John A.D. Vellone T (416) 367-6730 F 416.367.6749 jvellone@blg.com Borden Ladner Gervais LLP Bay Adelaide Centre, East Tower 22 Adelaide Street West Toronto, ON, Canada M5H 4E3 T 416.367.6000 F 416.367.6749 blo.com



Ada Keon T (416) 367-6234 F 416.367.6749 akeon@blg.com

April 20, 2018

Delivered by Email, RESS & Courier

Ms. Kirsten Walli Board Secretary Ontario Energy Board 2300 Yonge Street Suite 2701 Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: Enbridge Gas Distribution Inc. ("Enbridge"), Union Gas Limited

("Union"), EPCOR Natural Gas Limited Partnership

2018 Cap-and-Trade Compliance Plan

(EB-2017-0224/EB-2017-0255/EB-2017-0275)

Association of Power Producers of Ontario's ("APPrO") Compendium

We are counsel to APPrO in respect of the above noted matter.

Mr. John Wolnik will attend the oral hearing from April 23 to 26, 2018 on behalf of APPrO.

Please find enclosed APPrO's Cross Examination Compendium for the oral hearing.

We would ask witnesses of both Enbridge and Union to familiarize themselves with the information contained in Tabs 1-3 attached so as to facilitate a more productive discussion during the oral hearing. Tab 3 is a press release issued on April 19, 2018 by Union Energy Solutions Limited Partnership, an affiliate of Union Gas Ltd., an Enbridge company.¹

Yours very truly,

BORDEN LADNER GERVAIS LLP

Per:

Original signed by John A. D. Vellone

John A.D. Vellone

/Encl.

cc: David Butters, APPrO

John Wolnik, Elenchus

Applicant and Intervenors of record in EB-2017-0224/EB-2017-0255/EB-2017-0275

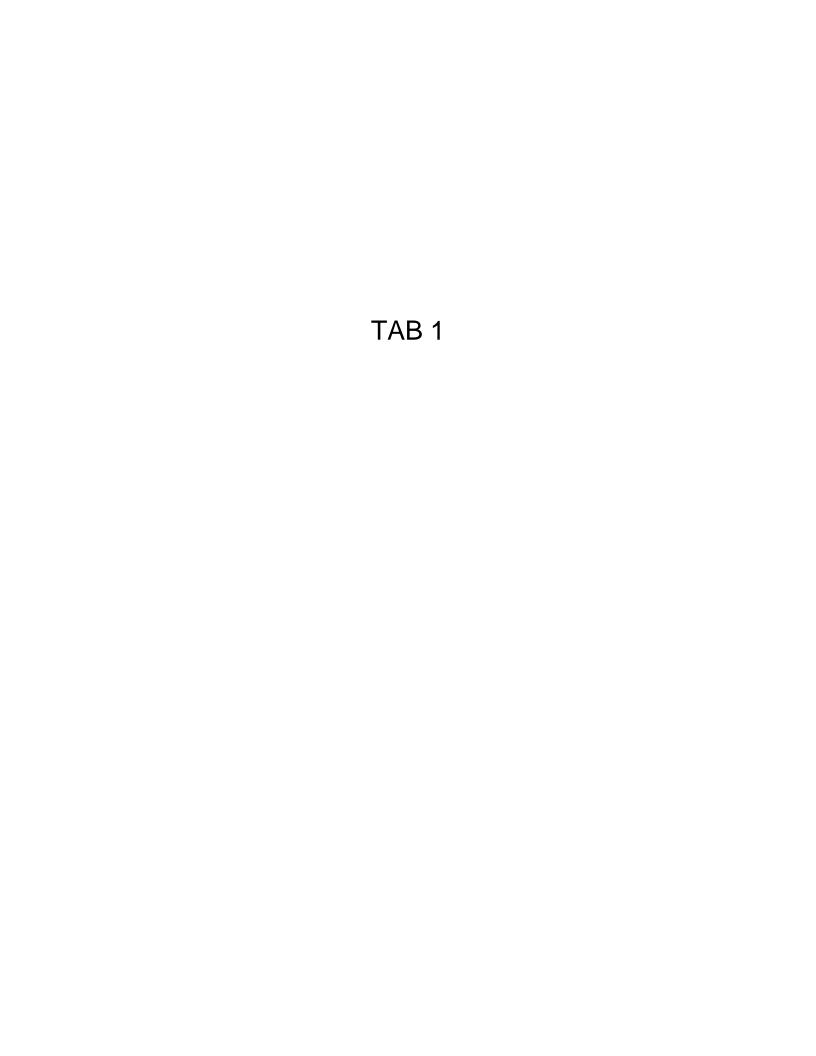
¹ The article is available online at: https://www.newswire.ca/news-releases/union-energy-solutions-announces-contractual-agreement-with-clean-energy-fuels-for-the-construction-of-cng-fuelling-stations-along-ontarios-highway-401-680269373.html

EB-2017-0224/EB-2017-0255

Association of Power Producers of Ontario (APPrO)

Cross Examination Compendium

April 23-26, 2018



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UNION GAS LIMITED

Answer to Interrogatory from School Energy Coalition ("SEC")

Reference: Exhibit 3, Tab 5

Question: Please work with Enbridge to provide a single response to this interrogatory:

- a) Please provide a table showing a comparison broken down by common categories of the 2016 actual administrative costs. Please provide an explanation of any differences +/- 10% between utilities per category.
- b) Please provide a table showing a comparison broken down by common categories of the 2017 actual administrative costs. Please provide an explanation of any differences +/- 10% between utilities per category.
- c) Please provide a table showing a comparison broken down by common categories for the 2018 administrative costs. Please provide an explanation of any differences +/- 10% between utilities per category.

Response:

a) - c)

Although Union and EGD (collectively the "Utilities") have made efforts to be responsive to this question, each entity developed their Cap-and-Trade programs independently to meet their individual requirements. Accordingly, there are differences in the incremental costs associated with facilitating Cap-and-Trade. Further, the Utilities continue to operate separately, please see the response at Exhibit B.Staff.14 a).

The response to this interrogatory corresponds with SEC #20 for EGD and SEC #15 for Union.

	2016 EGD	2016 Union	% Δ	2017 EGD	2017 Union	% Δ	2018 EGD	2018 Union	% Δ
	Actuals (\$000s)	Actuals (\$000s)		Actuals (\$000s)	Actuals (\$000s)		Forecast (\$000s)	Forecast (\$000s)	
IT Billing System (Revenue Req't on capital)	(99.5)	(4)	96%	97.6	90	-8%	191	193	1%
Staffing Resources	533.3	1,682	215%	694.6	2,437	251%	1,500	2,598	73%
Market Intelligence & Consulting Support	268.2	264	-2%	156.8	236	51%	400	420	5%
Customer Education & Outreach	44.8	50	12%	12.9	2	-84%	0	8	
External Legal Counsel	93.5	135	44%	363.6	40.8	-89%	400	150	-63%
Incremental C&T Framework related GHG Reporting and Verification Audit	0	35		9.5	63	563%	40	100	-60%
Bad Debt Provision	-	-	n/a	600	141.4	-76%	960	425	126%
Low Carbon Initiative Fund ("LCIF")	-	-	n/a	-	-	n/a	2,000	2,000	0%
OEB Cap & Trade related Consultations (e.g., LTCPF, MACC, working group)	-	-	n/a	318	112.3	-65%	100	50	100%
Other	0	63	4.507	20.7	96	364%	60	60	0%
Total	840.3	2,225	165%	2,273.7	3,218.5	42%	5,251	6,004	14%

To more efficiently respond to this question, the Utilities have addressed parts a) - c) in the response following, as rationale for cost differences were similar on a year to year basis.

Incremental requirements related to Cap-and-Trade differed in several areas for each company,

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and the primary differences have been highlighted below.

IT Billing Cost/Revenue Requirement

The variances in each company's IT billing system revenue requirements are primarily driven by differences in the total installed system costs, existing systems' adaptability to changes, and respective company's accounting policies and assumptions.

Staffing Resources

The Utilities incurred incremental staffing requirements as a result of the Ontario government's implementation of a Cap-and-Trade program. Each company independently assessed the program and in turn identified the number of staff necessary to successfully implement the program and sustain its operation.

EGD's incremental Full Time Equivalents ("FTE") are dedicated staff to support implementation of Cap-and-Trade. Additional EGD staff provides support to the Cap-and-Trade function, in addition to the roles that those staff members play in other areas of EGD's operations. Given that these staff members are partly performing roles that were contemplated at the time that EGD's Custom incentive regulation ("IR") model was approved, and therefore their costs are included in the Custom IR model, EGD is not seeking recovery for their costs through the Greenhouse Gas Emissions Impact Deferral Account ("GGEIDA").

Union, operating under a different IR model (40% of inflation price cap), is appropriately treating all eligible Cap-and-Trade resources as incremental.

Table 1 below highlights both the Utilities average incremental staffing requirements from 2016 through to 2017. Staffing requirements for 2018 are forecasted as per each company's respective Compliance Plan.

Table 1: Union and EGD 2016-2018 Average Incremental Staffing Requirements

Company	2016 average	2017 average	2018 incremental		
	incremental staffing	incremental staffing	staffing requirements		
	requirements	requirements	(forecasted)		
EGD	2.8	4.4	8.0		
Union	8.0	10.0	12.5		

A detailed breakdown of Union's 2016 actual and 2018 forecast staffing requirements can be found in Union's application at Exhibit 6, p. 6, and Exhibit 3, Tab 5, Schedule 2, respectively.

In 2016, Union's costs were comprised of 13 FTE new roles and portions of existing roles totaling 0.5 full time employees. The new roles were added throughout the year, and the average incremental FTE for the year was 8.0. In addition to resources required to administer the Capand-Trade program (e.g. procurement, GHG reporting, compliance planning), Union forecasted up to 5.0 FTE of business development and technology and innovation roles in 2016, and began

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to ramp up these activities through 2017, continuing into 2018. These resources have supported the development of the methodologies that facilitate the Initiative Funnel and pursue the technologies listed in Union's response at Exhibit B.Staff.21 a) & b).

In 2017, Union forecast that a similar 13.5 FTE roles would be required. In actuality, Union's average incremental FTE for the year was less, due to changes in Customer Contact Centre requirements (please see the response at Exhibit B.Staff.11 b)), two unfilled vacancies, and the incremental workload for one Finance role distributed across multiple roles in Finance, with no individual committing more than 25% of their time to Cap-and-Trade activities.

For 2018 Union's forecast includes one less FTE than forecast for 2017. The difference is due to the Finance role that was expected to be allocated to Cap-and-Trade on a permanent basis.

As outlined in Union's application at Exhibit 6, Union uses a decision tree and process to evaluate the requirement for FTEs on an annual basis and ensure that salaries and wage costs related to Cap-and-Trade accountabilities are properly accounted for. If an employee will not be committing greater than 25% of their time to Cap-and-Trade activities, then an allocation of that FTE is not included in the staffing costs.

EGD's 2018 forecast, 2017 forecast and 2016 actual staff costs are available at EB-2017-0224 Exhibit D, Tab 1, Schedule 1, EB-2016-0300, Exhibit C, Tab 3, Schedule 6 and Exhibit D, Tab 1, Schedule 2, respectively.

In 2016, EGD's Cap-and-Trade team consisted of approximately 2.8 FTE with a new FTE beginning in Q1. An average of 4.4 FTEs were included on EGD's Cap-and-Trade team in 2017. As noted in EB-2016-0300, Exhibit C, Tab 3, Schedule 6, paragraph 11, EGD will draw on experience from other parts of the business to assist with the implementation and sustainment of the Cap-and-Trade program.

Market Intelligence and Consulting Support

The actual costs incurred in 2016 and forecasted 2018 costs for market intelligence and consulting support are similar between the two companies.

Due to the level of support deemed necessary by each company, market intelligence and consulting support costs differed in 2017.

External Legal Counsel

Differences in external legal costs between the Utilities can be attributed to each company's respective legal counsel providers and the individual requirements of each company. The Utilities continue to engage external legal counsel in respect of each company's Compliance Plan.

EGD's external legal costs are inclusive of all legal costs related to OEB regulatory proceedings, which include, but are not limited to, evidence review, witness and argument preparation.

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Additionally, EGD's legal costs also would include costs incurred for external regulatory interpretation and assistance.

Union's legal costs are related to interpretation of climate regulations and to ensure Union's compliance with regulatory requirements and legislation. Legal costs associated with regulatory proceedings, similar to those noted for EGD above, are included in Union's existing rates. Please also see Union's response at Exhibit B.Staff.12.

Incremental Cap-and-Trade Framework related GHG Reporting and Verification Audit Beginning in 2016 Union incurred costs related to GHG Reporting and Forecasting in order to meet new regulatory GHG emissions reporting requirements associated with the implementation of Cap-and-Trade in Ontario, including O. Reg. 452. In 2016, Union's incremental costs were directly attributed to the development of new reporting tools to facilitate reporting and forecasting of GHG emissions for a natural gas distributor, critical review of calculation methodologies, and assistance with submissions in response to the Greenhouse Gas Reporting Guideline. I

In 2017, Union initiated a voluntary pre-audit verification process for GHG reporting related to Cap-and-Trade to assess calculations of ON.400 emissions to ensure compliance with the regulations. Union also incurred incremental consulting costs to support the consultation process for changes to the GHG Reporting Regulation and Guideline. Union plans to continue engagement of consultants to complete incremental work related to GHG reporting and forecasting in 2018.

In 2017, EGD also incurred incremental GHG reporting costs relating to a pre-audit verification process for GHG reporting related to natural gas distribution. The costs of this audit were \$9,500. These costs were incremental to the pre-existing facility related GHG verification costs, which are charged to EGD's Operations and Maintenance budget. For additional information, please refer to EB-2016-0300, Exhibit C, Tab 3, Schedule 6.

For 2018, EGD anticipates that it will incur \$40,000 related to incremental GHG reporting and verification audit costs as a result of the implementation of the Cap-and-Trade program. Please refer to EB-2017-0224, Exhibit D, Tab 1, Schedule 1.

Customer Education and Outreach

Prior to the Board's direction to develop consistent messaging between the Utilities, Union and EGD worked together to ensure messaging was available to customers across the Utilities' respective service areas. However, differences existed in research undertaken, communication tactics, customer numbers and frequency of communications.

EGD completed one focus group and a standalone bill insert in 2016. In 2017, the majority of

¹ Guideline for Quantification, Reporting And Verification Of Greenhouse Gas Emissions-2017,https://www.ontario.ca/page/report-greenhouse-gas-ghg-emissions

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the costs incurred in this component were associated with training requirements for the call centre staff. Throughout 2017, EGD relied primarily on non-cost communication methods, such as website, call centre, on-bill message and social media tools, to communicate with customers about Cap-and-Trade.

In 2016, Union incurred incremental costs related to the development of customer communications material including design and content for the new Cap-and-Trade section of its website, as well as two customer research studies. The first study included focus group sessions to assess general awareness of the government's Cap-and-Trade plan, reactions to the plan and to Cap-and-Trade costs, and preferences related to how Cap-and-Trade costs might appear on natural gas bills. In the second study, Union engaged a consultant to conduct customer surveys among Residential and General Service business customers to evaluate the effectiveness of Union's Cap-and-Trade customer communications.

Bad Debt

As explained in Union's application at Exhibit 3, Tab 5, Union used a simplified method to estimate Cap and Trade related bad debts for 2017, assuming that a 10% increase in customer bills as a result of Cap and Trade costs would result in a 10% increase in bad debt. This simplified method was employed because Union had no previous experience with bad debt in a Cap-and-Trade environment. For the 2018 forecast, Cap-and-Trade related bad debt is estimated using Union's corporate bad debt forecast methodology, and is calculated by taking Union's forecast compliance obligation costs for General Service customers and applying Union's average actual write-off factor from the past five years.

As outlined in Union's 2017 Compliance Plan interrogatory response at EB-2016-0296, Exhibit B, FRPO 1, the actual incremental bad debt amount directly related to Cap-and-Trade in 2017 was expected to be lower than the estimate in 2017 due to the implementation of Cap-and-Trade commencing January 1, 2017 and the lag time before Cap-and-Trade amounts would be included in customer accounts that were written off. Only the actual costs will be captured in a deferral account for future disposition; the forecast for 2017 of \$0.6 million was not in rates and was not in a deferral account. The amount of bad debt recognized in actuals is included in the GGEIDA. For 2017 the actual amount of bad debt included in the GGEIDA is approximately \$141,000. Union's actual bad debt write-offs are lower in 2017 due to the time lag described above, which results in only partial year impacts in 2017. For 2018, Union will realize a full year of bad debt write-offs in the GGEIDA.

As identified in paragraphs #27 through 30 of EB-2017-0224, Exhibit D, Tab 1, Schedule 1, EGD utilized the Company's total revenue requirement, total forecasted cost of compliance and corporate bad debt forecast to calculate a forecasted cost of bad debt associated with EGD's Capand-Trade program. In 2017, EGD forecasted \$0.9 million. Based on the actual bad debt realized in 2017, EGD incurred \$0.6 million associated with the Cap-and-Trade program.

OEB Cap and Trade Related Consultations

Both EGD and Union incurred costs related to the OEB Cap-and-Trade related consultations in

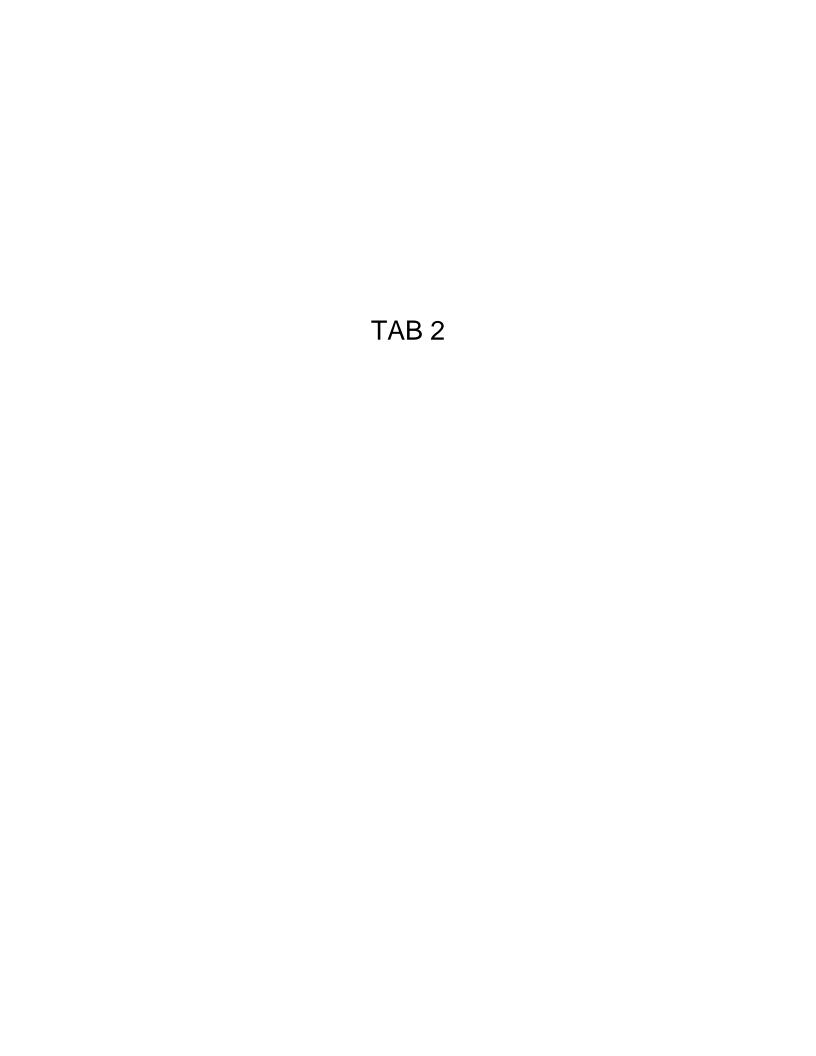
Filed: 2018-02-16 EB-2017-0255 Exhibit B.SEC.15 Page 7 of 7

2017. The costs were allocated as per the Board's methodology. The difference between the Utilities stems from the assignment of consultation costs. EGD included the costs of the "Report of the Board – Regulatory Framework for the Assessment of Costs of Natural Gas Utilities' Cap and Trade Activities" (EB-2015-0363) ("Framework") and "Marginal Abatement Cost Curve for Assessment of Natural Gas Utilities' Cap and Trade Activities" ("MACC") (EB-2016-0359) in the 2017 OEB Cap & Trade related consultation costs component.

Union's costs incurred for the Framework and MACC were included in Union's existing rates and 2017 Cap-and-Trade related consultation costs, respectively.

Each company forecasted different amounts related to the upcoming Long Term Carbon Price Forecast refresh and any other related stakeholder work. Costs associated with the OEB Capand-Trade related consultations will be allocated to each company based on the Board's methodology.

In 2018, Union has forecast its portion of OEB costs to be approximately half of the cost charged in 2017 as a MACC refresh is not within scope. Similarly, EGD's forecast is based on 60% of 2017's consultation costs.



Filed: 2013-06-28 EB-2012-0459 Exhibit D1 Tab 8 Schedule 5 Page 1 of 2 Plus Appendix

GREENHOUSE GAS EMISSIONS IMPACT DEFERRAL ACCOUNT ("GGEIDA")

Overview

- 1. The Ontario Ministry of the Environment (the "Ministry")is continuing to develop a provincial greenhouse gas emissions reduction program. In January of 2013, the Ministry issued a Greenhouse Gas Emissions Reduction in Ontario discussion paper. The paper was to be used in supporting discussions and seeking comments and input from stakeholders, which were to be received by April 21, 2013, for the purpose of informing the development and design of the program. A copy of the Discussion Paper is filed as Appendix A of this Exhibit.
- 2. The Ministry recommended an intention of the program being in place in 2015, one year prior to the implementation of Federal regulations of greenhouse gas emissions, which according to the Ministry are expected to begin in 2016.
- 3. EGD is seeking approval of a Customized IR plan for a 2014 through 2018 period. While EGD has become aware of the intended timeline of the Ministry's program, the requirements and potential ramifications of the program to EGD and its ratepayers are currently unknown. As a result EGD believes it is appropriate to establish this deferral account as it is unable to analyze and account for any impacts the program might have on EGD within the 2014-2018 timeframe or in any future year beyond that timeframe.
- 4. At the same time, EGD currently has a Board approved 2013 Carbon Dioxide Offset Credit Deferral Account ("CDOCDA") which had originally been approved by the Board in EB-2006-0021 and EB-2007-0615 for fiscal year 2008 and then was additionally approved for each of fiscal years 2009 through 2012 by the Board in

Witnesses: T. Adamson

K. Culbert

Filed: 2013-06-28 EB-2012-0459 Exhibit D1 Tab 8 Schedule 5 Page 2 of 2 Plus Appendix

subsequent proceedings. As a result of the Ministry of Ontario developing its Greenhouse Gas Emissions Program, EGD is requesting that the CDOCDA be discontinued for 2014 and beyond and that any credits or cost related impacts of Carbon Dioxides be dealt with within the GCEIDA, along with any impacts of the overall Ontario Greenhouse Gas Emissions Program.

5. EGD will bring forward its proposal for the detailed use of the GGEIDA in a future fiscal year if and when the Ontario Ministry of the Environment puts in place regulations concerning any policy outcome.

Witnesses: T. Adamson

K. Culbert

TAB 3

Union Energy Solutions Announces Contractual Agreement with Clean Energy Fuels for the Construction of CNG Fuelling Stations along Ontario's Highway 401

NEWS PROVIDED BY
Union Energy Solutions Limited Partnership
12:37 ET

CHATHAM, ON, April 19, 2018 /CNW/ - Union Energy Solutions Limited Partnership, an unregulated affiliate of Union Gas Limited - an Enbridge Company, announced today that it has entered into a contractual agreement with Clean Energy Fuels Corp.to construct three compressed natural gas (CNG) fueling stations along Ontario's Highway 401.

The three areas identified for station placement are:

- Husky Travel Centre Windsor this location is the busiest border crossing in North America linking to the U.S. Midwest.
- Shell Flying J between London and Woodstock this stretch of highway connects Highways 401, 402 and 403 with access to major U.S. border crossings.
- Shell Flying J Napanee in Eastern Ontario this section of highway provides connectivity to Eastern Canada and Northeast U.S. border crossings.

This network of CNG stations will enable heavy-duty truck fleets to confidently travel these routes ensuring they have sufficient fuel as they cross Canadian and provincial borders as well as travelling into the United States.

"The transportation industry represents one of the largest challenges in achieving emission reduction targets for its sector," said Sarah Van Der Pelt, vice-president, Union Energy Solutions Limited Partnership. "Today, about 11 million passenger and commercial vehicles regularly travel Ontario roads. These CNG stations will be among the first along the Hwy 401 corridor and will provide a more affordable and cleaner-burning fuel alternative thereby reducing greenhouse gases and giving fleet owners incentive to consider moving away from conventional fuels such as gasoline and diesel thereby reducing emissions."

Clean Energy, the leading provider of natural gas fuel and Renewable Natural Gas (RNG) fuel for transportation in North America, will design and build the three CNG stations. With a network of over 570 natural gas fueling stations, Clean Energy owns and/or operates facilities in 43 U.S. states and other provinces in Canada. Construction is anticipated to begin in spring 2018.

"Natural gas as a transportation fuel is the best solution to deliver emission reductions associated with diesel fuel from our highways, roads and communities," said Chad Lindholm, Vice President of Sales at Clean Energy. "This

network of CNG stations will enable heavy-duty truck fleets to confidently travel these routes ensuring they have sufficient fuel as they cross Canadian and provincial borders as well as travelling into the United States."

About Union Energy Solutions

Union Energy Solutions Limited Partnership (UES) is an unregulated affiliate of Union Gas Limited - an Enbridge Company - that focuses on various clean energy business initiatives in the Province of Ontario. UES is currently embarking on establishing a network of compressed natural gas (CNG) refuelling stations along Ontario's 400 Series highways.

About Clean Energy

Clean Energy Fuels Corp. is the leading provider of natural gas fuel and renewable natural gas (RNG) fuel for transportation in North America. We build and operate compressed natural gas (CNG) and liquefied natural gas stations (LNG) and deliver more CNG, LNG and RNG vehicle fuel than any other company in the U.S. Clean Energy sells Redeem RNG fuel and believes it is the cleanest transportation fuel commercially available, reducing greenhouse gas emissions by up to 70%. For more information, visit CleanEnergyFuels.com.

Media Contact on behalf of Union Energy Solutions:

Andrea Stass 1-800-571-8446 ext. 5005490 astass@uniongas.com

Clean Energy Media Contact:

Gary Foster
949-437-1113
gary.foster@cleanenergyfuels.com