



450 – 1 Street S.W.
Calgary, Alberta T2P 5H1

Tel: (403) 920-6209
Fax: (403) 920-2310
Email: elizabeth_swanson@transcanada.com

May 16, 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)
Written Evidence**

In accordance with the requirements in Procedural Order No. 5, please find attached TransCanada's Written Evidence.

Sincerely,
TransCanada PipeLines Limited

Original Signed by

Elizabeth Swanson
Associate General Counsel
Law and Regulatory Research

Enclosure

UNION GAS LIMITED

Distribution Rates for 2013

EB-2011-0210

WRITTEN EVIDENCE

of

TRANSCANADA PIPELINES LIMITED

May 16, 2012

1.0 Introduction

TransCanada Pipelines Limited (TransCanada) has intervened in this case for three principal reasons.

First, the TransCanada Mainline has extensive facilities in Ontario, and has provided reliable gas transportation service to Ontario markets for over 60 years. Mainline net plant in Ontario is approximately \$4 billion, occupying 3,251 kilometres of right-of-way with 164 domestic delivery points. While these facilities are regulated by the National Energy Board (NEB), a significant portion of their costs are borne by Ontario gas consumers, and the decisions of the Ontario Energy Board (Board) in this and future cases could have an important impact on whether Mainline costs to Ontario gas consumers go up or down.

Second, the Mainline is a substantial customer of Union Gas. The Mainline contracts for over 1 PJ/d of M12, 128,000 GJ/d of M12-X and 500,000 GJ/d of C1 Transportation Service on the Union System, with a total annual cost of over \$31 million. This Union capacity is used by TransCanada as part of its integrated Mainline to provide service to Ontario and other eastern markets. The Mainline recovers the cost of this transportation in its revenue requirement as Transportation by Others (TBO).

As a result of these contractual obligations on the Union system, many of them long term in nature, the costs of Union M12, M12-X and C1 Service have an impact on Mainline tolls and are material to the competitiveness of those tolls. It is in the Mainline's interest to ensure that these costs are as low as possible. Given that these costs are ultimately borne in significant measure by Ontario gas consumers, the decisions of this Board as they pertain to the costs incurred by the Mainline on the Union system also have a material impact on costs to Ontario gas consumers.

1 Third, Union's transportation services are a critical operational part of TransCanada's
2 integrated Mainline. TransCanada depends on these services to serve Ontario and
3 other eastern markets and accordingly TransCanada is always acutely interested in the
4 reliability of Union's transportation facilities.

5 TransCanada has factored these three considerations into the positions presented in
6 this evidence.

7 In its Application, Union has proposed major capital expenditures for compression
8 facilities at Parkway TCPL (Parkway), citing the reliability of service into the
9 TransCanada system as the reason for these facilities. Union has also proposed major
10 capital expenditures for a duplicate tie-in to the Enbridge Gas Distribution system at
11 Parkway, again citing the reliability of service as the rationale for these expenditures.

12 As noted, TransCanada depends on the reliability of Union's transportation services.
13 Indeed, among the parties before the Board in this case, TransCanada is one of those
14 most keenly interested in this issue. That said, TransCanada believes that it is in the
15 public interest of Ontario that the Board ensure that this reliability be achieved without
16 unnecessary natural gas infrastructure costs – costs that must inevitably be borne by
17 Ontario natural gas consumers.

18 In this regard, TransCanada supports the recommendation made in a Staff Report to
19 the Board as part of the 2010 Natural Gas Market Review that, in light of changes in
20 the natural gas market in North America, the Board's review of proposed expansions
21 of natural gas transmission systems in Ontario should take into account existing
22 alternatives to the proposed expansions to ensure economically prudent long-term
23 capital investments¹

¹ OEB Letter dated April 30, 2012

2.0 Summary of TransCanada's Position

Ontario has billions of dollars of natural gas facilities – infrastructure that Ontarians are already paying for – that can provide Union with loss of critical unit protection (LCU protection) at Parkway. Union did not consider alternatives to new capital expenditures that could address its interest in LCU protection; in particular, Union did not explore options that would use existing infrastructure. In this evidence, TransCanada presents a number of options that it believes that Union should consider before coming to the Board with a proposed solution to its interest in LCU protection.

Union is in a unique position when it comes to LCU protection at Parkway. Unlike its other compression stations, Parkway is at the terminus of the Union facilities connecting to TransCanada. As a result, it is feeding into a large system with its own compression and its own ability to add compression or provide services with existing infrastructure that create LCU protection at Parkway. This creates options for Union to obtain LCU protection at significantly lower costs than what would be incurred by the Parkway West Project.

As Union emphasizes in its evidence and in the presentations that were produced in response to a TransCanada Interrogatory², the natural gas market in southern Ontario is in a state of flux: Union's own plans for expansion are uncertain and TransCanada is expanding and conducting further open seasons in southern Ontario. This activity during a time of change calls for consultation and deliberation so that Union and TransCanada can develop the best solutions for Ontario gas users. Indeed, this is what TransCanada has done with Union throughout the development of the two systems. TransCanada and Union have minimized infrastructure costs by using Union's transportation facilities as part of the integrated TransCanada system.

² Exhibit J.B-1-7-8(e)

As noted below, TransCanada has infrastructure available in various configurations, or can modify or add in increments more economic than the Parkway West Project, facilities that will address Union's interest in LCU protection at Parkway.

TransCanada is prepared to work with Union to develop other options, but until this consultation takes place Union and the Board, cannot have confidence that the best solution for Ontario gas consumers is being proposed.

3.0 Parkway – TCPL – Loss of Critical Unit Protection

As part of the Parkway West Project, Union is proposing to spend \$215 million to add new compression in order to provide LCU protection at Parkway and a duplicate interconnection with Enbridge Gas Distribution (EGD). TransCanada questions the need for these facilities at this time.

As noted, TransCanada is concerned that the Parkway West Project was conceived and developed by Union without considering alternatives that use infrastructure for which Ontarians are already paying.

In response to Interrogatory J.B-1-1-7b, Union provided two alternative options to the compression that is included in the Parkway West Project: (1) installing additional compression at the existing Parkway compressor station and (2) increasing compression at Bright. TransCanada agrees that the compression described in the Parkway West Project is the best of the three options Union presents. However, TransCanada believes that there are at least four other alternatives that would be lower cost options. The four alternatives that would meet Union's requirements at Parkway in an LCU situation are:

1. Union can contract for TransCanada's Short Term Firm Transportation Service (STFT) from Empress to Union CDA, thus securing LCU protection at Parkway;
2. Existing TransCanada compression facilities can be moved to the TransCanada system at Parkway in order to provide Union with LCU protection;

1 3. TransCanada can move existing compression facilities to transport gas from
2 Kirkwall to Parkway in order to provide Union with LCU protection; or

3 4. The TransCanada and GLGT systems can be used to transport gas from Dawn
4 to Parkway as required.

5 Each of these options uses existing infrastructure and, in the case of the last three
6 alternatives, some additional but economic facilities expansions to meet Union's
7 objective at a lower cost. Ontario gas consumers would use existing facilities that they
8 are already paying for and thus overall infrastructure costs for Ontarians would be
9 reduced.

10 **3.1 Using TransCanada Capacity for Short Term Services**

11 Long haul Interruptible (IT) capacity on the TransCanada system is essentially firm
12 due to the current under-contracted situation and can flow with as little as 4 hours
13 notice. STFT is a firm transportation service that can be contracted for service starting
14 the next business day with term flexibility, from a minimum of 7 days to a maximum
15 of 364 days. Once contracted, STFT has the same level of priority as year round Firm
16 Transportation (FT) service, which on the TransCanada system is backed by LCU
17 protection. The reason STFT is economically competitive relative to installed
18 compression is due to the infrequency that it would be required for LCU protection.
19 Union has stated that there have been no restricted firm deliveries to TCPL at Parkway
20 due to a loss of compression since January 1, 2011.³ TransCanada is not aware of any
21 time in the last ten years or more when Union has restricted firm deliveries to
22 TransCanada at Parkway. In a presentation promoting the safe and reliable nature of
23 the Union system, Union states that their average compressor reliability is above
24 99%⁴, and further, the historical data that Union provided for unscheduled outages
25 shows that all of the unscheduled outages for the Parkway compressors that have
26 occurred since January 2011 were only hours long.⁵

³ Exhibit J.B-1-7-5f

⁴ Exhibit J.B-1-7-8.attachment 6, slide 7

⁵ Exhibit J.B-1-7-5d

1 In the response to J.B-1-7-7 h) Union also provides five reasons why Union believes
2 that STFT will not work for LCU protection. TransCanada wishes to address each of
3 those concerns.

4 3.1.1 There will not be enough time to source the non-facility capacity

5 TransCanada, with thousands of kilometers of pipe upstream of Parkway, has
6 substantial capacity to assist Union immediately in the event of a critical unit
7 failure. Also, IT is available within hours – at the next nomination window,
8 and is effectively firm. STFT bids are reviewed by 10:00 a.m. eastern time
9 every banking day with contracts available to be nominated by 1:00 p.m.
10 eastern time for service commencing the next gas day. TransCanada
11 infrastructure can reliably deliver Empress supply to the Ontario markets
12 during a LCU event at Parkway from the onset of the event.

13 Furthermore, TransCanada, with available capacity to Parkway, would be
14 more than willing to develop an “Emergency” service for Union in order to
15 provide access to immediate short term firm transportation when Union
16 experiences the loss of a critical unit. TransCanada’s current capacity and
17 tariff services can provide Union with economical LCU protection, and if
18 Union would like to customize a service, then, with consultations concerning
19 Union’s needs and TransCanada’s capabilities, custom service can be
20 developed, subject to NEB Approval.

1 3.1.2 The volume required is too large to mitigate using non-facility capacity

2 The quantity of available STFT available from Empress to the Union CDA for
3 the month of May 2012, for example, is 1.675 PJ/d as of May 11, 2012.

4 TransCanada expects that future STFT availability would be similar. The
5 quantity of STFT available is sufficient to mitigate the LCU shortfall in the
6 near term.

7 3.1.3 Uncertainty the volumes required will be available at a reasonable price

8 The two markets where transactions are likely to occur are Nova Inventory
9 Transfer (NIT), where the supply is purchased and Dawn where it will be
10 necessary to sell or store the gas. While 0.9 PJ/d is a sizable quantity of gas,
11 the amount that actually needs to transact in the marketplace will be
12 dependent on the market demand for transportation through Parkway to TCPL
13 during the time of the outage. 0.9 PJ is only a small fraction of the volume
14 transacted at NIT each day so the increase in price, if any, would be minimal.
15 Also, the need to go to the marketplace for this supply will be very infrequent,
16 as discussed above.

17 3.1.4 Acquiring volumes of this magnitude increase the cost of the non-facility
18 capacity

19 The cost of transportation tolls for 0.9 PJ/d for 7 days of STFT from NIT to
20 Union CDA based on the forecast 2014 tolls under TransCanada's
21 Restructuring Proposal is \$8 - \$12 million. There will also be savings arising
22 from the purchase of gas at NIT (as opposed to Dawn) and selling gas at
23 Dawn of \$4 – \$6 million. Therefore, the net cost of using STFT will be
24 approximately \$2 - \$8 million which compares favorably with the annual cost
25 of service impact of Union's proposed compressor addition which Union has
26 estimated to be approximately \$16 million for depreciation, allowed return,
27 and taxes only.⁶ Considering that the frequency of the need for STFT service

⁶ Exhibit J.B-1-7-8b

would be once every several years, the costs savings from using STFT are substantial.

3.1.5 A Parkway compressor outage could make physical deliveries to Parkway and points east difficult

As mentioned above, the capacity that TransCanada offers as STFT is firm. Regardless of whether the gas is sourced from Parkway or from Empress the reliability of the service is very high. TransCanada has been reliably delivering gas from Empress to the Ontario markets for decades.

3.2 TransCanada relocates existing compression facilities on the downstream side of Union's Parkway compression

This alternative is based on cost saving opportunities that exist if TransCanada constructs the LCU compression facility at Parkway. The cost savings are associated with the following points:

- TransCanada can transfer existing equipment from another location to Parkway, thus using existing infrastructure;
- The need for a new custody transfer meter station is eliminated;
- Based on the proposed Parkway West location in Exhibit J.B-1-7-8, Attachment 1, slide 9, TransCanada could construct the compressor adjacent to the existing TransCanada lines which reduces the amount of pipe required on the suction side of the compressor; and
- If the new meter station to Enbridge is not required as recommended below, then there is no need to construct a new valve site on the Dawn – Trafalgar System and the easement to the proposed Parkway West site is not required.

TransCanada estimates that the savings in capital costs associated with this alternative are almost 50% of the Union proposed alternative with cost savings as high as \$80 million.

1 As a result of FT long haul non-renewals on the Canadian Mainline TransCanada has
2 developed experience in relocating compressor units from one location to another.
3 Later this year TransCanada will be applying to the NEB for facilities related to
4 expansion volumes with an in-service date of November 1, 2013. That facility
5 application will include a proposal to relocate 2 compressor units to Station 130
6 (Maple) at an estimated capital cost of approximately \$70 million including the costs
7 to deactivate the compressors at the current sites.

8 TransCanada could locate compressors on the suction or downstream side of the
9 existing Parkway site. Again, with consultations between the two pipelines there is
10 an opportunity to meet Union's needs with existing infrastructure that Ontario gas
11 consumers have paid for rather than Union adding redundant infrastructure.

12 **3.3 Kirkwall to Parkway via the TransCanada system**

13 TransCanada notes that much of the decontracting occurring on the Union system is
14 for deliveries to Kirkwall and similar decontracting has occurred downstream of
15 Kirkwall on the TransCanada system. This proposal takes advantage of assets that
16 have available capacity. TransCanada would upgrade a length of low pressure line to
17 line up with a Maximum Allowable Operating Pressure (MAOP) of 6895 kPa (the
18 same MAOP as the Niagara Export Line), transfer one or two compressors to the
19 vicinity of Parkway and make some associated yard piping changes. (See map below.)



Even if the capital costs of this alternative approached those of the Union proposal, a preliminary hydraulic analysis indicates that this set of facilities could transport an incremental 1.4 PJ/d through Parkway – comfortably exceeding Union’s need for LCU protection and providing potential for further flows. A notable advantage of this option over the proposed Parkway West compression is that it would increase the reliability of TransCanada’s deliveries to the Bronte and Burlington meter stations in the Union CDA by allowing TransCanada to deliver gas to those meters from either Parkway or Kirkwall.

3.4 Dawn to Parkway via the TransCanada and GLGT system

Again, this alternative will take advantage of existing facilities and avoid substantial capital investment. Using the existing TransCanada and GLGT infrastructure, Union can meet its requirements at Parkway without the addition of the proposed Parkway West compression.

1 The response to Exhibit J.G-1-7-11 indicates that Union has not considered expansion
2 facilities for the Dawn-TCPL delivery point or even if additional facilities would be
3 required to meet its needs in this fashion. Given that the delivery pressure requirement
4 to TransCanada at Dawn is less than the pressure at which Union compresses the gas
5 for transport to Parkway and these are not incremental volumes, Union would not
6 require additional compression to increase its Dawn to Dawn TCPL capacity. The
7 facilities that Union would need to construct for this alternative should be limited to
8 yard piping, regulator upsizing and metering upsizing. This cost should be about one-
9 tenth of the cost of the Parkway West compression.

10 The most significant cost for this alternative would be the GLGT transportation,
11 though still likely substantially less expensive than the proposed Parkway West
12 compression.

13 **3.5 Summary**

14 TransCanada has described four viable, lower cost alternatives that take advantage of
15 existing infrastructure. In consultation with Union, the parties could doubtless develop
16 permutations of these alternatives or arrive at different alternatives. Furthermore, this
17 consultation could ensure that the adaptation of the two systems to the natural gas
18 supply and market changes that Ontario is facing occurs in the way that best serves the
19 interests of Ontario gas users.

20 **4.0 Reliable Deliveries to Enbridge**

21 TransCanada does not believe that Union has sufficiently justified the proposed
22 facilities for a duplicate interconnection with the Enbridge system. The two examples,
23 provided by Union⁷, of events that would prevent deliveries from being made at
24 Parkway and Lisgar appear to be extremely unlikely ever to occur.

⁷ Exhibit J.B-1-7-13c

1 The existing Parkway valve site consists of three lines upstream, two lines downstream
2 and three lines providing gas to the Parkway facilities⁸. Transmission pipes and valves
3 are extremely reliable: they operate for decades with only normal maintenance. This
4 Parkway valve site includes multiple crossover valves and side valves to allow for the
5 outage of individual lines without disrupting the flow of gas to downstream facilities.
6 The only type of failure that would prevent deliveries to Enbridge at Parkway and
7 Lisgar would be one that would disable all the facilities at the Parkway Valve Site.
8 This would involve a rupture with a magnitude that is extremely rare.

9 The proposed Parkway West Facility includes the construction of a new valve site
10 upstream of the existing Parkway valve site. This new valve site will have the same
11 level of risk of total failure as the existing site has. A total failure of the new valve site
12 would prevent deliveries to Enbridge at Parkway West, Parkway and Lisgar. The
13 proposed facilities provide no increased reliability against valve site failure.

14 The other type of failure that Union included in the response to Exhibit J.B-1-7-13c is
15 a failure of the pipeline system West of Parkway. While the Parkway West facility is
16 west of the current Parkway facility, it is only a short distance away compared to the
17 total distance from Dawn to Parkway. The only event where the Parkway West facility
18 will increase delivery reliability to Enbridge is a total failure of the lines between the
19 Parkway West valve site and the existing Parkway valve site.

20 TransCanada can provide more supply reliability to the Greater Toronto Area (GTA)
21 than the proposed Parkway West facility without additional facilities required.
22 TransCanada can deliver gas directly to Enbridge at Parkway, or through the delivery
23 of gas to Union at Parkway. TransCanada agrees that the GTA is an important and
24 growing market that must be served in a reliable manner. TransCanada proposes that
25 its facilities can provide this reliability in the event of a failure anywhere on the Union
26 system.

⁸ Exhibit J.B-1-1-2, attachment 1

1 Accordingly, TransCanada does not consider Union's proposed \$35 million
2 expenditure for delivery reliability to Enbridge to be at all justified.

3 **5.0 Relationship of Parkway West Project to Parkway Extension**

4 The presentations filed with Exhibit J.B-1-7-8 demonstrate that Union considers the
5 Parkway West Project and the proposed Parkway Extension to be linked projects. The
6 Board is being asked to consider the Parkway West Project without the full set of
7 facilities that will accommodate the growth that Union anticipates downstream of
8 Parkway.

9 In light of the evolving market, Union should not be putting the Board in the position
10 of approving the Parkway West Project when it is part of a pre-build of Union's
11 extension and expansion to Maple. The Parkway West Project should be considered in
12 the context of the market's development of expanded facilities to serve Maple and
13 downstream points in order to avoid a distortion of the market by inappropriately
14 increasing costs to Union's customers.

15 If there are to be further facilities in the Parkway – Maple corridor, then TransCanada
16 is able to build incremental capacity at a lower capital cost than other parties. Union
17 estimates capital costs for a Parkway – Maple project at \$400-\$600 million.⁹
18 TransCanada estimates that a Parkway to Maple build on its own system would have
19 costs in a range from one-half to two-thirds that amount: \$300 - \$400 million.

20 **6.0 Conclusion**

21 To achieve its objective of LCU protection, Union went directly to a solution premised
22 exclusively on new capital expenditures and a resulting increase in rate base. Much is
23 on the horizon for facilities development downstream of Parkway and in the GTA, and

⁹ Exhibit J.B-1-7-8, attachment 1, page 23

1 yet there is no evidence before the Board that the Parkway West Project will be
2 integrated with those developments.

3 TransCanada has presented a number of options that can meet Union's objective at a
4 lower cost by using existing infrastructure. One or a combination of these options can
5 be developed in consultation with Union, taking into account growth prospects
6 downstream of Parkway, and Ontario gas consumers will have the right solution
7 without having to pay the costs of redundant infrastructure.