

July 31, 2015

BY COURIER & RESS

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

RE: EB-2014-0182 – Union Gas Limited (“Union”) – Burlington Oakville Project – Reply Evidence

Dear Ms. Walli,

Please find attached the Reply Evidence of Union Gas Limited on the evidence prepared by Ms. Aggie Cheung submitted on behalf of the Ontario Greenhouse Vegetable Growers (“OGVG”) and Canadian Manufacturers and Exporters (“CME”).

If you have any questions with respect to this submission please contact me at 519-436-5334.

Yours truly,

[original signed by Angela Hale on behalf of]

Vanessa Innis
Manager, Regulatory Initiatives

Encl.

cc: Zora Crnojacki, Board Staff
Mark Kitchen, Union Gas
Charles Keizer, Torys
All Intervenors (EB-2014-0182)

REPLY EVIDENCE OF UNION GAS LIMITED

1. Introduction

The purpose of this evidence is to respond to the evidence filed by Ms. Aggie Cheung (dated June 29, 2015) on behalf of OGVG/CME. The intent of Ms. Cheung's evidence is to further support the OGVG/CME alternative no-build proposal ("Alternative Proposal") introduced as part of the EB-2014-0182 proceeding. The Alternative Proposal submits that Union should meet 100% of Burlington Oakville System design day requirements by purchasing supply at Niagara and transporting it via TransCanada transportation services from Niagara to the Burlington Gate Station and Bronte Gate Station located in TransCanada's Union CDA¹. OGVG/CME suggest that the Alternative Proposal is a lower cost alternative than Union's proposed Burlington Oakville Pipeline.

The Alternative Proposal comprises the following:

"Union currently purchases 21 TJ/d of gas supply at Niagara. The utility could purchase more gas at Niagara and use that gas to serve the demands in both Union ECDA and amended Union CDA. Instead of contracting for only 75% of the ECDA demand on the

¹ The Burlington Gate Station and Bronte Gate Station are located within TransCanada's Union CDA. TransCanada proposed to restructure the Union CDA such that these two gate stations will be located in the newly created Union ECDA once the Burlington Oakville Pipeline has been approved with an anticipated in-service date of November 1, 2016.

1 *TransCanada system, Union could serve 100% of the demand through the TransCanada*
2 *system.”*²

3
4 *“Under the Alternative described above, Union would source up to a total of 276 TJ/d*
5 *from Niagara to the Burlington Oakville area by 2035.”*³

6
7 OGVG/CME have attempted to address Union’s distribution reinforcement needs through their
8 Alternative Proposal, focusing on how Union should make its gas supply planning decisions.
9 Union’s gas supply portfolio already includes sufficient upstream gas supply and transportation
10 assets to meet the planned needs of Union South including the Burlington Oakville System. The
11 Alternative Proposal is premised on purchasing significant supply at Niagara. However, supply is
12 not the issue that Union is addressing through the proposed Burlington Oakville Pipeline.

13
14 The Burlington Oakville Pipeline as proposed by Union is designed to increase the physical
15 connection between the towns of Burlington, Oakville, and the southern portion of Milton to the
16 Dawn Parkway System in order to deliver gas supply already being purchased by Union.
17 Union’s evidence concludes that it is less expensive for Union to build the Burlington Oakville
18 Pipeline than it is to contract for TransCanada transportation services to deliver these supplies.
19 Significant other benefits, beyond economics, also result from the proposed Burlington Oakville

² OGVG/CME Alternative Proposal, p. 4, paragraph 14

³ OGVG/CME Alternative Proposal, p. 6, paragraph 21

1 Pipeline.⁴

2
3 There are three fundamental issues with the Alternative Proposal, which are discussed in more
4 detail later in this evidence:

5 1. The Alternative Proposal would disconnect the Burlington Oakville System from Dawn,
6 thus eliminating the benefits of the integrated Dawn Parkway System and the strategic
7 Dawn Hub.

8 2. The Alternative Proposal does not align with Union's Gas Supply Planning Principles as
9 it:

10 a. would move up to 77% of Union's upstream transportation and supply portfolio
11 away from Dawn, the number one market hub in the Great Lakes region, and
12 would force Union to rely on Niagara, which is the least liquid point in Union's
13 current supply portfolio;

14 b. cannot be operationalized without using additional assets, which when those costs
15 are incorporated, make the Alternative Proposal more expensive, not less
16 expensive, than the proposed Burlington Oakville Pipeline; and,

17 c. would decrease the diversity and security of Union's upstream transportation and
18 supply portfolio.

19 3. The Alternative Proposal omits the \$8.25 million annual cost of a contract with
20 TransCanada for 135 TJ/d of Kirkwall to the Amended Union CDA transportation
21 capacity ("Kirkwall Contract") to serve an area adjacent, but not attached, to the

⁴ EB-2014-0182 Technical Conference transcript, May 21, 2015, pp. 6-8

1 Burlington Oakville System.

2

3 The notion of using third party services, rather than Union's own facilities, is also counter to the
4 trend that Union has been following elsewhere on its system. Union has been working to move
5 Union South delivery obligations to Dawn, a change which has been requested repeatedly by
6 Union's customers. The Alternative Proposal, including contracting up to 77% of the upstream
7 supply portfolio at a single point, would require the reinstatement of vertical slice and/or
8 obligated deliveries at the Union CDA or Niagara. It is not equitable to require only sales service
9 customers to purchase such a large portion of supplies at Niagara to support all customers'
10 needs.⁵ The Alternative Proposal runs counter to what Union's customers actually want and what
11 was the result of the settlement regarding the elimination of the Parkway Delivery Obligation.⁶

12

13 In addition, both OGVG/FRPO and CME filed submissions in EB-2014-0289 (2014 Natural Gas
14 Market Review) which included comments on the Dawn Reference Price. In its submission
15 (dated January 16, 2015), OGVG/FRPO⁷ identified the merits of a Dawn Reference Price.
16 Although CME said there was not enough information presented to provide a position, CME did
17 agree that OGVG/FRPO made a persuasive case for changing the reference price location to

⁵ The Alternate Proposal is similar to Union disconnecting the Windsor/Leamington market from Dawn and requiring those customers to provide gas at Ojibway (Union's interconnection point with Panhandle Eastern Pipeline in Windsor).

⁶ The Parkway Delivery Obligation has been the subject of numerous contentious regulatory proceedings. In 2014, after lengthy discussions, Union and intervenors agreed to a process that will result in the elimination of the Parkway Delivery Obligation. The agreement was filed on June 3, 2014 and approved by the Board as part of EB-2013-0365 (Union's 2014 Rates proceeding) in a decision issued June 16, 2014.

⁷ FRPO – Federation of Rental-housing Providers of Ontario

Dawn.⁸

2. Issue 1 - Disconnecting the Burlington Oakville System from the Dawn Parkway System

Union South is primarily served by the Dawn Parkway System using integrated transportation and storage assets. This integrated system includes access to the Dawn Hub, the largest natural gas market hub in the Great Lakes region and one of the largest and most important market hubs in North America.

The Board recognized in its November 7, 2006 Natural Gas Electricity Interface Review Decision EB-2005-0551, (“NGEIR Decision”), that:

“The development of the Dawn Hub has brought substantial benefits to consumers in Ontario and to other market participants”⁹

The Board further identified the importance of the Dawn Hub by saying:

“The storage facilities are an integral part of what is commonly referred to as the Dawn Hub, which is widely recognized as one of the more important market centres in North America for the trading, transfer and storage of natural gas. In its Natural Gas Forum Report, the Board stated “The large amount of nearby storage, combined with the convergence of pipelines linking the U.S. and Ontario gas markets, have made Dawn the

⁸ Union filed a proposal to move to a Dawn reference price where appropriate on July 15, 2015 (EB-2015-0181).

⁹ EB-2005-0551 Decision, November 7, 2006, p. 44.

1 *most liquid trading location in Ontario. The Federal Energy Regulatory Commission, in*
2 *its assessment of energy markets in the United States in 2004, made similar comments*
3 *about the significance of Dawn:*

4 *The Dawn Hub is an increasingly important link that integrates gas produced from*
5 *multiple basins for delivery to customers in the Midwest and Northeast...Dawn has many*
6 *of the attributes that customers seek as they structure gas transactions at the Chicago*
7 *Hub: access to diverse sources of gas production; interconnection to multiple pipelines;*
8 *proximity to market area storage; choice of seasonal and daily peak and loan services;*
9 *liquid trade markets; and opportunities to reduce long haul pipeline capacity ownership*
10 *by purchasing gas at downstream liquid hubs.”¹⁰*

11
12 As explained in its 2014-2015 Gas Supply Plan Memorandum¹¹, Union structures its Union
13 South sales service upstream transportation and gas supply portfolio by taking the total annual
14 volume requirement of all Union South sales service customers and dividing it by 365 days.
15 This average day requirement is then contracted with upstream transportation providers and this
16 transportation capacity is designed to be utilized at 100% load factor throughout the year. This
17 methodology also applies to Union South direct purchase customers who have their Daily
18 Contract Quantity (DCQ) based on average day demand.

¹⁰ EB-2005-0551 Decision November 7, 2006, pp. 7-8.

¹¹ EB-2015-0010 2014 Disposition of Deferral Account Balances and 2014 Earnings Sharing Amount, Exhibit A, Tab 5, Section 5.1.1

1 During times when customer demands are below average day demand, the excess supply is
2 injected into storage at Dawn. When customer demands are greater than average day demand,
3 gas is withdrawn from storage and transported to Union South in-franchise customers. This
4 allows Union and its customers to use their upstream transportation contracts as efficiently as
5 possible and allows for gas supply to be purchased evenly and more cost effectively. Bundled
6 direct purchase customers in Union South purchase gas in exactly the same manner (including
7 hospitals, schools, greenhouses, and manufacturing plants).

8
9 Bundled direct purchase customers in Union South also benefit from being connected to the
10 Dawn Hub and the Dawn Parkway System as they can take advantage of the diverse
11 transportation and supply options available at the Dawn Hub. In contrast, the Alternative
12 Proposal suggests that Union purchase the Burlington Oakville System gas supply requirements
13 based on design day and not on average day. The result is that the Niagara supply component for
14 Union South would become significantly disproportionate relative to other supply points in the
15 Union South upstream transportation portfolio.

16
17 In addition to not building the proposed Burlington Oakville Pipeline, the Alternative Proposal
18 suggests that Union should no longer use the existing NPS 8 Milton Line and the NPS 12
19 Parkway Line connected to the Dawn Parkway System to meet design day demand. The
20 Alternative Proposal would serve the Burlington Oakville System from Niagara entirely through
21 third-party transportation services. This would eliminate the ability for customers in the
22 Burlington Oakville System to benefit from Dawn. In other words, as Union has been working

1 to further connect its customers to Dawn and allow those customers to have access to the
2 integrated Dawn Parkway System, the Alternative Proposal would do the opposite for customers
3 in the Burlington Oakville System. Burlington Oakville System customers would be completely
4 reliant upon supply delivered to TransCanada at Niagara where: there are fewer upstream
5 pipeline connections; supply is primarily from one production basin; fewer counterparties
6 transact; and there is no direct access to storage.

7
8 **3. Issue 2 - Union's Gas Supply Planning Principles**

9 When managing its transportation portfolio and analyzing potential pipeline paths and supply
10 sources, Union refers to its Gas Supply Planning principles¹². The Board in its EB-2011-0210
11 decision issued a directive related to Union's Gas Supply Planning principles and processes and
12 peak (design) day methodology. Union responded to this directive in EB-2013-0109 (2012
13 Deferrals and Earnings Sharing) by filing an independent third party report prepared by Sussex
14 Economic Advisors ("Sussex"). The Sussex report verified that Union's Gas Supply Planning
15 process, methodology and plan reflects appropriate planning principles that are objectively
16 applied and result in a Gas Supply Plan that is "right sized". The Board accepted that report as
17 filed.

18
19 These principles are designed to ensure customers consistently receive secure, diverse natural

¹² The Gas Supply Planning Principles have been presented to and accepted by the Board on many occasions. Most recently these principles were presented to the Board in Union's 2013 Rate Case (EB-2011-0210), the 2012 Deferral Disposition Proceeding (EB-2013-0109), and the Parkway Projects Proceeding (EB-2012-0433/EB-2013-0074).

gas supply at a prudently incurred cost and minimal risk. The Gas Supply Planning principles also help Union to determine whether changes are required to the current transportation and supply portfolios. The principles are as follows:

- 1) Ensure secure and reliable natural gas supply to Union's service territory;
- 2) Minimize risk by diversifying contract terms, supply basins and upstream pipelines;
- 3) Encourage new sources of supply as well as new infrastructure to Union's service territory;
- 4) Meet planned design day and seasonal gas delivery requirements; and,
- 5) Deliver natural gas to various receipt points on Union's system to maintain system integrity.

The Alternative Proposal does not align with Union's Gas Supply Planning principles by:

- 1) Moving up to 77% of Union's upstream transportation and supply portfolio away from Dawn, the number one market hub in the Great Lakes region, to Niagara which is the least liquid point in Union's current supply portfolio; and,
- 2) Decreasing the diversity and security of Union's upstream transportation and supply portfolio.

3.1 Liquidity of Niagara vs. Dawn

Liquidity is a measure of the ability and ease of contracting for natural gas supply at a specific trading point, supply hub or market hub. Elements of liquidity include the number of

1 interconnecting pipelines, the amount of storage available, the number of active buyers/sellers,
2 the number and volume of transactions (see Figure 3-1), the transparency of pricing (presence on
3 a trading index), and, often, the availability of services (such as balancing).

4
5 Niagara is a trans-shipment point between TransCanada and three U.S. pipelines: National Fuel
6 Gas, Dominion Transmission and Tennessee Gas Pipeline. Historically, natural gas was
7 exported at Niagara from Canada via the TransCanada system through a pipeline crossing the
8 Niagara River to the United States. Flow through Niagara to the three U.S. pipelines historically
9 reached as much as 1.2 PJ/d; however, Niagara was not considered liquid.

10
11 Since 2012, flow has primarily reversed from the United States to bring Marcellus production
12 through Niagara into Canada. Despite its proximity to the Marcellus region, **Niagara is not a**
13 **liquid point**. Liquidity at Niagara is low due to its limited pipeline connectivity, distance from
14 storage, limited number of counterparties who buy and sell at that point and limited price
15 discovery. Even with TransCanada transportation contracts expected to exceed 1 PJ/d from
16 Niagara to points in Ontario and Quebec, Niagara remains a trans-shipment point and is not
17 expected to develop into a liquid trading point.

Figure 3-1
Measures of Liquidity at Niagara and Dawn

| Platts Average Daily Traded Volumes (GJ/day) | | | | |
|---|-------------|-------------|-------------|------------------------------|
| | 2012 | 2013 | 2014 | 2012-2014 Average |
| Dawn Hub | 686,156 | 661,101 | 665,151 | 670,803 |
| Niagara | 10,238 | <1 | 3 | 3,414 |

(Source: Platts, May 28th 2015)

| Average Number of Daily Transactions | | | | |
|---|-------------|-------------|-------------|------------------------------|
| | 2012 | 2013 | 2014 | 2012-2014 Average |
| Dawn Hub | 66 | 60 | 68 | 65 |
| Niagara | <1 | <1 | <1 | <1 |

(Source: NGI, May 28th 2015)

Figure 3-1 demonstrates that Niagara is far less liquid than the Dawn Hub. From Figure 3-1, it is clear that daily transacted quantities are far greater at Dawn than Niagara (670,803 GJ/d vs. 3,414 GJ/d, respectively): As well, the number of daily transactions at Dawn are far greater than at Niagara (on average 65 at Dawn vs. less than 1 at Niagara).

Since Union began purchasing supplies at Niagara in 2012, an average of only three parties have responded to each Request For Proposal that Union has issued. The lack of counterparties, and liquidity, at Niagara becomes an even larger issue as the quantity being purchased increases.

1 This was recently referenced by Enbridge Gas Distribution in an interrogatory response during
2 its EB-2015-0122 proceeding. In response to FRPO interrogatory #25 requesting details of
3 supply being contracted at Niagara, Enbridge Gas Distribution stated, “*The Company has*
4 *attempted to negotiate a combination of seasonal and annual supply contracts but, due to the*
5 *lack of liquidity at the Niagara and Chippawa interconnects at this time, the majority of*
6 *suppliers require the supply contracts to be on an annual basis. Pricing for all of the contracts*
7 *will be based on Dawn less a negotiated amount once again due to the lack of liquidity at the*
8 *Niagara and Chippawa interconnects.*”¹³ Niagara is not considered a supply hub or a market
9 hub, simply a trans-shipment point between interconnecting pipelines.

10
11 Conversely, as discussed at Exhibit A, Tab 4, Attachment 1 of the Burlington Oakville Pipeline
12 Project application, the Dawn Hub is a deep and liquid market. The Dawn Hub is the number
13 one market hub in the Great Lakes region and the second most physically traded point in North
14 America with nearly 100 active counterparties trading on NGX and over-the-counter. Its
15 strategic location provides direct access to nearly 1 Tcf of natural gas storage in Ontario and
16 Michigan, access to nearly all of North America’s major supply basins and connections to major
17 pipelines such as Great Lakes, Vector, Panhandle, ANR, MichCon, Bluewater, TransCanada and
18 Enbridge (Tecumseh).

19
20 The Dawn Hub is also connected to demand markets in Ontario, Eastern Canada, the Maritimes
21 and the U.S. Northeast through the Dawn Parkway System and downstream pipelines (such as

¹³ EB-2015-0122 – Exhibit I.D.EGDI.FRPO.25 Enbridge 2014 Earnings Sharing Mechanism and Deferral and Variance Accounts.

1 the TransCanada Mainline). All three major LDCs in Eastern Canada (Union, Enbridge Gas
2 Distribution and Gaz Métro) are actively moving large portions of their supply portfolios to
3 Dawn and providing access to Dawn that their bundled direct purchase customers have
4 requested. This increased activity at Dawn will promote even greater liquidity.

5
6 The Alternative Proposal suggests that Union contract up to 276 TJ/d of upstream transportation
7 in order to meet the design day requirement of the Burlington Oakville System. For the majority
8 of the year, actual daily demand in the Burlington Oakville System is far less than the design day
9 demand with summer demand falling to 20 TJ/d. In order to mitigate incoming supply (up to
10 256 TJ/d), when Burlington Oakville System market requirements are lower than design day
11 requirements, two options can be undertaken.

12
13 The first option is to use variable supply contracts for purchases at Niagara which would allow
14 Union to control the amount of natural gas being delivered each day into the Burlington Oakville
15 System. Based on the purchasing experience of Union and Enbridge (discussed above), variable
16 supply contracts, especially the large quantities required under the Alternative Proposal to meet
17 design day demands, would not be available at Niagara. Even if that supply was hypothetically
18 available, suppliers would require a premium price over longer-term monthly, seasonal, or yearly
19 contracts since their cost and/or risk to supply on a variable basis (i.e. from 20 TJ/d to 276 TJ/d)
20 is much higher. The variable supply contracts would also require Union to purchase gas in the
21 day market, which would expose Union's customers to pricing volatility and availability

1 risks.¹⁴

2
3 The second option is for Union to operationalize the Alternative Proposal using the Dawn
4 Parkway System to transport and inject supplies into storage during the summer and withdraw
5 supplies from storage during the winter. This would result in additional costs that are not
6 included in the Alternative Proposal, and would make the Alternative Proposal more expensive
7 than the Burlington Oakville Pipeline (see Figure 5-3). Even with access to Dawn, the
8 Alternative Proposal requires Union to purchase up to 77% of the total Union South sales service
9 portfolio at a single, illiquid trans-shipment point using a single transportation provider. Buying
10 up to 77% of the Union South sales service supply in this manner is not prudent.

11
12 In its response to Union's interrogatory #3, OGVG/CME suggest that Union should help to
13 develop Niagara into a market hub similar to Dawn. This is improbable as Niagara lacks the key
14 elements required of a market hub discussed earlier – a large number of pipeline connections, a
15 large number of market participants, direct access to storage, and transparency of pricing and
16 services¹⁵. In fact, Niagara supply accesses the Dawn Hub through TransCanada and Union
17 transportation services.

18

¹⁴ Issues specific to the day market have been the subject of review and discussion in a number of Union's previous regulatory filings. For example, the Board at page 4 of its EB-2014-0050 decision (dated March 21, 2014) stated that Union "*proactively purchased the gas necessary to meet its customers' requirements in the forward market, to the extent possible, as opposed to the more expensive intra-month case market.*"

¹⁵ Niagara is a trans-shipment point similar to Iroquois/Waddington where TransCanada connects to the Iroquois Gas Pipeline System. Iroquois/Waddington is also not considered a supply hub or market hub.

1 Further, in 2003, TransCanada applied to the National Energy Board¹⁶ to establish the North Bay
2 Junction as a receipt and delivery point on the Mainline System as an alternative trading point to
3 Dawn. The North Bay Junction lacks connections to multiple pipelines, does not have direct
4 access to storage and has a lack of buyers and sellers. The North Bay Junction has not
5 materialized as a liquid trading point on the TransCanada system. These are the similar to
6 conditions that exist at Niagara today, which are not likely to change substantively in the future.
7

8 ***3.2 Diversity and Security of Supply***

9 Union uses capacity on multiple upstream pipelines in its Union South transportation portfolio to
10 access several supply basins and market hubs. These pipelines provide access to supply in
11 Western Canada, Gulf of Mexico, Chicago, the U.S. mid-continent and the Marcellus (through
12 Niagara). The resulting portfolio of suppliers and upstream transportation contracts provides
13 diversity, increased security of supply and reduces the exposure to price volatility for Union
14 South customers. Having access to multiple supply basins through various transportation routes
15 reduces the overall impact of an incident or pricing anomaly at any one of the upstream supply
16 points.
17

18 Union also manages risk to customers by diversifying the length of the contract terms to provide
19 flexibility in managing the upstream transportation portfolio. In Union South, contract terms
20 range from one to fifteen years. Union holds renewal rights on the majority of these contracts at
21 the expiry date.

¹⁶ RH-3-2003 TransCanada Pipelines Limited North Bay Junction Application

1 The Alternative Proposal asserts that contracting up to 276 TJ/d of upstream supply at Niagara
2 will “*minimize risk by diversifying contract terms, supply basins and upstream pipelines*”¹⁷.

3 This assertion is completely false. The Alternative Proposal will actually result in a drastic
4 decrease in the diversity of the contract terms (will require 15 year contracts), supply basins (one
5 supply basin), and upstream pipelines (three in the U.S connecting to one in Canada) within the
6 Union South sales service supply portfolio.

7
8 Union purchases approximately 360 TJ/d of gas supply for its Union South sales service
9 portfolio (based on average day demand). Purchasing up to 276 TJ/d of supply for the
10 Burlington Oakville System at Niagara would represent 77% of the Union South portfolio being
11 contracted with a single transportation provider and sourced at a single point. A large
12 commitment at Niagara would not align with Union’s Gas Supply Planning Principles. Not only
13 is this imprudent, it will also have a negative impact on the liquidity of the Dawn Hub, affecting
14 all of Ontario.

15
16 As a point of comparison, the largest single supply source within the current Union South sales
17 service portfolio is Chicago where 31% of supplies are purchased for Union South. Chicago is
18 one of the most highly liquid trading points in North America. Figure 3-2 below shows the
19 current Union South upstream transportation portfolio as of January 2015.

¹⁷ OGVG/CME Alternative Proposal, p. 5, paragraph 16

Figure 3-2
January 2015 South Portfolio

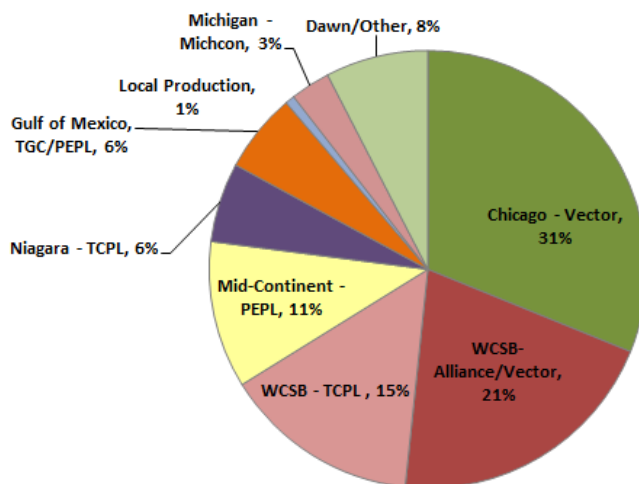
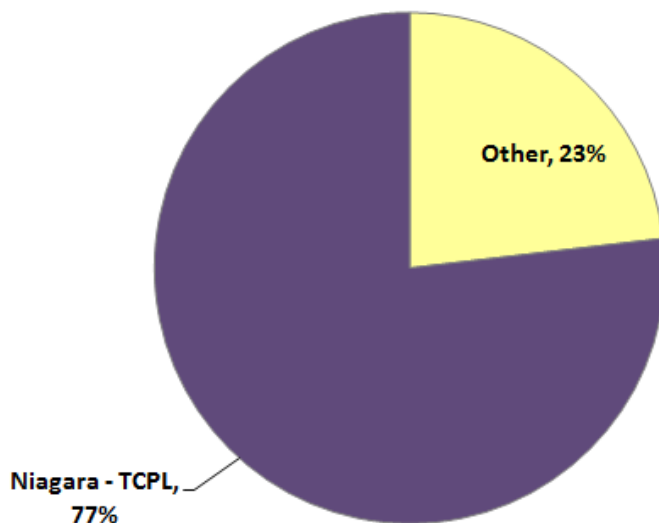


Figure 3-3 below demonstrates how the current Union South upstream transportation portfolio would look if 276 TJ/d of supply was contracted at Niagara. In order to do so, Union would have to reduce or terminate transportation capacity contracted with most of the upstream pipelines that currently serve the Union South sales service portfolio leaving only 23% of the Union South portfolio contracted outside of Niagara.

Figure 3-3
Projected Portfolio as per the Alternative Proposal



OGVG/CME state that the Alternative Proposal will allow Union to “*encourage new sources of supply as well as new infrastructure to Union's service territory*”¹⁸. This assertion is somewhat misleading as infrastructure exists to and from Niagara and it is a source of supply today for Union and its customers. Union currently contracts for 21 TJ/d of upstream transportation capacity from Niagara to Kirkwall.

In their interrogatory response, OGVG/CME asserts that Union should apply for pre-approval of the new Niagara contract(s) that would result from the Alternative Proposal¹⁹. Union had previously applied for pre-approval of the 21 TJ/d long term TransCanada contract in 2010 (EB-2010-0300). In that proceeding, the Board ruled that this path is not considered new

¹⁸ OGVG/CME Alternative Proposal, p. 6, paragraph 16

¹⁹ OGVG/CME response to Board Staff interrogatory 5 a)

1 infrastructure and the pre-approval framework does not apply.²⁰

2
3 **4. Issue 3 - Omission of the TransCanada Kirkwall to Union CDA Contract**

4 The Alternative Proposal makes the incorrect assumption that TransCanada will not require
5 Union to continue the Kirkwall Contract (135 TJ/d of Kirkwall to Amended Union CDA
6 capacity) for non-Burlington Oakville System deliveries if the proposed Burlington Oakville
7 Pipeline is not approved.

8
9 In its response to Union's interrogatory #5, OGVG/CME references Union's testimony provided
10 during the technical conference on May 21, 2015. The quote referenced by OGVG/CME
11 omitted clarifying information that was requested by Mr. Wolnik immediately afterwards, as
12 reproduced below:

13
14 *"MR. WOLNIK: So if you made the decision to -- if the outcome had been different,*
15 *you'd made the decision to purchase the service from TransCanada to Bronte, are you*
16 *saying you wouldn't also have contracted for the 135 a day?*

17 *MR. ISHERWOOD: That's correct. We'd do one or the other.*

18 *MR. WOLNIK: How would you have met that demand to meet the 135 a day --*

19 *MR. ISHERWOOD: Same way we have for the last 20, 30 years.*

²⁰ EB-2010-0300/EB-2010-0333 Board decision dated January 27, 2011.

1 *MR. WOLNIK: I haven't looked at that. Can you just give me the 20-second overview?*

2 *MR. ISHERWOOD: It is very similar to what we've been doing at Parkway prior to*
3 *2011, is we actually nominated volumes at our two stations within the ECDA, and we*
4 *deliver those volumes to Kirkwall, and there is not a contract between Kirkwall and those*
5 *points. There is not an LBA, there's not an OBA. It is sort of an operational agreement*
6 *between the two companies. And to the extent that we miss a nomination, as you would*
7 *expect, we estimate load for the next day. If we're short or long we make it up the next*
8 *day type thing, so it's -- it works similar to an OBA, but there is no formal OBA in*
9 *existence.”²¹*

10
11 Mr. Isherwood's response was in the context of whether the TransCanada Settlement
12 Agreement²² provision regarding the Kirkwall Contract would be triggered if the Burlington
13 Oakville Pipeline is not approved. As stated by Mr. Isherwood, if the Burlington Oakville
14 Pipeline is not approved, Union is no longer obligated by the TransCanada Settlement
15 Agreement to hold the Kirkwall Contract starting November 1, 2016. Union would then, as
16 stated by Mr. Isherwood, continue to assume that supplies delivered at Kirkwall would
17 operationally satisfy the requirements of a portion of the Union CDA as they have in the past.
18
19 As clarified by Mr. Isherwood in his testimony, the deliveries from Kirkwall to Union's gate
20 stations located within TransCanada's Union CDA (Kirkwall/Dominion Gate Station and

²¹ Burlington Oakville Pipeline Project Technical Conference Transcript, pp. 72-73 (LBA - Load Balancing Agreement; OBA - Operational Balancing Agreement)

²² RH-001-2014 – Application for Approval of Mainline 2015-2030 Settlement

1 Hamilton #3 Gate Station) are made in similar fashion to how Union made deliveries from
2 Parkway into TransCanada's Union CDA (Burlington Gate Station and Bronte Gate Station) up
3 to 2011. At that time, gas delivered to Parkway was considered gas delivered into TransCanada's
4 Union CDA (Burlington, Bronte, Kirkwall/Dominion and Hamilton #3 Gate Stations).²³

5
6 *"In early 2011, TransCanada indicated that Union would need to contract and pay to*
7 *transport volumes from Parkway to the Union CDA to meet customer consumption*
8 *requirements. Historically, TransCanada had not charged for this service and Union did*
9 *not have to contract for it since deliveries at Parkway were deemed to satisfy*
10 *requirements in the Union CDA.*²⁴

11
12 Today, Union delivers the same amount of natural gas to TransCanada at Kirkwall that it
13 requires for deliveries to the Kirkwall/Dominion Gate Station and Hamilton #3 Gate Station.
14 Despite the assumption that Union would continue to satisfy the requirements as it has in the past
15 if the Burlington Oakville Pipeline is not approved, and consistent with the changes required by
16 TransCanada in 2011 at Parkway, it is very likely that in the future TransCanada will require
17 Union to contract for transportation capacity from Kirkwall to facilitate deliveries to the
18 Kirkwall/Dominion Gate Station and Hamilton #3 Gate Station. As a result, it is not appropriate
19 to exclude this aspect from the comparative analysis.

20

²³ EB-2014-0182, Exhibit A, Tab 5, pp. 2-3.

²⁴ EB-2014-0182 Burlington Oakville Pipeline Project – Exhibit A, Tab 5, p. 3

OGVG/CME have calculated the annual cost of the proposed Burlington Oakville Pipeline as \$26.04 million by including the revenue requirement of the proposed pipeline, allocated Dawn Parkway System costs, and the Kirkwall Contract.²⁵ OGVG/CME assert that the Alternative Proposal cost of \$22.04 million annually (when contracting for 276 TJ/d at Niagara) is approximately \$4 million less expensive than the proposed Burlington Oakville Pipeline.²⁶ With the addition of the \$8.25 million annual cost of the Kirkwall Contract, the Alternative Proposal is approximately \$4 million more expensive than the proposed Burlington Oakville Pipeline.

However, there are also other operational changes required to allow gas to flow efficiently from Niagara to the Burlington Oakville System under the Alternative Proposal.

5. Union's Variation of the Alternative Proposal

As submitted by OGVG/CME, the Alternative Proposal has a number of issues that prevent it from being operationalized. These issues are shown in Figure 5-1. In order to address these issues, Union has developed a variation of the Alternative Proposal to operationalize this option. The analysis in Figure 5-3 shows that the proposed Burlington Oakville Pipeline remains a more economical solution than the Alternative Proposal.

²⁵ OGVG/CME Alternative Proposal, Attachment 9, Page 1.

²⁶ OGVG/CME Alternative Proposal, Attachment 9, Page 1

Figure 5-1
Union's Adjustments to the Alternative Proposal

| | Operational Issues with Alternative Proposal | Union's Variation of the Alternative Proposal |
|---|---|--|
| 1 | The Alternative Proposal would disconnect the Burlington Oakville System from Dawn. To properly serve the heat sensitive Burlington Oakville System and avoid the need to purchase variable supply, access to Dawn storage is required. | Include both Union and TransCanada firm transportation assets that would be required for the Niagara supply to have access to Dawn. |
| 2 | The Alternative Proposal over-supplies the Burlington Oakville System. A more appropriate way to operationalize the Alternative Proposal is to buy the average day amount rather than the design day amount. | Reduce volumes contracted at Niagara to the average day requirements of the Burlington Oakville System and use assets to connect the Burlington Oakville System to Dawn. This is the way Union currently buys supply and is the way other bundled direct purchase customers (i.e. greenhouses and manufacturing plants) procure their gas. |
| 3 | The Alternative Proposal omits the \$8.25 million annual cost of the Kirkwall Contract. | Include \$8.25 million annual cost of the Kirkwall Contract into the economic evaluation of the Alternative Proposal. |
| 4 | The Alternative Proposal suggests that Union should no longer use the 54 TJ/d of capacity that is provided by the existing NPS 8 Milton Line and the NPS 12 Parkway Line between the Dawn Parkway System and Burlington Oakville System. If Union were to no longer flow gas from the Dawn Parkway System into those pipelines as suggested by the Alternative Proposal, the operating pressure of the NPS 8 Milton Line would decrease resulting in the loss of approximately 1/3 of its original capacity. Since the NPS 8 Milton Line serves a growth area on Union's system, decreasing capacity does not make sense. | Use the NPS 8 Milton Line and NPS 12 Parkway Line to flow 54 TJ/d from the Dawn Parkway System into the Burlington Oakville System. |
| 5 | The Alternative Proposal assumes that quantities greater than 200 TJ/d can be | Use Kirkwall to Parkway path to evaluate the Alternative Proposal. |

| | | |
|--|---|--|
| | shipped from Niagara to Parkway using the Domestic Line. TransCanada has confirmed that 200 TJ/d is the maximum capacity and that incremental capacity requests would use the Kirkwall to Parkway path. | |
|--|---|--|

As mentioned previously, Union contracts for its Union South upstream transportation capacity based on average day demands, similar to other bundled direct purchase customers. Daily and seasonal demand swings are managed by using Dawn storage. To explain the scenario described in Figure 5-3, the following assumptions in Figure 5-2 are based on Burlington Oakville System demands forecasted in 2035:²⁷

Figure 5-2
Assumptions for Operationalizing the Alternative Proposal
(Forecasted in 2035)

| | |
|-----------------------|----------|
| Design Day Demand | 276 TJ/d |
| Annual Average Demand | 94 TJ/d |
| Minimum Summer Demand | 28 TJ/d |

Under this scenario, Union would contract 94 TJ/d of TransCanada Niagara to Kirkwall transportation capacity to meet the average day demands of the Burlington Oakville System. Contracting the capacity to Kirkwall will get the gas into the Dawn Parkway System and allow Union to leverage the integrated assets at Dawn. Union would use the Niagara to Kirkwall transportation capacity at 100% load factor throughout the year. Union would then require firm

²⁷ For the purpose of this comparison, the annual average demand was estimated as 34% of design day demand, while the minimum summer demand was estimated as 10% of design day demand.

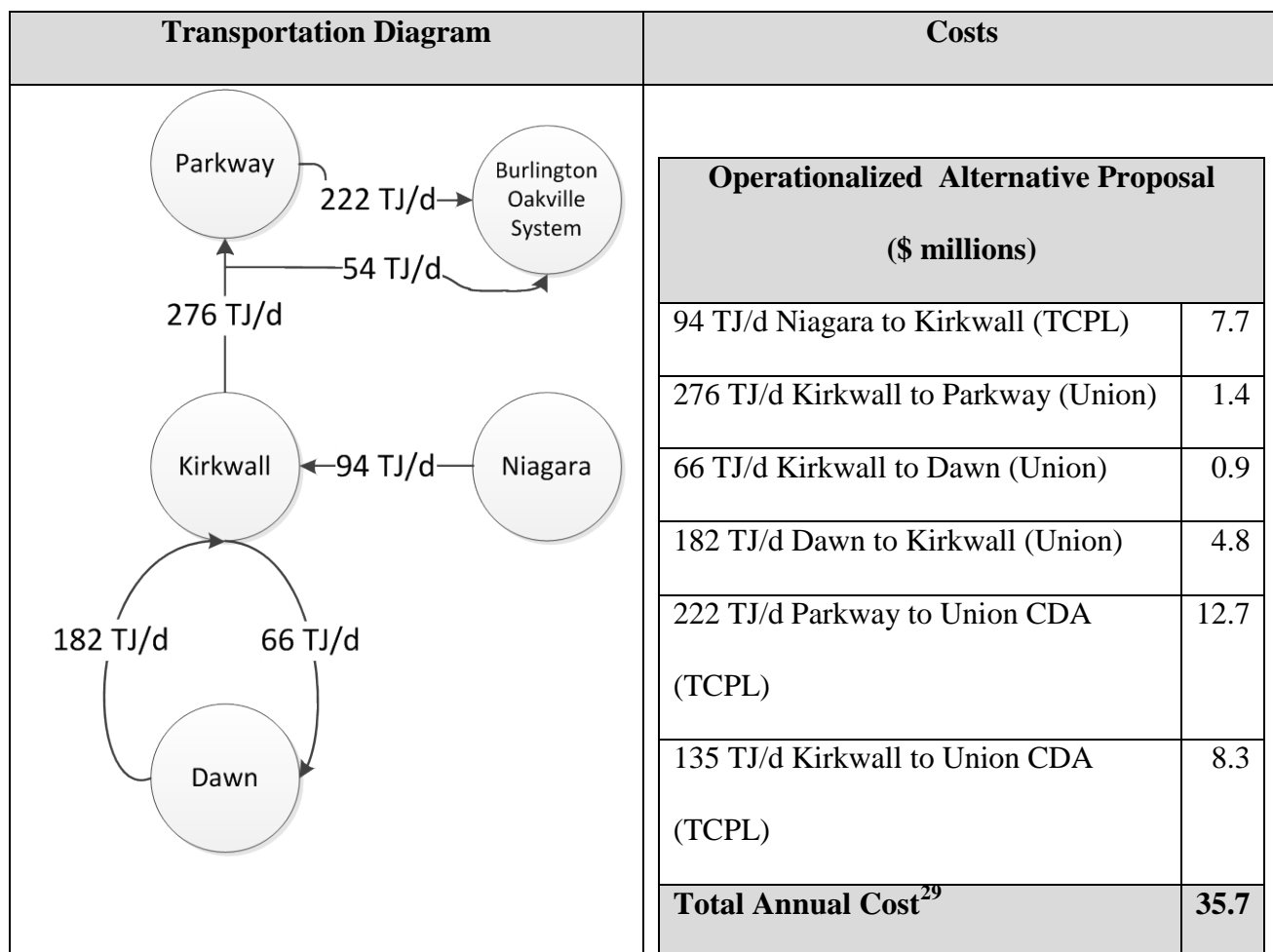
1 assets to transport up to 66 TJ/d from Kirkwall to Dawn to access storage since the minimum
2 summer consumption in the Burlington Oakville System is approximately 28 TJ/d ($94 \text{ TJ/d} - 28$
3 $\text{TJ/d} = 66 \text{ TJ/d}$).

4
5 To meet design day demands, Union would then require firm transportation assets up to 182 TJ/d
6 from Dawn storage to Kirkwall which would be combined at Kirkwall with the 94 TJ/d of
7 upstream supply from Niagara ($182 \text{ TJ/d} + 94 \text{ TJ/d} = 276 \text{ TJ/d}$). Kirkwall to Dawn and Dawn to
8 Parkway capacity would not flow at 100% load factor and utilization would change based on
9 seasonal variation.

10
11 Union would then require 276 TJ/d of Kirkwall to Parkway capacity to move gas away from
12 Kirkwall. Union would use the existing NPS 8 Milton Line and the NPS 12 Parkway Line to
13 deliver 54 TJ/d of supply into the Burlington Oakville System²⁸. For the remaining 222 TJ/d of
14 design day demand, Union would contract TransCanada Parkway to Union CDA (Burlington
15 Gate Station and Bronte Gate Station) transportation capacity. A graphical representation of the
16 transportation capacity requirements can be found in Figure 5-3.

²⁸ The Alternative Proposal of OGVG/CME did not include the use of Union's existing assets connecting the Dawn Parkway System to the Burlington Oakville System.

Figure 5-3
Operationalized Alternative Proposal (2035)



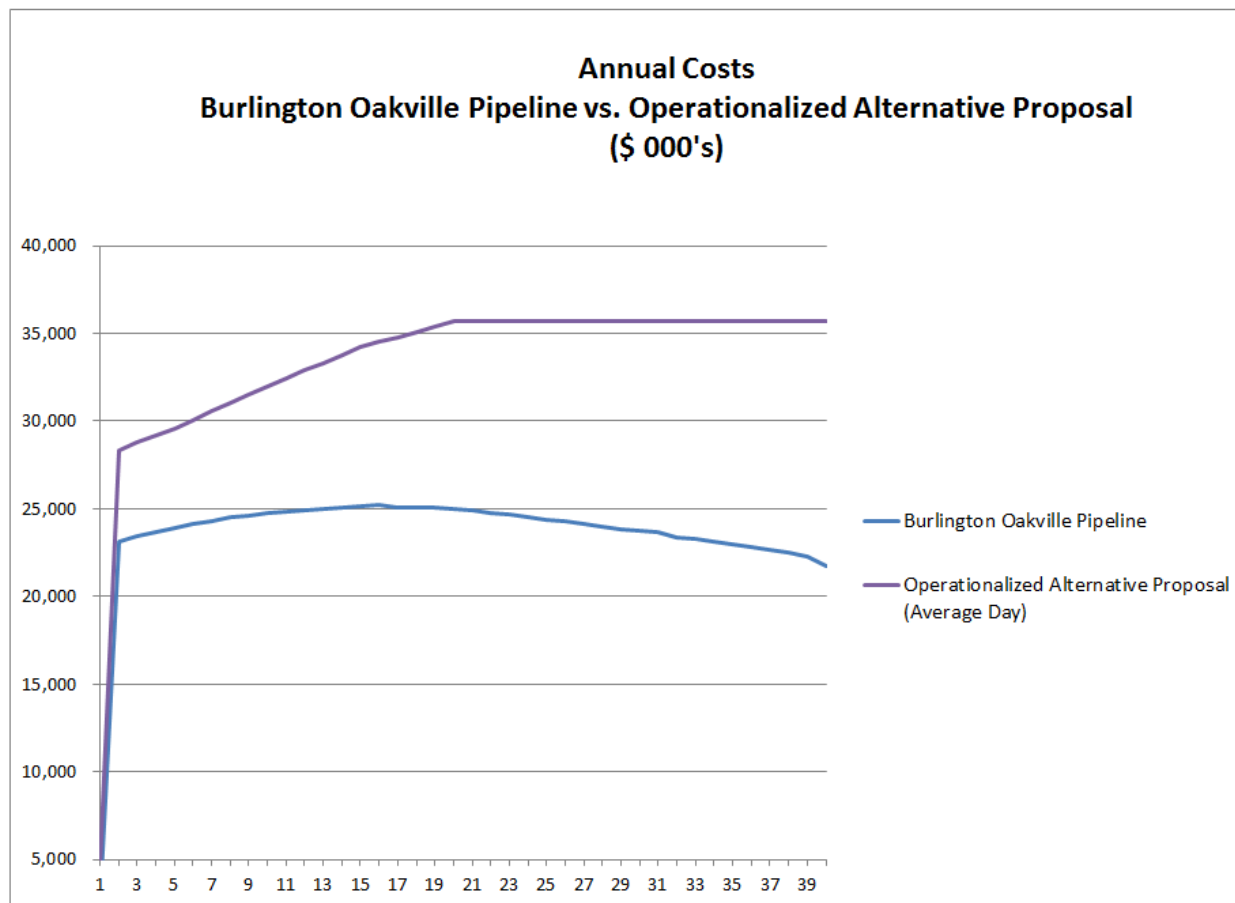
When all costs are considered, this variation to the Alternative Proposal results in annual costs \$9.7 million higher than the proposed Burlington Oakville Pipeline (\$35.7 million - \$26.04 million = \$9.7 million).

²⁹ Total Annual Cost is the same if 182 TJ/d of Dawn to Parkway capacity and 94 TJ/d of Kirkwall to Parkway capacity is held (same cost as segmented capacity in the diagram).

1 Union notes that the 222 TJ/d of TransCanada Parkway to Union CDA (Burlington Gate Station
2 and Bronte Gate Station) capacity referenced in Figure 5-3 is essentially the subject of the
3 Burlington Oakville Pipeline application. It is more economic to build a new distribution
4 pipeline into the Burlington Oakville System to serve design day demands than to contract third
5 party services.

6 To assist in comparing the cost of the operationalized Alternative Proposal and the Burlington
7 Oakville Pipeline over time, Union has provided Figure 5-4 and Figure 5-5 below. Figure 5-4
8 shows the annual cost of the operationalized Alternative Proposal including the annual cost of
9 the Kirkwall Contract as detailed in Figure 5-3 as well as the annual cost of the proposed
10 Burlington Oakville Pipeline provided by OGVG/CME.

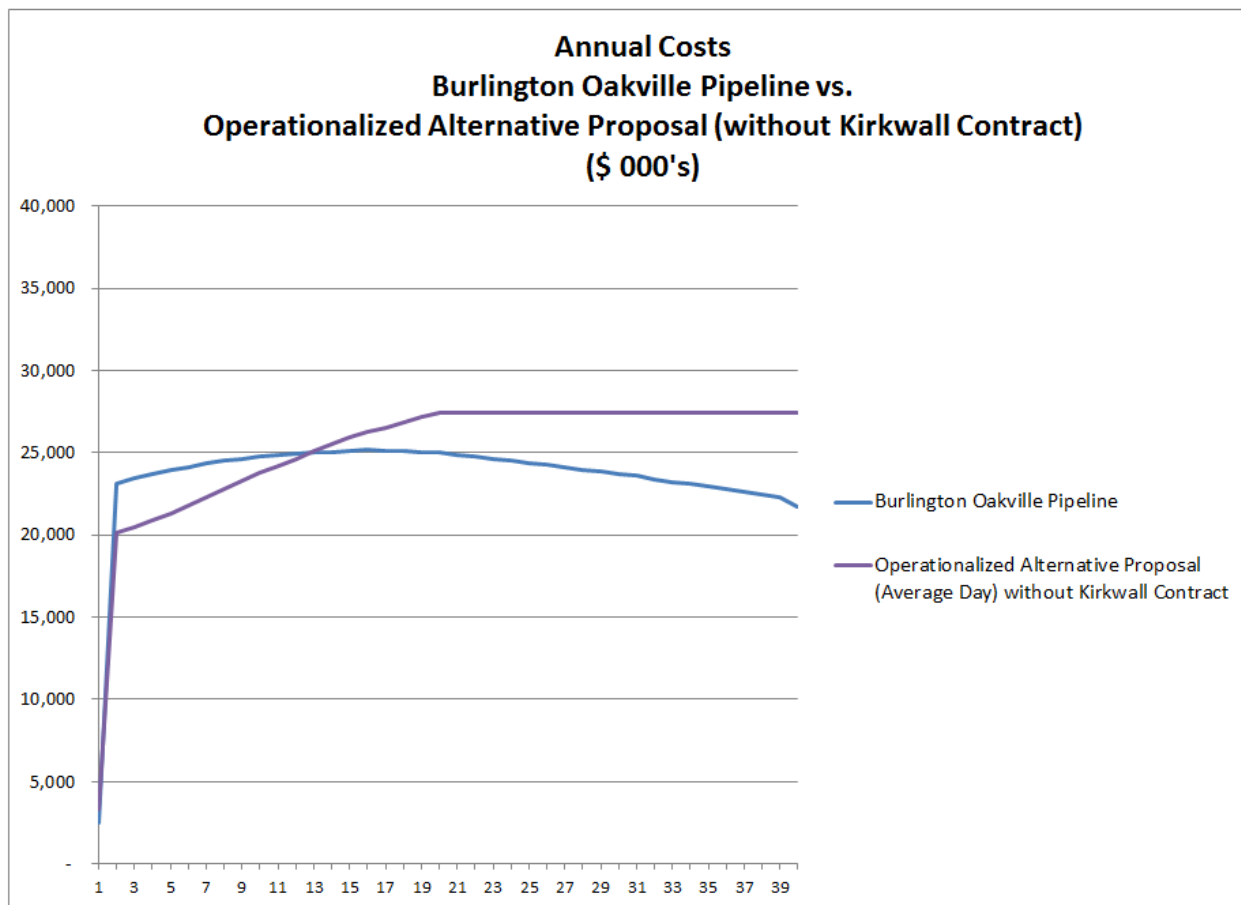
Figure 5-4



As demonstrated in Figure 5-4, the annual cost of the Burlington Oakville Pipeline is less than the annual cost of the operationalized Alternative Proposal in all years.

In the unlikely event that TransCanada does not require Union to hold the Kirkwall Contract if the proposed Burlington Oakville Pipeline is not approved, Union has also provided Figure 5-5 below. This figure provides a conservative comparison between the proposed Burlington Oakville Pipeline and the operationalized Alternative Proposal without the Kirkwall Contract. (see section 4).

Figure 5-5



Although the annual cost of the proposed Burlington Oakville Pipeline is higher than the Alternative Proposal in 2016, the annual cost of the proposed Burlington Oakville Pipeline becomes less starting in 2029 as the revenue requirement of the pipeline continues to decrease and the amount of transportation services increase with design day growth. The difference between the annual cost of the proposed Burlington Oakville Pipeline and the operationalized Alternative Proposal (without the Kirkwall Contract) continues to grow to 2035.

6. Additional Concerns with the Alternative Proposal

6.1 Requirement for Incremental Facilities on Union's System

In its response to Board Staff interrogatory #2, OGVG/CME state that *“Notwithstanding the lack of excess capacity on the two systems, Union confirmed in its response to OGVG/CME questions, that TransCanada can provide new FTs totalling 276 TJ/d from Niagara/Douglastown to Union ECDA with no new facilities on either TransCanada or Union.”*

To clarify, Union would not require additional facilities beyond Union's proposed 2015, 2016 and 2017 Dawn Parkway Projects and Parkway West Project to provide 276 TJ/d of transportation service from Niagara to the Burlington Oakville System using Union's Kirkwall to Parkway transportation path.

6.2 Flow Diagrams in Response to Board Staff Interrogatory #2

Union would like to clarify the diagrams depicting the design flows on the TransCanada system in OGVG/CME response to Board staff interrogatory #2. The design day flow from Niagara to Enbridge Parkway CDA on the Domestic Line with the Greater Golden Horseshoe Project facilities in-service is 200 TJ/d, not 287 TJ/d as depicted in the OGVG/CME diagram. Please reference Figure 3-2 System Schematics in TransCanada's Greater Golden Horseshoe Project, specifically MLV 207 Regulator capacity of $5,309 \times 10^3 \text{M}^3$ or approximately 200 TJ/d. As well, as stated in OGVG/CME response to Board staff interrogatory #1, no further transportation capacity above the 200 TJ/d Niagara to Enbridge Parkway CDA is available on the TransCanada

Domestic Line without a facility expansion.

6. Summary

The Alternative Proposal put forth by OGVG/CME attempts to address distribution reinforcement to meet design day demand through a significant restructuring of Union's gas supply portfolio and would require Union to contract up to 77% of the total Union South gas supply at Niagara.

First, the Alternative Proposal put forth by OGVG/CME is less economic than the proposed Burlington Oakville Pipeline when considering the cost of the Kirkwall Contract and the cost to operationalize the Alternative Proposal. Even when modified to purchase based on average day, the Alternative Proposal is less economic.

Second, the Alternative Proposal serves to disconnect the Burlington Oakville System from Dawn which is counter to the trend that Union has been following in moving Union South delivery obligations to Dawn. Increasing access to Dawn has been requested repeatedly by Union's own customers, resulting in the settlement to move the Parkway Delivery Obligation to Dawn. Disconnecting the Burlington Oakville System from the integrated Dawn Parkway System also disconnects the Burlington Oakville System from the strategic Dawn Hub.

1 Third, the Alternative Proposal would also require Union to make fundamental adjustments to
2 how services are structured for its customers. Having such a large portion of the upstream
3 supply portfolio contracted at a single point would require the reinstatement of vertical slice
4 and/or obligated deliveries at the Union CDA or Niagara, as it is not equitable to require only
5 sales service customers to purchase such a large portion of supplies at Niagara.

6
7 Finally, the Alternative Proposal does not align with Union's Gas Supply Planning Principles.
8 Niagara is a trans-shipment point between pipeline systems and is not a liquid trading point.
9 Niagara is also not expected to become a liquid trading point. Increasing gas supply purchases at
10 Niagara to up to 77% of the total Union South gas supply portfolio is not prudent. The
11 Alternative Proposal would not only direct supply purchases away from liquid markets, such as
12 Dawn and Chicago, but would decrease diversity and security of supply.

13
14 As a result, the Board should reject the OGVG/CME Alternative Proposal.