for forecasting data for landed cost analysis for Union Gas. ICF International acquired Energy & Environmental Analysis.

The April 2010 base case from which the data is used is proprietary information to ICF International. Union is not permitted to disclose the information without the consent of ICF International. ICF International has given its consent to the provision of the forecasting data that was used for the landed cost analysis. That information can be found in the attached table.

The following is ICF International proprietary information used to calculate the landed cost analysis found in Exhibit A, Appendix D.

Source: ICF International, April 2010 Base Case, data point information

Annual Averages - November to October

Note: Previous nomenclature of Energy & Environmental Analysis (EEA) is incorrect. ICF International purchased EEA. All forecasting data used in the landed cost analysis is from ICF International.

UNION GAS LIMITED

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

Question:

Reference: Exhibit A, Appendix F

Request: Please provide version of these two tables with the same ten year time period as

included in Appendix D.

Response:

The analysis provided is based on the associated terms of the contracts, restating the analysis over any other time-period would be irrelevant.

UNION GAS LIMITED

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

Question:

Reference: Exhibit A, Appendix D & F.

Preamble: Union states that, in its economic analysis, it uses the "Average fuel ratio over the previous 12 months or Pipeline Forecast."

Request:

- a) For the TransCanada Mainline, please clarify which of the two methods was used.
- b) If the "previous 12 months" method was used please provide the fuel ratios for each of the routes for each of the 12 months.
- c) If the "Pipeline Forecast" method was used please provide the source of the forecast.

- a) A 9 month average was provided for TCPL as the previous 12 months included a 3 month fuel anomaly due to a true-up.
- b) Please see the attachment.
- c) See a) above.

Filed: 2010-11-30 EB-2010-0300 Exhibit B4.7 b) Attachment

Fuel Ratios for TCPL

	Empress to EDA	Empress to NDA	Empress to WDA	Parkway to EDA	Parkway to NDA	Parkway to WDA	Empress to SWDA	Niagara to Kirkwall
August'09	3.50%		, 1.68%	% 0.36%	%65:0	_	2	
September 109	0.00%	J	Ü	•		%00.0	%00.0	00:00%
October 09	1.80%							
November'09	1.40%	1.07%	%69:0	% 0.17%	% 0.26%	%89:0	% 1.17%	0.00%
December'09	3.50%		% 1.84%					
January'10	3.30%		% 1.63%					
February'10	3.95%	(-)	%66:1			6 1.94%	,	
March'10	3.40%	(4	%67.1			_		
April'10	2.50%		% 1.38%			-		
May'10	2.75%		% 1.41%			6 1.37%		
June'10	3.02%		% 1.53%			6 1.49%	,	
July'10	2.95%	(4	0 1.47%	% 0.36%		0 1.43%		
Average	3.21%	2.48%	% 1.64%	% 0.46%	% 0.67%	. 1.60%	6 2.80%	%00.0

Note: Did not use the fuel ratios in the months highlighted above as they were not representative of true fuel ratios on TCPL. They were a result of a fuel true-up completed by TCPL.

Filed: 2010-11-30 EB-2010-0300 Exhibit B5.1 Page 1 of 2

UNION GAS LIMITED

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

Question:

With respect to Union's proposed 10 year agreement with TransCanada for service between Niagara and Kirkwall:

- a) What term of supply agreement will Union enter into if the Board approves this arrangement?
- b) In the second paragraph on page 7 of Union's evidence, Union implies that TransCanada may not be able to provide service through the full term of the contract for operational reasons.
 - i) What are the implications if TransCanada is unable to fulfill its commitment?
 - ii) Was it necessary or desirable to enter into a 10 year contract with TransCanada for service from Niagara if it appears that TransCanada may not operationally be able to provide the service through the full term?
 - iii) Union also notes that TransCanada is unable to provide the service then Union could simply enter into an exchange service between Niagara and the Union system. Could Union not use such an exchange in lieu of entering into a long term contract?
 - iv) Is it Union's intention now or in the future to contract for any capacity in the US upstream of Niagara?
- c) Union noted that the landed cost of Niagara supplies are less than supplies from Alberta. Given that the TransCanada Mainline flows are declining resulting in higher tolls for the remaining shippers, did Union do a comparison of this new route, and the attendant benefits, to contracting long haul on the TransCanada Mainline that could have the other ratepayers? If such an analysis was completed, please provide the analysis.
- d) Are there any related expansions of the Dawn-Kirkwall or Dawn- Parkway corridor or any other commercial arrangements required to facilitate movement of gas from Kirkwall required as result of the proposal to source gas at Niagara?
- e) During the recent 2010 Natural Gas Review, the Board engaged ICF International to provide some assessment of the overall market dynamics as a result of shale gas supplies. The ICF representative indicated that they expected Marcellus shale gas supplies to be transported to Dawn in the off peak period to access storage and these volumes would be subsequently exported at Niagara during peak times. Union is one of the major storage providers at Dawn. In the event that parties are interested in this import/export, is it Union's intention to help facilitate these winter exports via an exchange? If so is this part of the rationale to contract for this 10 year capacity?

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f) In the event that Union does facilitate exports at Niagara through an exchange by utilizing this capacity, how will the costs/benefits of such an arrangement be shared with the ratepayers?

Response:

a) Please see Exhibit B1.4 b)

- b) In the second paragraph on page 7 of Union's evidence, Union was not implying that TransCanada may not be able to provide service through the full term of the contract. The Board has directed that applicants for pre-approval of Long Term contracts address Risk Mitigation. In this section, Union was addressing the possible risk of short term Force Majeure on the Niagara-Kirkwall path by noting that Union could arrange for incremental supplies along other routes that serve Ontario.
 - i. Union would arrange for incremental supplies along other routes that serve Ontario.
 - ii. Union is not implying that TransCanada may not be able to provide service through the full ten year term of the contract. As indicated in the TCPL Open Season Notice filed in response to Exhibit B2.1, a 10 year term was required for new capacity bids.
 - iii. Please see Exhibit B3.11
 - iv. Union's decision to contract for any future capacity in order to meet system supply requirements will continue to be guided by the criteria as outlined in Exhibit B3.6.
- c) Please see response to Exhibit B1.10 b) i)
- d) Union is proposing to modify the Kirkwall Custody Transfer Station to provide bidirectional flow and measurement. No other facilities on the Dawn-Parkway system are required to accommodate this proposal for Union to source gas at Niagara.
- e) The rationale to contract for the Niagara Kirkwall capacity is to further diversify the sources of supply within the System Supply portfolio. The Niagara capacity will result in annual imports of 7.7 PJ's from the developing Marcellus Shale Gas basin for a 10-year term. At present, this represents 5.7% of Union's annual sales service purchases of 135.7 PJ's/year.
- f) N/A

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UNION GAS LIMITED

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

Question:

With respect to the 10 year contracts between Parkway and the EDA and Parkway and the NDA:

- a) Does Union require expansion of the Dawn-Trafalgar system to deliver gas into these contracts? If so has Union considered the incremental costs of providing such capacity to Parkway (vs. the approved tolls) and were these factored into the overall economics of the landed gas?
- b) As in 1 c above, as an alternative to its contract proposal, has Union done a comparison of the benefits to its ratepayers of contracting longhaul on TransCanada which might result in lower tolls for all rather than just an analysis of the current toll forward costs?
- c) Does Union know what expansion is necessary downstream of Parkway by TransCanada and if this expansion will result in other TransCanada rates increasing to accommodate this expansion?
- d) Union notes on page 11, clause 1 of its evidence that this capacity will serve year-round base load demands in the EDA and NDA. Appendix F contains a comparison of landed costs using both Empress and Dawn as the points of supply. It appears that the landed cost to the NDA via Empress is \$9.14/GJ and the landed cost via Dawn is \$9.20/GJ. Since Union is proposing a route that requires incremental facilities to be constructed on TransCanada are there reasons that Union is advocating a more expense route to the NDA that also requires new facilities to be constructed?
- e) Given the excess capacity on the Mainline, it is understood that short term contracts are available for capacity from Empress to both the NDA and EDA. Since the route via Parkway requires new facilities and a 10 year contractual commitment, how does Union take into account the risk differences between contracting on these two routes? In the event that this capacity via Parkway becomes surplus to Union's requirements within the term of the 10 year contract, who bears this risk of excess capacity?

- a) Union requires Dawn to Parkway capacity to deliver gas to these contracts. That capacity could be available through an expansion of the Dawn-Trafalgar system or unsubscribed capacity on the system. The landed cost analysis for both the Parkway to EDA and Parkway to NDA paths includes the current Dawn to Parkway tolls.
- b) The purpose of these contracts is to bring supply diversity to the North by replacing Western Canadian sourced supply with supply sourced at Dawn. Incremental

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transportation capacity is not required, the long term contracts Union is seeking approval for will replace existing capacity.

c) As indicated in the 2010 Natural Gas Market Review, Union believes that a physical expansion of the Parkway to Maple corridor (ref Union's November 2 2010 written comments EB-2010-0199 pages 3 and 19) is a more economically sustainable solution to meet market demand. When gas must physically flow over 3,500 km (i.e. from Dawn to Emerson to Parkway) versus 225 km from Dawn to Parkway, one must consider the full cost of this transport versus the option to expand facilities.

TransCanada's ability to use its integrated system and divert gas destined from Dawn to Parkway "around the horn" is no longer economically sustainable as the economic decision supporting a notional displacement of gas is not the same as the economic criteria for a physical flow of gas.

Since the expected cost of the Parkway to Maple expansion will be based on TransCanada's actual design parameters and therefore unknown to Union, Union can only present an illustrative example for consideration. In this example, if TransCanada expands Parkway to Maple between 500,000 GJ/d to 1 Bcf/d at a capital cost approximately \$150 -\$300 million, this would result in approximately \$17 - \$34 million annual cost of service applying rolled in toll methodology. However, the concern that this expansion would result in an increase to Mainline rates fails to consider the offsetting benefits of expected turnback of the then obsolete affiliate contracts. Currently, TransCanada holds approximately 990,000 GJ/d of Great Lakes transportation which equates to approximately \$156 million annual cost of service, based on TCPL's 2009 quarterly surveillance reports as a proxy. Turnback and/or non-renewal of this Great Lakes contract would more than offset the cost of expansion and should result in an overall net reduction to the Mainline cost of service and all tolls.

The Parkway to Maple expansion is necessary to open the path to allow customers such as power producers in the EDA to access supply at Dawn, supply from Marcellus through Kirkwall, or supply from the Rockies Express Pipeline through Dawn. For power producers in the EDA, additional facilities costs and associated rate changes on TransCanada would need to be considered along with potential cost savings offered by alternate supply options (i.e. the landed cost of gas).

- d) Please refer to Exhibit B1.11.
- e) Please refer to Exhibit B1.11.

The Parkway contracts represent 32% to 35% of the System Sales supply volume into the EDA and NDA delivery areas. The remainder of the System Sales supply volume to these delivery areas is on transportation contracts that renew on an annual basis. Union has the flexibility to adjust its transportation portfolio yearly if demands are

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forecasted to decrease. Therefore, Union does not believe there is a risk of excess capacity.

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f) In the event that Union does facilitate exports at Niagara through an exchange by utilizing this capacity, how will the costs/benefits of such an arrangement be shared with the ratepayers?

- a) Please see Exhibit B1.4 b)
- b) In the second paragraph on page 7 of Union's evidence, Union was not implying that TransCanada may not be able to provide service through the full term of the contract. The Board has directed that applicants for pre-approval of Long Term contracts address Risk Mitigation. In this section, Union was addressing the possible risk of short term Force Majeure on the Niagara-Kirkwall path by noting that Union could arrange for incremental supplies along other routes that serve Ontario.
 - i. Union would arrange for incremental supplies along other routes that serve Ontario.
 - ii. Union is not implying that TransCanada may not be able to provide service through the full ten year term of the contract. As indicated in the TCPL Open Season Notice filed in response to Exhibit B2.1, a 10 year term was required for new capacity bids.
 - iii. Please see Exhibit B3.11
 - iv. Union's decision to contract for any future capacity in order to meet system supply requirements will continue to be guided by the criteria as outlined in Exhibit B3.6.
- c) Please see response to Exhibit B1.10 b) i)
- d) Union is proposing to modify the Kirkwall Custody Transfer Station to provide bidirectional flow and measurement. No other facilities on the Dawn-Parkway system are required to accommodate this proposal for Union to source gas at Niagara.
- e) The rationale to contract for the Niagara Kirkwall capacity is to further diversify the sources of supply within the System Supply portfolio. The Niagara capacity will result in annual imports of 7.7 PJ's from the developing Marcellus Shale Gas basin for a 10-year term. At present, this represents 5.7% of Union's annual sales service purchases of 135.7 PJ's/year.
- f) N/A