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April 10, 2012

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

Filed electronically

Attention: Ms. Kirsten Walli
Board Secretary

Dear Ms. Walli:

Subject: Union Gas Limited – Distribution Rates for 2013
OEB File No. EB-2011-0210
TransCanada PipeLines Limited (TransCanada)
Interrogatories to Union Gas Limited

In accordance with the requirements in Procedural Order No. 4, please find attached TransCanada's Interrogatories to Union Gas Limited (Union).

Sincerely,
TransCanada PipeLines Limited

Original signed by

Elizabeth Swanson
Associate General Counsel
Law and Regulatory Research

Enclosures

ONTARIO ENERGY BOARD
EB-2011-0210

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. c. 15, Schedule B, as amended;

AND IN THE MATTER OF an application by Union Gas Limited for an Order or Orders approving or fixing just and reasonable rates and other charges for the sale, distribution, transmission and storage of natural gas, effective January 1, 2013 (the Application).

To: Ms. Kirsten Walli
Board Secretary
Ontario Energy Board

TRANSCANADA PIPELINES LIMITED
INTERROGATORIES TO UNION GAS LIMITED

B. Rate Base

1. Is Union's forecast level of capital spending in 2013 appropriate?

Interrogatory 1:

Reference: (1) Exhibit B1, Tab 9, pg 1-6

Preamble: Union discusses the Parkway compressor station and the proposed Parkway West Project.

Request: a) Please provide a diagram showing all existing and proposed connections between Union and all parties in the Parkway / Lisgar area. Please identify which connections are existing connections and which are proposed.

b) Please provide Union's current delivery capability (in GJ/d) at each of these connections. Please identify any changes to Union's current delivery capability at each of the connections as a result of the proposed Parkway West Project.

c) Please provide Union's actual and forecast total annual deliveries (in GJ), average daily deliveries (in GJ/d), and peak day deliveries (in GJ) at each of these connections for each of the calendar years 2000 to 2015.

Interrogatory 2:

Reference: (1) Exhibit B1, Tab 9, pg 2

Preamble: Union discusses its expectation that firm demand at the discharge [sic] at Parkway will continue to increase through to 2015/2016 as a result of (among other things):

i) Growth in three markets: (a) the Greater Toronto Area (GTA) (b) key eastern Canadian and (c) key US Northeast markets; and

ii) Union's desire to partially supply the northern and eastern franchise areas through short-haul service.

Request:

a) Please explain and quantify the expected growth in each of the three market areas discussed above by year for 2012 to 2016.

b) Please provide any studies or analyses that Union has conducted or had conducted on its behalf concerning the demand in each of these three market areas.

c) Please identify which eastern Canadian markets are "key" eastern Canadian markets, and explain why they are key markets.

d) What pipeline paths will be used to serve these key eastern Canadian markets downstream of Parkway, that supports Union estimates of the increase in demand at the discharge side of Parkway?

e) Please identify which US Northeast markets are "key" US Northeast markets, and explain why they are "key" markets.

f) What pipeline paths will be used to serve these key US Northeast markets downstream of Parkway, that supports Union estimates of the increase in demand at the discharge side of Parkway?

g) Does "partially" in the reference above mean (a) part of existing market demand; (b) part of new market demand; (c) all of new market demand; or (d) something else? Please specify.

h) Please quantify the portion of the northern and eastern franchise areas that Union intends to serve with short-haul service, indicating the intended quantities in each of Union's Western, Sault Ste. Marie, Northern, North Central, Central and Eastern Delivery Areas. Please also provide this information as a percentage of the total market served in each area.

i) Please explain how Union expects that the firm demand caused by growth in the GTA will be met by Union physically and contractually. Does Union expect that this growth will be met by parties contracting for (a)

firm capacity of greater than one year, (b) discretionary services such as seasonal, interruptible services or (c) some other services on the Union System?

j) Has Union completed any studies that determine the impact on TransCanada tolls as a result of serving these growing markets with short-haul services? If so, please provide the studies. If not, why not?

Interrogatory 3:

Reference: (1) Exhibit B1, Tab 9, pg 2

Preamble: Union states its expectation that design day demand for exports through Parkway compression could exceed 3.0 PJ/d by 2015/2016.

Request: a) Please explain how Union arrived at this expectation of an increase from the current 2.0 PJ/d to 3.0PJ/d. Please provide all studies and analyses that Union has conducted or had conducted for it concerning demand growth for exports through Parkway compression through to the end of 2016.

Interrogatory 4:

Reference: (1) Exhibit B1, Tab 9, pg 3
(2) Exhibit B1, Tab 9, pg 1

Preamble: Union states that "Year-round exports through the Parkway compression have impacted the ability to schedule maintenance activities for the Parkway A Unit and Parkway B Unit as well as the associated facilities." and discusses the deliverability capability of each of the Parkway Units.

Request: a) Please explain the typical maintenance requirements at each of the Parkway Units including expected elapsed time required to complete this maintenance.

b) Please provide the dates in 2010 and 2011 when Union performed maintenance on each of the Parkway units and the volumetric flows on an hourly basis during those dates.

c) Please provide the dates during the months of June to September 2010 and 2011 when the volumetric flows through Parkway compression were greater than:
i) 1.0 PJ/d; and
ii) 1.8 PJ/d.

d) Please provide the (a) current firm delivery capability to Parkway (TCPL); (b) the current total delivery capability at Parkway (TCPL); and, (C) the

total current firm contracted delivery requirement to Parkway (TCPL) (in GJ/d).

e) Please confirm that Union would be able to maintain 1.0 PJ/d of deliverability capability to Parkway (TCPL) if the Parkway B Unit was lost and 1.8 PJ/d of deliverability capability to Parkway (TCPL) if the Parkway A Unit was lost. If this is not correct please provide the correct amounts.

Interrogatory 5:

Reference: (1) Exhibit B1, Tab 9, pg 3 of 6 line 6 through to pg 4 of 6 line 5
(2) Exhibit B1, Tab 9, Schedule 2
(3) Exhibit B1, Tab 9, pg 1
(4) Exhibit B1, Tab 9, pg 3, line 19

Preamble: TransCanada wishes to better understand the development of the existing Dawn to Parkway system design and the rationale for changing the system design.

Request: a) For each of the past ten years (2001-2012), please provide the extent (both absolute as to capabilities vs. requirements and as a percentage of requirements) of Parkway LCU coverage that Union has had for deliveries to TransCanada at Parkway.

b) Please describe in detail the facilities that provide or provided the LCU coverage identified in the response to (a).

c) Please provide schematics that support the response to (a) and represent the facilities described in (b) for each facilities configuration that has been in place over the past ten years, together with any other engineering data that support the responses.

d) For each of the Parkway A Unit and the Parkway B unit provide by month for the period from November 2006 to March 2012:

i) the running hours of the unit;

ii) the non-running hours when the unit was available but there was no demand for the unit;

iii) the non-running hours when the unit was unavailable as a result of scheduled maintenance; and

iv) the non-running hours when the unit was unavailable due to unscheduled issues.

e) Given the historical flows provided in reference (2), would Union describe any of the months from April 2011 to October 2011 as a “period of peak demand?” Why or why not, and if not, how would Union describe these months in terms of relative demand?

f) For each day in the past ten years that Union restricted firm deliveries to TransCanada at Parkway due to the loss of compression at Parkway please provide:

i) the date of the restriction;

ii) the Parkway compressor unit that was unavailable that day;

iii) any other pipe and/or compression facilities on the Dawn-Trafalgar System that were unavailable that day;

iv) the nominated firm deliveries to TransCanada at Parkway on that day;

v) the quantity of firm deliveries that were restricted on that day; and

vi) the length of time required to fix the unit.

g) For each day in the past ten years that Union would have restricted firm deliveries at Parkway had it not been for the loss of critical unit protection for Dawn, Lobo and Bright compression please provide:

i) the date that the restriction would have occurred;

ii) the compressor unit that was unavailable that day;

iii) all other pipe and compression facilities on the Dawn-Trafalgar System that were in or out of service that day;

iv) the nominated firm deliveries on that day; and

v) the estimated quantity of firm deliveries that would have been restricted on that day if Union had not designed the system with loss of critical unit protection.

Interrogatory 6:

Reference: (1) Exhibit B1, Tab 9, pg 3
(2) Exhibit B1, Tab 9, pg 1

Preamble: Union states that "Union has Loss of Critical Unit (LCU) protection for Dawn, Lobo and Bright compression which will protect gas flow along the Dawn to Parkway system."

Request: a) Does Union identify specific facilities as providing "Loss of Critical Unit (LCU) protection at Dawn, Lobo and Bright." If so please explain how each facility provides LCU protection.

b) Please provide the estimated total gross capital and annual owning and operating costs of the facilities identified in (a).

c) Please provide the number of times that those LCU protection facilities have been required due to a loss of critical unit during the past 10 years.

d) Please provide the number of days that the LCU protection facilities were required for each of the events listed in c) above.

Interrogatory 7:

Reference: (1) Exhibit B1, Tab 5, pg 3, lines 1 - 12

Preamble: TransCanada wishes to better understand “non-facility capacity” and its role in avoiding the need for “facility capacity”.

Request: a) Please describe in detail what non-facility capacity is.

b) Please describe in detail how Union was able to react to operating restrictions at the Lobo Compressor Station by increasing the non-facility capacity to a “high level”, as described in the referenced evidence, including the characteristics of the non-facility capacity and how it was acquired.

c) What factors caused the anticipated insufficiency in capability on the Dawn-Parkway system for the 2011-2012 winter, such that Union forecast, in the referenced evidence, the need for non-facility capability?

d) How did Union plan to acquire the 187,141 GJ/d of non-facility capacity for the 2011-2012 winter as described in the referenced evidence?

e) What cost did Union anticipate incurring to acquire the non-facility capacity described in (d)?

f) As matters transpired, was the capability of the Dawn-Parkway system insufficient to meet demand during the 2011-2012 winter?

g) If the capability of the Dawn-Parkway system was insufficient to meet demand during the 2011-2012 winter, what non-facility capacity was acquired? If any non-facility capacity was acquired, please provide the particulars as to its quantity, characteristics, costs and how it was acquired.

h) Please describe how Union could use non-facility capacity to mitigate operational restrictions at Parkway due to potential compression unit losses.

Interrogatory 8:

Reference: (1) Exhibit B1, Tab 9, pgs 4-5

Preamble: Union states that the Parkway West Project facilities are comprised of three components. Union explains part of these facilities as follows: "Union proposes to install a second metering and a header system connected to the Dawn to Parkway system that would allow continued supply to EGD in the event of an outage of the existing Dawn to Parkway system interconnection at Parkway (including the valve site)." Union also provides a schedule of capital expenditures from 2012 to 2014.

Request:

a) Is the "second metering and a header system connected to the Dawn to Parkway system that would allow continued supply to EGD in the event of an outage of the existing Dawn to Parkway system interconnection at Parkway (including the valve site)." required to provide LCU at Parkway (TCPL) discharge? If not, please describe the nature and cost of those proposed facilities that are not required to provide LCU at Parkway (TCPL) discharge.

b) Please provide the estimated annual owning and operating costs of the Parkway West Project facilities for the next 15 years:

   i) that will provide loss of critical unit protection for deliveries to TransCanada ; and

   ii) that will provide the second connection to EGD.

c) Please provide the proposed allocation of the costs provided in (b) to M12, M12-X and C1 customers as well as in-franchise customers, and the contractual underpinning for these facilities.

d) Please provide the effect that these costs will have on Rates M12, M12-X, and C1 for the following services (in cents/GJ at 100% LF) for the next 15 years:

   i) Dawn to Kirkwall

   ii) Dawn to Parkway

   iii) Kirkwall to Parkway

   iv) Parkway to Kirkwall

   v) Kirkwall to Dawn

   vi) Parkway to Dawn

e) Please provide a copy of each presentation that Union made to Enbridge Gas Distribution, Enbridge Inc., Spectra Energy, TransCanada and Union Senior Management or any other affected party, in which either element of the Parkway West Project is the topic or is among the topics discussed in the presentation.

Interrogatory 9:

Reference: (1) Exhibit B1, Tab 9

Preamble: Union announced a binding Open Season for the Parkway Extension Project on March 13, 2012 offering transportation service on a proposed new pipeline from an interconnect near the Union Gas Parkway Compressor Station to a new interconnect with the TransCanada Pipelines limited transmission system at or near Maple, Ontario. The Parkway Extension will operate in conjunction with the Parkway West Project facilities. Enbridge Gas Distribution is described as a joint owner (with Union) of a section of the Parkway Extension, with a view to interconnecting with the new pipeline to serve its own franchise.

Request:

a) Please provide the announcement of the open season and the bidders' open season package that accompanied the announcement.

b) Please provide a copy of each presentation that Union made to potential bidders regarding the Parkway Extension project.

c) Is the "new interconnect near the Union Gas Parkway Compressor Station" as described in the open season different or the same as the new interconnect to the EGD system as described in Exhibit B1, Tab9, Pg. 4. Please explain in detail the relationship between the two interconnections.

d) Has Union discussed the part of the Parkway West Project that consists of the second connection of the Dawn to Parkway system to the EGD system with EGD? If so, please provide any correspondence, presentations or meeting notes related to this discussion.

e) Did EGD submit a request to Union for the second connection of the Dawn to Parkway system to the EGD system? If so, please provide details, including any correspondence in which EGD made this request.

f) Is the second connection of the Dawn to Parkway system to the EGD system related to EGD's proposed GTA Reinforcement Project that was presented to Stakeholders on November 11, 2011, in any way? Please explain in detail.

g) Would the proposed Parkway West Project still provide sufficient LCU protection for deliveries to Parkway (TCPL) if Union's open season is successful?

h) If the answer to (g) is no, then what additional facilities will be required in conjunction with the Parkway Extension in order to continue to provide LCU protection at Parkway (TCPL)? Please provide details including size & location of such facilities.

Interrogatory 10:

Reference: (1) Exhibit B1, Tab 9, pgs 5-6

Preamble: Union discusses its proposal to add Parkway West Metering and Header facilities and states "Union proposes to install i) headers and custody transfer metering to connect the Dawn to Parkway system to the EGD system at the proposed Parkway West station, which will provide EGD with a secure feed in the event of an outage of the existing Parkway (Consumers) feed".

Request:

a) The stated intent of these facilities is to "provide EGD with a secure feed in the event of an outage of the existing Parkway (Consumers) feed". Would these facilities be used only in the event of an outage of the existing Parkway (Consumers) feed? Please explain.

b) If these facilities would be used in any event other than an outage of the existing Parkway (Consumers) feed, please explain in detail when and how they would be used.

c) Would the second interconnection with EGD alter the capability of Union to deliver to EGD, and/or EGD to take, volumes of gas? If so, please provide a detailed explanation of the change in Union and/or EGD capabilities.

d) Likewise are the proposed headers to connect the new Parkway compression to the TCPL system to be used only in the event of an outage of a Parkway compressor or associated piping?

e) If the proposed headers connecting the new Parkway compression to the TCPL system would be used in any event other than an outage of a Parkway compressor, please explain in detail when and how they would be used.

Interrogatory 11:

Reference: (1) Exhibit B1, Tab 9, pg 6

Preamble: Union discusses its proposal to add LCU protection at Parkway by installing approximately 40,000 HP of compression and that no capacity created by the LCU protection at Parkway will be sold as firm transportation capacity.

Request:

a) How much additional capacity will the new Parkway compression provide?

b) Are there any additional firm transportation contracted volumes supporting the proposed addition of the new Parkway compression facilities? If so please provide details.

c) Union states that "no capacity created by the LCU protection at Parkway will be sold as firm transportation capacity."

i) Would Union use the new compression to provide non-firm services? If so, please explain in detail.

ii) What would prevent Union from selling this LCU protection capacity as firm services in the future?

iii) If the LCU protection capacity will be used to provide discretionary services, please explain:

(a) who pays for the costs of the facilities;

(b) who receives the revenues generated by the discretionary services.

Interrogatory 12:

Reference: (1) Exhibit B1, Tab 9, pg 3 of 6, lines 15 - 17

Preamble: TransCanada wishes to better understand the capabilities and impacts of loss of unit conditions at Parkway.

Request: a) Please provide the following information for each of the Parkway A Unit, the Parkway B Unit, and the Parkway Compressor Station at winter design day conditions for the 2013/2014 winter assuming the maximum deliveries to Parkway (TCPL) that the system is capable of delivering:

i) power available;

ii) power required;

iii) suction pressure;

iv) discharge pressure;

v) compression ration;

vi) flow; and

vii) fuel consumption.

b) Please provide the same information as requested in request (a) for the scenarios involving (1) the loss of the Parkway A Unit and (2) the loss of the Parkway B Unit.

c) Please provide the same information requested in request (a) and (b) but assume that the delivery pressure requirements to TransCanada are 150 kPa lower than Union's current design pressure.

d) Please provide the same information as requested in request (a) and (b) but assume that the delivery pressure requirements to TransCanada are 300 kPa lower than Union's current design pressure.

Interrogatory 13:

Reference: (1) Exhibit B1, Tab 9, pg 4, lines 8 - 13

Preamble: TransCanada wishes to better understand the existing facilities in the Parkway / Lisgar area and the potential for restrictions to service.

Request: a) Please provide a schematic of all the facilities between Parkway and Lisgar including all pipes, compressors, meters, and valves and including the following information:

i) For each pipe, the diameter and the maximum allowable operating pressure (MAOP).

ii) For each meter, the capacity of the meter.

iii) Fore each valve:

(a) its size;

(b) its MAOP;

(c) whether the valve is normally open or closed or a regulator; and

(d) whether the valve can be remotely operated from Union's gas control.

b) Please provide the distance between the Parkway facilities and the Lisgar facilities.

c) Please indicate what facilities and what events would be involved in an outage of the existing Parkway interconnect that would result in no gas being delivered to Parkway (Consumers) and Lisgar.

Interrogatory 14:

Reference: (1) Exhibit B1, Tab 9, pg 5, lines 1 – 8
(2) Exhibit B1, Tab 9, Schedule 1
(3) Union's March 13, 2012 open season announcement for the Parkway to Maple extension, proposing 500-700 TJ/d service from Parkway to Maple commencing November 1, 2015.

Preamble: TransCanada wishes to better understand how the facilities associated with Union's open season for services from Dawn to locations including Maple in the 2014/2015 timeframe would integrate with:

i) the facilities associated with the estimated growth in demand at Parkway to more than 3.0 PJ/d by 2015/2016;

ii) the proposed Parkway West Project; and

iii) the existing facilities in the Parkway / Lisgar area.

Request: a) Please provide a schematic of all of the existing and proposed facilities in the Parkway and Lisgar area for the 2012 / 2013 Gas Year, including the same information requested in Interrogatory 13 a).

b) Please provide a schematic of all of the existing and proposed facilities in the Parkway and Lisgar area for the 2013/14 Gas Year, including the same information requested in Interrogatory 13 a).

c) Please describe:

i) how the proposed Parkway West Project and/or existing Parkway facilities will be expanded or modified to meet Union's estimated demand of more than 3.0 PJ/d of deliveries from Parkway by 2015/2016; and

ii) when Union anticipates adding these facilities.

d) Please describe any facilities additions or modifications to the proposed Parkway West Project facilities and/or the existing Parkway facilities associated with providing 500 TJ/d of deliveries to TransCanada at Maple.

e) Please provide the same information requested in (d), but in relation to deliveries to TransCanada at Maple of 700 TJ/d.

f) Please provide Union's forecast total annual deliveries (in GJ) and average daily deliveries (in GJ/d) to Parkway (TCPL) and Parkway (Consumers) for each of the years 2012 to 2016.

g) Please describe the interrelation of :

i) the existing Parkway compression and facilities;

ii) the proposed Parkway West Project facilities ;

iii) the facilities associated with the estimated growth in demand to more than 3.0 PJ/d at Parkway by 2015/2016; and

iv) the compression and facilities associated with the Parkway to Maple pipeline project for 2014/2015

with the loss of critical unit protection that will be available for deliveries to TransCanada (at Parkway) with the facilities additions or modifications discussed in the response to (ii), (iii) and (iv) above, for each year from 2012 to 2016, including for each year:

(a) the facilities that would be in place;

(b) the capability of Union to deliver at Parkway on a design day; and

(c) the percentage of loss of critical unit protection that will be available for deliveries to TransCanada at Parkway.

Interrogatory 15:

Reference: (1) Exhibit A2, Tab 1, Schedule 1, pg 12, lines 7 - 9

Preamble: TransCanada wishes to better understand Union's view of the TransCanada capacity constraint at Maple.

Request: a) Please confirm that Union is aware of several new capacity open seasons that TransCanada has conducted since 2007 that solicited interest in transportation capacity from points such as Parkway and Dawn on the Canadian Mainline.

b) Has Union bid into any such new capacity open season for capacity originating at Parkway? Please provide the details of all such bids submitted along with the current status of such bids.

c) Is Union aware of any circumstance where TransCanada refused to provide service to potential shippers that bid into the new capacity open seasons? If so, please describe the circumstances.

Interrogatory 16:

Reference: (1) Exhibit A2, Tab 3, Schedule 2, pg 1, lines 3-4
(2) 2006 Trafalgar Expansion Program Application[1], Section 5

Preamble: TransCanada requires more detail regarding the economics of the Parkway West Project.

Request: a) Please provide the Discounted Cash Flow (DCF) analysis for the Parkway West Project in the same format as the second reference. Please also include a detailed explanatory for the revenue estimates.

Interrogatory 17:

Reference: (1) Exhibit B1, Tab 5, pgs 8-10
(2) Exhibit G3, Tab 1, pgs 14-15

Preamble: TransCanada wishes to better understand Union's explanation of the firm east end deliveries that are relied upon to lower costs and the specific manner in which those deliveries lower costs.

Request: a) Please provide the following information in relation to Union's Parkway obligation requirement:

i) Using letters to designate customers (e.g. "Customer A", "Customer B"), please provide a table listing, for each year (calendar or gas year) from 2002 to 2012:

ii) the Parkway obligation of each in-franchise direct purchase customer, and Union on behalf of sales service customers;

[1] Ontario Energy Board Proceeding EB-2005-0201

iii) the interconnected transmission lateral(s) that is/are used to serve the customer and Union on behalf of sales service customers;

iv) each customer's Dawn-Parkway and Kirkwall-Parkway contracted capacity and the type of contract;

v) each customer's actual deliveries at Parkway;

vi) Union's actual deliveries at Parkway on behalf of sales service customers;

vii) the path over which each customer physically flowed gas to meet its Parkway obligation; and

viii) the path over which Union physically flowed gas to meet its Parkway obligation on behalf of sales service customers.

b) How do Union customers with Parkway obligations inform Union that they have, on a given day, met their Parkway obligations?

c) How does Union confirm that its customers with Parkway obligations have met their obligations by delivering the required quantity of gas at Parkway?

d) How does Union ascertain the path over which the customer has met its Parkway obligation?

Interrogatory 18:

Reference: (1) Exhibit B1, Summary Schedule 2, pg 3, line 55

Preamble: TransCanada is seeking clarity with respect to Union's concerns with the metering at Parkway.

Request: a) Please confirm that the reference to "TCPL measurement" is to the Union measurement facilities at the interconnect with TransCanada and that to Union's knowledge the TransCanada measurement facilities do meet all standards for custody transfer measurement. If not confirmed please explain why.

b) Please explain and quantify the costs associated with the current process for the reconciliation of volumes at Parkway and explain the extent, if at all, to which those costs will be reduced by the metering replacement project.

Interrogatory 19:

Reference: (1) Exhibit B1, Tab 4, pgs 4 - 7

Preamble: Union provides a summary of Capital spending in the distribution area in excess of 1 million dollars under Specified Projects.

Request: a) For Ontario Power Generation – Thunder Bay Specified Project:

i) Please provide a complete description of this project including the full cost for this proposed customer connection.

ii) Please describe the details of the contractual commitment that underpins the $28 million in 2013 and the $0.8 million in 2012.

iii) If this project does not proceed, who will bear the costs incurred to the date of cancellation?

b) For Red Lake Distribution Phase 2 Specified Project:

i) Please provide a complete description of this project and the full cost for this proposed customer connection.

ii) Please describe the details of the contractual commitment that underpins the $7.4 million.

iii) If this project does not proceed, who bears the costs incurred to the date of cancellation?

c) For Lambton Power Plant Specified Project:

i) Please provide a complete description of this project and the full cost for this proposed customer connection.

ii) Please indicate where Union will be tying into existing infrastructure and indicate the size of the pipe being proposed for the connection.

iii) Please provide the details of the services/expenditures that are included in the $1.8 million projected for 2012.

iv) Please describe the details of the contractual commitment that underpins the $1.8 million referenced above. Please provide a copy of the contract.

v) Please provide the Union open house / public consultation documentation, and any other communications to stakeholders for this proposed project.

vi) If this project does not proceed, who bears the costs incurred to the date of cancellation?

d) Guelph – Combined Heat and Power – OPG Specified Project:

i) Please provide a complete description of this project and the full cost for this proposed new customer connection.

ii) Please describe the details of the contractual commitment that underpins the $1.1 million in 2013. Please provide a copy of the contract.

iii) If this project does not proceed, who bears the costs incurred to the date of cancellation?

e) Sarnia Petrolia Line Specified Project:

i) Please provide a complete description of this project and the full cost for this proposed new customer connection.

ii) Please describe the details of the contractual commitment that underpins the $1.1 million in 2013. Please provide a copy of the contract.

iii) If this project does not proceed, who bears the costs incurred to the date of cancellation?

Interrogatory 20:

Reference: (1) Exhibit B3, Tab 2, Schedule 4, pg 3

Preamble: Union provides a summary of continuity of Utility Gas Plant Under Construction by Major Project.

Request: a) For the Nanticoke Major Project listed on line 30:

i) Please provide a complete description of this project and the full cost for this project.

ii) Please indicate where Union will be tying into its existing infrastructure and indicate the size of the pipe being proposed for the project.

iii) Please describe the services/expenditures that are included in the $100,000 projected by the end of 2012.

iv) Please describe the details of the contractual commitment that underpins the $100,000 referenced above. Please provide a copy of the contract.

v) Please provide all open house documentation, and any other stakeholder consultations or media coverage for this proposed project.

vi) If this project does not proceed, who bears the costs incurred to the date of cancellation?

B. Rate Base

4. Is the proposed Test Year Rate Base appropriate?

Interrogatory 1:

Reference: (1) Exhibit B1, Tab 1

Preamble: TransCanada seeks to better understand facilities that are included in rate base.

Request: a) For:

i) All pipeline segments with an outside diameter of NPS 12 or larger; and

ii) Any distribution line serving industrial customers or power generators with an outside diameter of NPS 4 or larger.

Please identify all facilities or portions of facilities that, in any of the last 10 years (2002 through 2011) have experienced:

i) Less than 80% utilization of capacity on an annual basis;

ii) Less than 60% utilization of capacity on an annual basis;

iii) Less than 40% utilization of capacity on an annual basis;

iv) Less than 20% utilization of capacity on an annual basis.

b) Please provide a table listing the capacity expansions of the Dawn-Parkway system since 2002, including:

i) the type of expansion (compression or looping);

ii) the specific facilities involved in the expansion (e.g. new x h.p. compressor at Bright, x km NPS 48 loop from Brooke to Strathroy, etc.);

iii) the capacity created by the expansion;

iv) the capital costs of the expansion; and

v) the volumes and terms of the incremental contracts associated with the expansion.

C. Operating Revenues

3. Is the 2013 Contract Customer Demand forecast appropriate?

Interrogatory 1:

Reference: (1) Exhibit C1, Summary Schedule 1

Request: a) Please provide a version of this schedule that shows throughput volume by service type and rate class excluding power generation volumes.

b) Please provide a table showing total weather normal throughput volume (a) excluding power generation volumes, (b) power generation volumes only and (c) the total throughput (corresponding to the total shown on line no. 24) for each year shown on Summary Schedule 1.

4. Is the 2013 S&T forecast appropriate?

Interrogatory 1:

Reference: (1) Exhibit B1, Tab 9

Preamble: Union discusses the Parkway West construction project.

Request: a) Please confirm that additional revenue earned through the sale of short term transportation service made possible by the Parkway West Project would be captured in the Short Term Transportation and Exchanges Revenue Forecast. If not, please explain where this revenue would be recorded.

b) Please list all of the potential services under which Union could sell this LCU capacity using the services described in Union's Priority of Service Policy.

c) Please explain how Short Term Transportation and Exchanges Revenue is shared between Union shareholders and Union ratepayers.

Interrogatory 2:

Reference: (1) Exhibit C1, Tab 3, pg 8, lines 4-7

Preamble: Union discusses its revenue projection for the Ojibway to Dawn line.

Request: a) Please provide the design day and peak day capacity of the Ojibway to Dawn line.

b) Please provide the average daily throughput and peak day throughput on the Ojibway to Dawn line for each of the last 10 years and the forecast for the next 15 years.

c) Please provide the annual load factor on the Ojibway to Dawn line for each of the last 10 years and the forecast for the next 15 years.

Interrogatory 3:

Reference: (1) Exhibit C1, Tab 3, pg 7, Table 2
(2) Union Website[1], C1 Transportation Services, Bluewater Interconnect listed as a service point

Preamble: Union lists the Bluewater Interconnect as an option for C1 Transportation Service that "lets you transport between upstream markets from Dawn".

Request: a) Please provide the current design day and peak day capacity of the Bluewater river crossing.

b) Please provide the average daily throughput and peak day throughput on the Bluewater river crossing for each of the last 10 years and the forecast for the next 15 years.

c) Please provide the annual load factor on the Bluewater to Dawn path for each of the last 10 years and the forecast for the next 15 years.

d) Please provide the current design day and peak day capacity of the Bluewater to Dawn path.

e) Please provide the average daily throughput and peak day throughput on the Bluewater to Dawn path for each of the last 10 years and the forecast for the next 15 years.

f) Please provide the annual load factor on the Bluewater to Dawn path for each of the last 10 years and the forecast for the next 15 years.

g) Does the C1 Long-term Transportation outlook for 2011 and forecast for 2012 and 2013 contain any revenue for Bluewater to Dawn C1 Transportation Service? If not, why not?

h) Please confirm that Union affiliate St Clair Pipelines Management Inc. is proposing to replace the current leased NPS 12 line crossing the St Clair River with a St.Clair-owned NPS 20 line.

i) Please provide the design day and peak day capacity of the Bluewater river crossing after the new NPS 20 river crossing pipe is placed into service.

j) What firm contracts underpin the construction of the new NPS 20 Bluewater river crossing?

[1] http://www.uniongas.com/storagetransportation/services/transportation/c1transport.asp

k) Please provide the forecast annual load factor on the Bluewater river crossing for the next 15 years.

l) Please provide the annual costs that Union has incurred in relation to the existing Bluewater NPS 12 river crossing for the past 10 years ending 2011 and its forecast of the annual costs that Union will incur in the 10 years after the new NPS 20 river crossing is put into service.

m) Please provide the design day and peak day capacity of the Bluewater to Dawn path after the new NPS 20 river crossing pipe is placed into service.

n) Would the completion of the NPS 20 river crossing project impact Union's forecast of C1 Long-term Transportation revenue? If not, why not?

o) What is the rationale for replacing the line when the lease on the current river crossing expires?

p) Please provide the cost-benefit analysis that Union and/or St. Clair performed to support the replacement of the leased river crossing line on the expiry of the lease.

Interrogatory 4:

Reference: (1) Exhibit C1, Tab 3, pg 3

Preamble: Union discusses the resale of Dawn-Kirkwall and Dawn-Parkway capacity of 211,407 GJ/d in 2011 & 122,950 GJ/d in 2012.

Request: a) For each of the contracts that constituted the resale described in the referenced evidence, please provide the following information:

i) starting dates

ii) ending dates

iii) receipt and delivery points

iv) contract type (M12, C1, M12-X, etc.)

Interrogatory 5:

Reference: (1) Exhibit C1, Tab 3, pgs 3-4

Preamble: On page 3; Union discusses the resale of Dawn-Parkway capacity of 122,950 GJ/d starting in 2012. On page 4; Union discusses incremental new sales of Dawn-Parkway capacity of 133,950 GJ/d which commence in May and November 2012 and a Kirkwall-Parkway contract of 88,497 GJ/d commencing November 1, 2012.

Request: a) Please explain the difference between the volumes discussed on page 3 and the volumes discussed on page 4.

b) For each of the contracts that constituted the resale described in the referenced evidence, please provide the following information:

i) starting dates;

ii) ending dates;

iii) receipt and delivery points;

iv) contract type (M12, C1, M12-X, etc.)

v) the facilities that were added by Union to provide the service associated with each of the contracts and the capital cost of those facilities ;

vi) whether the contract terms described in the responses to (i) and (ii) above were requested by the shippers or required by Union; and

vii) if the contract terms were required by Union, please provide the rationale for these requirements.

Interrogatory 6:

Reference: (1) Exhibit C1, Tab 3, pg 5

Preamble: Union discusses a sale of Kirkwall-Parkway capacity of 174,752 GJ/d commencing November 1, 2013.

Request: a) For the above mentioned contract please provide the following information:

i) starting dates;

ii) ending dates;

iii) receipt and delivery points;

iv) contract type (M12, C1, M12-X, etc.)

v) the facilities that were added by Union to provide the service associated with each of the contracts and the capital cost of those facilities ;

vi) whether the contract terms described in the responses to (i) and (ii) above were requested by the shippers or required by Union; and

vii) if the contract terms were required by Union, please provide the rationale for these requirements.

Interrogatory 7

Reference: Union Gas Limited Open Season announcement dated February 22, 2012 for service on Union’s St. Clair (MICHCON) to Dawn transportation path.

Preamble: The referenced announcement describes an open season for 180,000 MMBtu/d of firm capacity from St. Clair (MICHCON) to Dawn commencing as early as April 1, 2012. The open season closed on March 9, 2012 with contracts expected to be executed no later than March 31, 2012.

Request: a) Please specify the quantity and term for each contract awarded as a result of this open season.

b) Please describe the impact of the contracts described in (a) on the storage and transportation forecast for 2013.

c) Please describe the impact of the contracts described in (a) on rates for 2013.

Interrogatory 8

Reference: Union Gas Limited Open Season announcement February 24, 2012 for service on Union's Bluewater (interconnect with Bluewater Gas Storage) to Dawn transportation path.

Preamble: The referenced announcement describes an open season for 140,000 GJ/d of firm capacity from Bluewater to Dawn commencing November 1, 2012. The open season closed on March 12, 2012 with contracts expected to be executed no later than March 31, 2012.

Request: a) Please indicate the capacity available on the Bluewater to Dawn path as of April 1, 2012 and why the commencement date of November 1, 2012 was stipulated in the open season announcement.

b) Please specify the quantity and term for each contract awarded as a result of this open season.

c) Please describe the impact of the contracts described in (a) on the storage and transportation forecast for 2013.

d) Please describe the impact of the contracts described in (a) on rates for 2013.

Interrogatory 9:

Reference: (1) Exhibit C1, Tab 3, pg 12, lines 5-6 "The single biggest factor contributing to growth in exchange revenue was the utilization of the TCPL FT RAM program starting 2008"
(2) Exhibit C1, Tab 3, pg 11, lines 13-14 "The 2012 forecast assumes the TCPL FT RAM program will be eliminated on November 1, 2012. A full year impact of FT RAM program being discontinued is reflected in 2013."
(3) Exhibit D1, Tab 1, pg 3, line 2

Preamble: TransCanada has applied to the National Energy Board to eliminate the RAM feature of TransCanada's FT service and Union and others have filed evidence in support of retaining RAM. Due to the uncertainty thus surrounding FT RAM, and the impact of potential FT RAM revenues on the Short-Term Transportation and Exchanges Revenue Forecast, TransCanada seeks to better understand the historical and forecast amount of revenue attributable to FT RAM and how the uncertain future of FT RAM will be managed by Union with respect to the 2013 rates.

Request:

a) Please provide the following historical information, for November 2007 to March 2012, by month:

   i) Total revenue attributable to FT RAM, in dollars.

   ii) Average revenue attributable to FT RAM, in $/GJ.

b) Please provide the following forecast information, for the months of April 2012 through to December 2012, by month:

   i) Total revenue attributable to FT RAM, in dollars.

   ii) Average revenue attributable to FT RAM, in $/GJ.

c) In the event FT RAM is not discontinued as of November 1, 2012, please describe how Union will alter the Short-Term Transportation and Exchange Revenue forecast for 2012-2013 for the purposes of establishing rates.

d) Please provide the amount of FT RAM credits, in dollars, that Union has generated by month since November 2007.

e) Please provide a monthly breakdown of the Exchange Revenue shown in Exhibit C1, Tab 3 Table 4 into the following categories:

   i) Use of Union's upstream transportation capacity to provide exchange services to third parties.

   ii) Net revenue generated from capacity releases

   iii) Revenue obtained as a result of TCPL's FT RAM program.

   iv) Other

   v) Total exchange revenue.

f) Please explain how the 2013 Exchange Revenue forecast is treated in determining Union's revenue requirement.

g) Please explain how any variance between actual and forecast 2013 Exchange Revenue is allocated between Union shareholders and Union ratepayers.

Interrogatory 10:

Reference: (1) Exhibit C1, Tab 3, pg 12, lines 5-6 "The single biggest factor contributing to growth in exchange revenue was the utilization of the TCPL FT RAM program starting 2008."
(2) Exhibit C1, Tab 3, pg 11, lines 17-19 "Exchange revenue is comprised of activity using Union's upstream transportation capacity to provide exchange services to third-parties. It also includes net revenue generated from pipe releases or revenue from TCPL's FT RAM program."

Preamble: TransCanada requires more information about Union's Exchange Revenues to be able to determine if the 2013 Short Term Transportation and Exchanges Revenue Forecast is appropriate.

Request:
a) Please provide a detailed description of how Union obtains revenue as a result of FT RAM.

b) Please provide sample agreements of each type of transaction that results in the FT RAM revenue as described in reference 1 and 2.

c) Please provide, by month since 2008, quantities of FT capacity that Union has assigned to other counterparties that generated Exchange revenue or otherwise reduced Union's transportation costs. For each assignment, please provide the quantity, assignee, toll, and path of the transport assigned.

d) Please explain how Union exchanges gas between points on the Union system and points on the TransCanada system.

e) Please explain what transportation service is used to affect the exchange and how Union determines what to charge for the service.

f) Are exchanges done on a firm basis or an interruptible basis?

Interrogatory 11:

Reference: (1) Exhibit C1, Tab 3, pg 2, Table 1
(2) Exhibit C1, Tab 3, Schedule 1, line 5
(3) Exhibit C1, Tab 3, Schedule 2, line 5

Preamble: In the summer of 2010 TransCanada contracted with Union to convert certain contracts to M12-X service effective September 1, 2011. The tables do not show any M12-X transportation revenue for the 2011 outlook.

Request:
a) Please provide an explanation as to why there is no M12-X revenue in the 2011 outlook and if appropriate amend the tables, and any related data in the Application, to reflect the 2011 revenue from TransCanada's M12-X contract.

Interrogatory 12:

Reference: (1) Exhibit C1, Tab 3, Schedule 1 and Schedule 3

Preamble: Impact of M12 Turnback and demands as of November 1, 2011, November 1, 2012 and November 1, 2013. Union Gas received turn back of Dawn to Kirkwall capacity and resold the capacity as M12 Dawn to Parkway, and Kirkwall to Parkway service.

Request: a) What contract term does Union require for the sale of existing capacity? Please provide the rationale for requiring this term.

b) Please discuss Union's historical and current position with respect to the requirement that TransCanada offer one year term FT contracts, with six months' renewal notice, for existing capacity on the TransCanada system.

c) Please update Union's filed evidence reflecting all contracts entered into after the filing date, including future service start dates, and term.

D. Cost of Service

14. Is the gas supply plan for 2013 appropriate?

Interrogatory 1:

Reference: (1) Exhibit D1, Tab 1, pg 8

Preamble: Union discusses its Gas Supply Plan and the assumption that customers will remain with the service they received effective January 1, 2011. It is TransCanada's understanding that the level of system gas customers versus direct purchase customers has been changing quite dramatically over the past several years.

Request: a) Please provide an updated Gas Supply Plan reflecting the latest level of system gas customers versus direct purchase customers.

b) Please provide the level of system gas customers versus direct purchase gas customers (annual volume in GJ's) for 2009, 2010, and 2011.

c) Does the level of system gas customers versus direct purchase customers impact the level of obligated deliveries at Parkway?

Interrogatory 2:

Reference: (1) Exhibit D1, Tab 1, pg 14

Preamble: Union discusses its existing firm transportation contracts with Trunkline Gas Company and Panhandle Eastern Pipe Line.

Request: a) The stated term of the Trunkline/Panhandle contracts are November 1, 2007 through to October 31, 2012. Does Union plan to renew, extend or replace these contracts? If not, why not? If so, please provide the rationale, including landed cost analysis for this contract and all potential alternatives.

b) Union states that "the volumes are obligated at Parkway by a firm Ojibway to Parkway service".

i) How is this Ojibway to Parkway service provided?

ii) Does Union contract with itself under an ex-franchise transportation contract? If so, what are the terms of that contract?

iii) Is the obligation of deliveries from the Panhandle contract discussed at line 19-22 handled the same way? If not, please explain.

Interrogatory 3:

Reference: (1) Exhibit D1, Tab 1, pgs 15-16

Preamble: Union discusses its Union North Transportation Portfolio which now includes firm transportation of 6,143 GJ/d from Michigan to the SSMDA.

Request: a) Union's stated rationale for contracting for 6,143 GJ/d from Michigan to the SSMDA was "to achieve some supply diversity in Union North."

i) Was supply diversity the only reason for undertaking these contracts? If there were other reasons please provide them.

ii) Please confirm that Union reduced its FT contracted volumes with TransCanada for service from Empress to the SSMDA. Please provide the amount of the contracted volume reduction.

iii) Please provide the economic analysis that Union relied upon to make this decision, including the comparison of the cost of serving this market with TransCanada FT and with capacity from Michigan to the SSMDA.

b) Please provide average day and peak day deliveries for each of the last 3 years to the SSMDA.

c) Please break out the service type and volumes by pipeline used to service the SSMDA.

d) Please explain how Union is changing the manner in which it supplies the SSMDA through GLGT backhaul service

e) Does Union include the costs to its customers of changes in TransCanada Mainline tolls as a result of Union's decontracting on the TransCanada

Mainline when it evaluates the cost of supply alternatives for Union North? If not, why not?

Interrogatory 4:

Reference: (1) Exhibit D3, Tab 2, Schedule 3

Preamble: Table indicating forecast of supply from 2012 to 2016

Request: a) Please explain why the forecast shows:

i) Western Canadian Firm supply decreasing from 107,848 TJ in 2012 to 70,863 TJ in 2016;

ii) US Firm supplies decreasing from 43,884 TJ, in 2012 to 18,363 TJ in 2016; and

iii) Ontario Delivered Supplies increasing from 83,306 TJ in 2012 to 133,103 TJ in 2016.

b) Please provide any economic analysis supporting the above noted changes in forecast supply source. If no analysis was done, please explain why not.

Interrogatory 5:

Reference: (1) Exhibit D3, Tab 2, Schedule 3 and 5

Preamble: Union provides its summary of upstream transportation contracts and gas supply / demand balance forecast for 2012-2016. TransCanada seeks to better understand the possible effects on Union's contracts as a result of Union's Parkway Extension Open Season.

Request: a) Please provide the changes to these contracts that Union expects will occur if its current Parkway extension Open Season is successful.

Interrogatory 6:

Reference: (1) Exhibit D1, Tab 1, pgs 2 - 3

Preamble: Union discusses principles for gas supply planning, one of which is: "iii) Encourage new sources of supply as well as new infrastructure to Union's service territory;"

Request: a) Does Union consider the total impact on all Union customers and/or on all Ontario customers resulting from the acquisition of new sources of supply and adding new infrastructure including the effect on the tolls that Union pays to TransCanada? If not, why not? If so, please provide all the analysis that has been done in this regard in the past 10 years when accessing new sources of supply.

Interrogatory 7:

Reference: (1) Exhibit D1, Tab 1, pg 2 - 3

Preamble: Union discusses its five year gas supply plan including key inputs and assumptions.

Request:
a) Has Union considered the impact that the reduced TransCanada tolls, as filed in TransCanada's RH-3-2011 Proposal with the National Energy Board (NEB), would have on its customers and on the proposed supply portfolio.

b) If yes, please provide the analysis conducted.

c) If no, please explain why no analysis was done.

d) Please recalculate the forecast of Union's costs required to serve in-franchise sales service and bundled direct purchase customers using TransCanada's Rates as set out in TransCanada's proposal as filed with the NEB in the RH-3-2011 proceeding.

Interrogatory 8:

Reference: (1) Exhibit D1, Tab 1, pg 6, line 10
(2) Exhibit D3, Tab 2, Schedule 3, line 6

Preamble: In Reference (1), Union lists 15.3 TJ of Dawn Delivered Service for 2013, and in Reference (2) lists 79,779 TJ of Ontario Delivered Supplies.

Request:
a) Please define the term Dawn Delivered Service.

b) Please define the term Ontario Delivered Supplies.

c) Please break out the 79,779 TJ of Ontario Delivered Supplies to reflect Dawn Delivered Supply, and explain what other supplies make up Ontario Delivered Supplies for each year from 2012 to 2016.

Interrogatory 9:

Reference: (1) Exhibit H1, Tab 1, pg s 53 - 54

Preamble: Union discusses the change in methodology for Kirkwall to Dawn C1 Service.

Request: a) Please provide the toll impact of the proposed change to the toll design methodology for C1 Kirkwall to Dawn service on:

i) Kirkwall to Parkway C1 Service;

ii) M12-X Service;

iii) M12 Dawn to Parkway Service; and

iv) M12 Dawn to Kirkwall Service .

b) Please identify whether C1 Kirkwall to Parkway service, M12-X service, or C1 Kirkwall to Dawn service are allocated costs associated with the Kirkwall facilities modifications.

G. Cost Allocation

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

Interrogatory 1:

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

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

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

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

i) contracted or forecasted annual volumes;

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

iii) actual volumes; and

iv) capacity of the Dawn-Trafalgar system.

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

Interrogatory 2:

Reference: (1) Exhibit G3, Tab 1
(2) Exhibit B1, Tab 5

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

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

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

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

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

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

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

v) actual receipts by receipt point;

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

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

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

Interrogatory 3:

Reference: (1) Exhibit G3, Tab 1
(2) Exhibit B1, Tab 5

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

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

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

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

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

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

v) forecast receipts by receipt point;

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

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

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

Interrogatory 4:

Reference: (1) Exhibit G3, Tab1
(2) Exhibit B1, Tab 5
(3) Union's 2004 Rate Application RP-2003-0063, Exhibit J32.4

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

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

Interrogatory 5:

Reference: (1) Exhibit G3, Tab1;
(2) Exhibit B1, Tab 5;
(3) Union's 2004 Rate Application RP-2003-0063, Exhibit J32.5.

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

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

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

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

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

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

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

Interrogatory 6:

Reference: (1) Exhibit B1, Tab 5 pages 3-4

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

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

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

Interrogatory 7:

Reference: (1) Exhibit G3, Tab1 Pg. 4-5
(2) Union's 2004 Rate Application RP-2003-0063, Exhibit J32.12 (a).

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

Request:

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

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

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

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

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

i) ISO power;

ii) Maximum volumetric capacity;

iii) suction pressure;

iv) discharge pressure;

v) MW required;

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

vii) inlet gas composition and temperature;

viii) efficiency of the compression; and

ix) ambient temperature.

Interrogatory 8:

Reference: (1) Exhibit G3, Tab1 pg 16, lines 2-4

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

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

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

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

Interrogatory 9:

Reference: (1) Exhibit G3, Tab 1, Schedule 1, pg 3 line 7 to pg 4 line 22

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

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

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

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

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

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

v) Please indicate on the schematic the facilities identified as: 26"/34"/42" Meter Runs; Total Measurement; Tecumseh

Interconnect; TCPL Interconnect and Great Lakes Header; Vector Interconnect; Plant E Compressor; and Tecumseh Sombra Line Extension.

Interrogatory 10:

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

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

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

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

a. power available;

b. total power required;

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

d. suction pressure;

e. discharge pressure;

f. compression ratio;

g. flow; and

h. fuel consumption.

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

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

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

Interrogatory 11:

Reference: (1) Exhibit G1, Tab1, pg 9, lines 7 – 9

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

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

i) For each of the compressor units please provide:

a. power available;

b. power required;

c. suction pressure;

d. discharge pressure;

e. compression ratio;

f. flow; and

g. fuel consumption.

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

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

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

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

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

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

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

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

f) Please identify specific facilities, if any, required to increase TransCanada's firm Dawn to Dawn-TCPL service from the current level of 500 TJ/d to 900 TJ/d as well as an estimate of the capital cost for the

facilities identified and an estimate of the incremental commodity costs based on 90 days of utilization.

H. Rate Design

1. Are the rates proposed in Exhibit H just and reasonable?

Interrogatory 1:

Reference: (1) Exhibit H1, Tab 1, pg 55, lines 8 - 11

Preamble: Union discusses Dawn to Dawn Vector service charges.

Request: a) Please provide the historical daily flow between Dawn and Dawn Vector for each of the past five years.

b) Please provide the historical daily flow between Dawn and Dawn-TCPL since the inception of service.

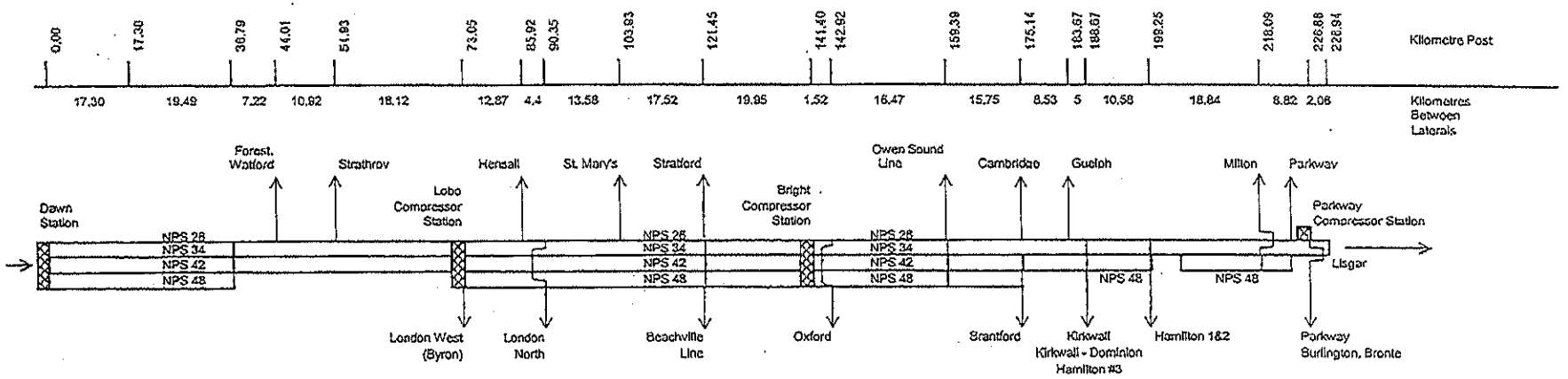
Calgary, Alberta
April 10, 2012

Respectfully submitted,
TransCanada PipeLines Limited

Original signed by

Per: _____
Elizabeth Swanson
Associate General Counsel
Law and Regulatory Research

TRAFALGAR SYSTEM



Design Day Demands

		(GJ/d)
	Southern Ontario	
	Forest, Watford	13,141
	Strathroy	9,636
	London West	127,734
U	Hensall	22,142
N	London North	113,193
I	St. Mary's	7,209
O	Stratford	30,964
N	Beachville	58,140
	Oxford Line	33,918
M	Owen Sound Line	229,602
A	Cambridge	78,277
R	Brantford	105,909
K	Kirkwall - Dominion	91,635
E	Guelph	82,103
T	Hamilton 3	81,855
S	Hamilton 1&2	252,274
	Milton	57,341
	Parkway	0
	Burlington, Bronte	185,712
	Total Southern Ontario	1,580,785
	Northern & Eastern Ontario	
	Parkway	178,000
	Kirkwall	1,281,723
M	Lisgar, Parkway	2,642,781
1	**Total M12**	3,924,504
2	**Total Design Day Demands**	5,683,289

System Capacity

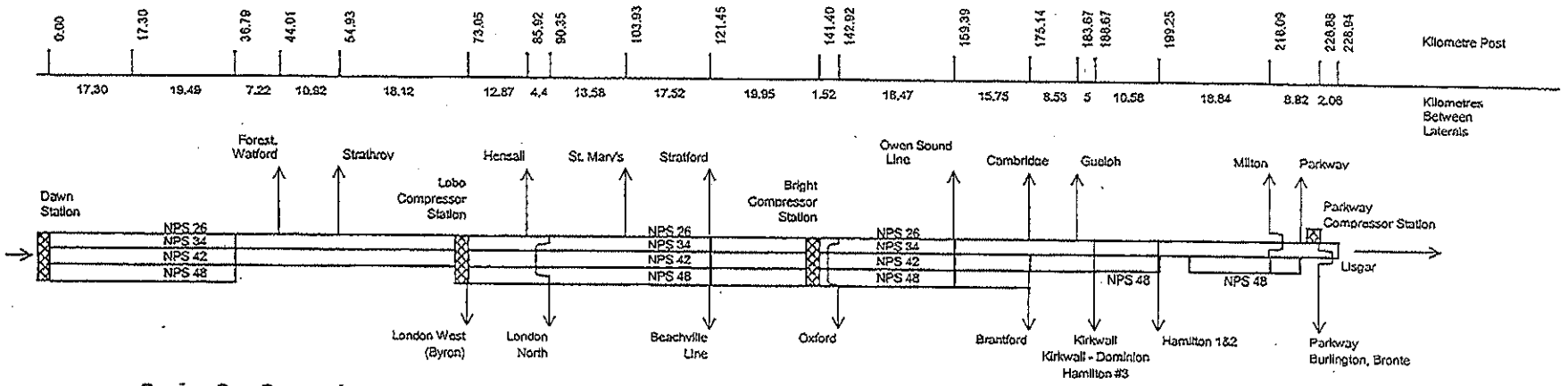
Total System Capacity (Including Firm Service Receipts of 706,341 GJ/d)	5,650,073
Total Requirements	5,683,289
Total Shortfall	(33,216)
Union Markets	0
M12 Transportation	
Kirkwall	0
Lisgar, Parkway	(33,216)

WINTER DESIGN DAY
TRAFALGAR SYSTEM
WINTER 2003/04
(Blue Page Update)

Compressor Stations Operating Conditions at Peak Hour

STATION	LOBO	BRIGHT	PARKWAY
Power Available (MW)	30.7	56.6	16.9
Power Required (MW)	30.7	56.6	12.4
Pressure			
Suction (kPa)	4,148	3,916	3,448
Discharge (kPa)	4,891	5,426	6,454
Compression Ratio	1.18	1.39	1.87
Flow (GJ/d)	4,909,215	4,558,763	462,235
Daily Fuel (GJ/d)	10,562	15,576	3,414

TRAFALGAR SYSTEM



Design Day Demands

	Southern Ontario	(GJ/d)
	Forest, Watford	13,292
	Strathroy	9,770
	London West	129,208
U	Hensall	22,396
N	London North	114,476
I	St. Mary's	7,282
O	Stratford	31,318
N	Beachville	59,418
	Oxford Line	34,742
M	Owen Sound Line	233,379
A	Cambridge	81,088
R	Brantford	108,237
K	Kirkwall - Dominion	93,649
E	Guelph	83,164
T	Hamilton 3	83,126
S	Hamilton 1&2	256,188
	Milton	57,791
	Parkway	0
	Burlington, Bronte	187,173
	Total Southern Ontario	1,605,696
	Northern & Eastern Ontario	
	Parkway	178,000
	Kirkwall	1,281,723
M	Lisgar, Parkway	2,680,781
1	Total M12	3,962,504
2	**Total Design Day Demands**	5,746,200

System Capacity

Total System Capacity (Including Firm Service Receipts of 703,814 GJ/d)	5,653,380
Total Requirements	5,746,200
Total Shortfall	(92,820)
Union Markets	0
M12 Transportation	
Kirkwall	0
Lisgar, Parkway	(92,820)

WINTER DESIGN DAY
TRAFALGAR SYSTEM
WINTER 2004/05
(Blue Page Update)

Compressor Stations Operating Conditions at Peak Hour

STATION	LOBO	BRIGHT	PARKWAY
Power Available (MW)	30.7	56.6	16.9
Power Required (MW)	30.7	56.6	12.4
Pressure			
Suction (kPa)	4,141	3,907	3,445
Discharge (kPa)	4,884	5,412	5,454
Compression Ratio	1.18	1.39	1.87
Flow (GJ/d)	4,913,695	4,558,976	504,257
Daily Fuel (GJ/d)	10,562	15,576	3,414

UNION GAS
Dawn Trafalgar Allocation Units
Winter 2004/05

Line No.	Particulars	Demand ($10^6m^3/d$) (a)	Kilometre Post (km) (b)	Commodity Kilometre ($(10^6m^3/d)$*km) (c)
	Union Demands Supplied by Dawn			
1	Forest	0.356	44.01	15.671
2	Strathroy	0.225	54.93	12.368
3	London West / Byron	3.236	73.05	236.397
4	Hensall	0.586	85.74	50.214
5	London North	2.870	90.35	259.316
6	St. Marys	0.169	103.93	17.558
7	Stratford	0.819	121.45	99.462
8	Beachville	1.505	121.45	182.731
9	Oxford Line	0.875	142.92	125.101
10	Owen Sound	5.993	159.39	955.161
11	Cambridge	2.018	175.14	353.516
12	Brantford	2.741	175.14	480.014
13	Guelph	2.093	183.67	384.405
14	Kirkwall Dominion	2.371	188.67	447.406
15	Hamilton Gate 3	1.009	188.67	190.443
		26.866		3,809.763
	Union Demands Supplied by Parkway FT			
16	Hamilton Gate 3	1.203	40.27	48.453
17	Hamilton Gates 1&2	6.819	29.69	202.458
18	Milton	1.535	10.85	16.656
19	Burlington/Bronte/Parkway	4.972	0.00	-
		14.529		267.567
20	Total Union	41.396		4,077.330
	Storage & Transportation Contracts From Dawn			
21	Consumers' Gas	57.342	228.94	9,660.986
22	Consumers' Gas	1.800	188.67	339.591
23	Grey County	0.000	228.94	-
24	Kingston P.U.C.	0.346	228.94	79.213
25	G.M.I.	5.428	228.94	1,242.682
26	Sunoco	0.397	228.94	90.994
27	Duke	1.325	228.94	303.312
28	T.C.P.L.	6.574	228.94	1,505.058
29	T.C.P.L.	2.833	228.94	648.538
30	T.C.P.L.	23.986	188.67	4,525.425
31	Others	0.681	228.94	155.836
32	Others	8.771	188.67	1,654.822
33	Total S & T	109.482		23,673.262
34	Nothern & Eastern Areas	4.717		-
35	Total Union and S&T	155.595		27,750.592
36	Demands Supplied by Parkway FT	14.529		
37	Total Design Day Demand	141.066		

UNION GAS
Dawn Compression Allocation Units
Winter 2004/05

Line No.	Particulars	10^6 ($10^6 m^3$)
1	Union load	46.112
2	Less Parkway FT	(14.529)
3	Less load not requiring Dawn compression	(0.336)
4	Union load requiring Dawn compression	31.247
5	S&T load	109.482
6	Less load not requiring Dawn compression	(1.164)
7	S&T load requiring Dawn compression	108.318
8	Total System Design Day Load Requiring Dawn Compression	139.566

UNION GAS
M12 Transportation Allocation
Winter 2004/2005

Line No.	Particulars	Transportation Demand Excl. Dawn Compression (a)	Dawn Compression (b)	Total (c)
1	Cost of Service ($000's)	118,186	18,623	136,809
	Allocation of Costs Between M12 and Union Markets:			
	Allocation Units:			
	Transmission ($10^6m^3/d*km$)			
2	Total System Allocation Unit	27,750.592		
3	M12 Allocation Unit	23,673.262		
	Dawn Compression (10^6m^3)			
4	System Maximum Day Volume		139.566	
5	M12 Maximum Day Volume		108.318	
	Allocated Costs:			
	Transmission ($000's)			
6	M12 allocated costs	100,834 [1]		
7	Infranchise allocated costs	17,352		
	Dawn Compression ($000's)			
8	M12 allocated costs		14,453	
9	Infranchise allocated costs		4,170	

Note:
1 This total includes a direct assignment of $29 for Distribution Customer Accounting costs.

UNION GAS
Dawn Trafalgar Allocation Units
No East End Deliveries
Winter 2004/05

Line No.	Particulars	Demand ($10^6m^3/d$) (a)	Kilometre Post (km) (b)	Commodity Kilometre (($10^6m^3/d$)*km) (c)
	Union Demands Supplied by Dawn			
1	Forest	0.356	44.01	15,671
2	Strathroy	0.225	54.93	12,368
3	London West / Byron	3.236	73.05	236,397
4	Hensall	0.586	85.74	50,214
5	London North	2.870	90.35	259,316
6	St. Marys	0.169	103.93	17,558
7	Stratford	0.819	121.45	99,462
8	Beachville	1.505	121.45	182,731
9	Oxford Line	0.875	142.92	125,101
10	Owen Sound	5.993	159.39	955,161
11	Cambridge	2.018	175.14	353,516
12	Brantford	2.741	175.14	480,014
13	Guelph	2.093	183.67	384,405
14	Kirkwall Dominion	2.371	188.67	447,406
15	Hamilton Gate 3	2.213	188.67	417,450
16	Hamilton Gates 1&2	6.819	199.25	1,358,696
17	Milton	1.535	218.09	334,800
18	Burlington/Bronte/Parkway	4.972	228.94	1,138,272
19	Total Union	41.396		6,868,539
	Storage & Transportation Contracts From Dawn			
20	Consumers' Gas	57.342	228.94	9,660,986
21	Consumers' Gas	1.800	188.67	339,591
22	Grey County	0.000	228.94	-
23	Kingston P.U.C.	0.346	228.94	79,213
24	G.M.I.	5.428	228.94	1,242,682
25	Sunoco	0.397	228.94	90,994
26	Duke	1.325	228.94	303,312
27	T.C.P.L.	6.574	228.94	1,505,058
28	T.C.P.L	2.833	228.94	648,538
29	T.C.P.L.	23.986	188.67	4,525,425
30	Others	0.681	228.94	155,836
31	Others	8.771	188.67	1,654,822
32	Total S & T	109.482		23,673,262
33	Nothern & Eastern Areas	4.717		-
34	Total Union and S&T	155.595		30,541,801

UNION GAS
Dawn Compression Allocation Units
No East End Deliveries
Winter 2004/05

Line No.	Particulars	($10^6 m^3$)
1	Union load	46.112
2	Less load not requiring Dawn compression	(0.445)
3	Union load requiring Dawn compression	45.668
4	S&T load	109.482
6	Less load not requiring Dawn compression	(1.055)
7	S&T load requiring Dawn compression	108.427
8	Total System Design Day Load Requiring Dawn Compression	154.095

UNION GAS
M12 Transportation Allocation
No East End Deliveries
Winter 2004/2005

Line No.	Particulars	Transportation Demand Excl. Dawn Compression (a)	Dawn Compression (b)	Total (c)
1	Cost of Service ($000's)	118,186	18,623	136,809
	Allocation of Costs Between M12 and Union Markets:			
	Allocation Units:			
	Transmission ($10^6 m^3/d*km$)			
2	Total System Allocation Unit	30,541.801		
3	M12 Allocation Unit	23,673.262		
	Dawn Compression ($10^6 m^3$)			
4	System Maximum Day Volume		154.095	
5	M12 Maximum Day Volume		108.427	
	Allocated Costs:			
	Transmission ($000's)			
6	M12 allocated costs	91,636 [1]		
7	Infranchise allocated costs	26,550		
	Dawn Compression ($000's)			
8	M12 allocated costs		13,104	
9	Infranchise allocated costs		5,519	

Note:
1 This total includes a direct assignment of $29 for Distribution Customer Accounting costs)

UNION GAS LIMITED

Answer to Interrogatory
from TransCanada PipeLines Limited

Reference: 1) Union's 2004 Rates Application RP-2003-0063, Exhibit G3, Tab 1, Schedule 1
2) Union's 1997 Rates Application, E.B.R.O. 493/494, Union response to TransCanada Interrogatory, Exhibit J28.5B.5

Preamble: TransCanada requires further information in order to understand how compressor costs are functionalized to Dawn-Trafalgar transmission.

Question

a) Please provide a schematic of the piping layout and the compressor units in the Dawn compressor station in the same format as reference (2). The layout should show how each compressor is connected to the TransCanada, St. Clair, Bluewater, Vector, Ojibway, and Dawn-Trafalgar pipelines and to the pipelines from Union and Enbridge Gas Distribution's storage sites on the 2004 design day that Union uses for determining the winter compression charge. The schematic should also show the piping arrangements from the compressors' discharge side into each line of Union's Dawn-Trafalgar system.
b) Please list all of the compressors at the Dawn compressor station that have some or all of their costs allocated to Dawn-Trafalgar transmission.
c) Please identify the compressors provided in response (b) which are also used to provide other services besides transmission, specify the other service provided (e.g. storage, transportation on other pipelines, etc.), and provide calculations and allocation factors used to functionalize the costs of these compressors between Dawn-Trafalgar transmission and other services.
d) Are all of the compressors at the Dawn compressor station that have some or all of their costs allocated to Dawn-Trafalgar transmission physically capable of providing, and actually used to provide, compression for the purpose of transmission on the Dawn-Trafalgar system? If not, please list the exceptions and explain why costs related to these compressors are allocated to Dawn-Trafalgar transmission.
e) Please provide the following operating information for each of the compressors at the Dawn compressor station on the 2004 design day that Union uses for determining the winter compression charge:
   i. ISO power;
   ii. maximum volumetric capacity;
   iii. suction pressure;
   iv. discharge pressure;
   v. MW required;
   vi. volume compressed for each service provided by that compressor;
   vii. inlet gas composition and temperature;
   viii. efficiency of the compression; and
   ix. ambient temperature.

Witness: Bill Fay / Pat McMahon
Question: July 24, 2003
Answer: September 19, 2003
Docket: RP-2003-0063

Answer

a) Please see attached schematic.

b) Please refer to (e).

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

The factor COMPRECL-PT is used to functionalize Dawn compression rate base related costs. The allocation is based on design day horsepower requirements reflecting Blue Page updated data.

Storage Excluding Dehydrator – 49.59%
Dawn Station – 45.77%
Ojibway/St. Clair – 4.64%

Calculations:

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

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

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

Union then allocates the required horsepower of each compressor to Storage Service or to Transmission Service. This is done outside of the model. Because of the integrated nature of the Dawn yard, not all compressors are specifically performing Storage or Transmission Services. The horsepower of compressors not performing a specific service must be divided between Storage and Transmission Services. The horsepower required to raise the pressure of gas from storage pool pressure to 700 psig is allocated to Storage Service. The horsepower required to raise the pressure of gas from 700 psig to 895 psig is allocated to Transmission Service. The method used to allocate each compressor (along with an example) is detailed in EBRO 499 Exhibit G1, Tab 1, Appendix D.

Witness: Bill Fay / Pat McMahon
Question: July 24, 2003
Answer: September 19, 2003
Docket: RP-2003-0063

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

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

Storage Excluding Dehydrator – 30.99%
Dawn Station – 62.85%
Ojibway/St. Clair – 6.16%

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

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

Due to the fact that the model is very large and involves multiple worksheets for each calculation and utilizes assumptions that vary by season and month, it is not practical to provide the calculations that would be generated by the model. In order to assist in the understanding of how Union calculates its fuel requirements, the methodology has been provided below.

Dawn Storage Fuel

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

Dawn Transmission Fuel

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

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

d) No, not all of the compressors at the Dawn Compressor station that have some or all of their costs allocated to Dawn-Trafalgar transmission are physically capable of providing, nor used to provide, compression for the purpose of transmission on the Dawn-Trafalgar system. All Dawn compression costs are tracked as a total pool of costs (including compressors performing transmission and other services throughout the year) and those total costs are allocated based on design day.

e) Please see attached table.

Exhibit J32.12 (a)
Attachment