

September 26, 2017

Ms. Kirsten Walli OEB Secretary Ontario Energy Board 2300 Yonge Street, 27<sup>th</sup> Floor Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: EB-2017-0087 – Union Gas Limited – 2018 Rates Evidence

Union Gas Limited ("Union") filed an application on September 20, 2017 with the Ontario Energy Board ("OEB") for an Order of the OEB approving or fixing rates for the distribution, transmission and storage of natural gas, effective January 1, 2018.

Please find attached evidence from Union in support of that application.

If the proposed 2018 Rate changes are approved by the OEB, the net annual bill increase for a typical Union South residential customer consuming 2,200 m<sup>3</sup> per year will be \$9.60 per year and the net annual bill increase for a typical Union North residential customer consuming 2,200 m<sup>3</sup> per year will range from \$10.75 to \$14.03 per year.

Union seeks the OEB's issuance of the final Rate Order by November 30, 2017 to ensure the implementation of 2018 Rates by January 1, 2018. In the event that the OEB does not issue a Rate Order by November 30, 2017 for implementation, Union seeks an Order of the OEB declaring interim approval of Union's rates as filed, as of January 1, 2018. Union proposes to deal with any retrospective impact of the OEB's Decision through a rate rider for general service rate classes and a one-time adjustment for all other rate classes, which will recover any changes in rates ultimately approved by the OEB's Order with effect from January 1, 2018.

Yours truly,

[Original signed by]

Adam Stiers Manager, Regulatory Initiatives

c.c.: EB-2016-0245 Intervenors Crawford Smith, Torys

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### 1 PREFILED EVIDENCE 2 3 The purpose of this evidence is to describe proposed changes to Union's regulated transportation, 4 storage and distribution rates effective January 1, 2018 determined in accordance with the OEB-5 approved 2014-2018 Incentive Regulation ("IR") application and evidence (EB-2013-0202), 6 Settlement Agreement and supporting evidence (collectively "the Agreement"), approved on 7 October 7, 2013. The Agreement sets out a multi-year incentive ratemaking mechanism ("IRM") 8 for calendar years 2014 to 2018. 9 10 The 2018 rate setting process described below follows the same approach used to set 2017 Rates 11 in EB-2016-0245. Distribution revenue and rates associated with Union's Cap-and-Trade 12 program have been excluded from this evidence and will be filed with the 2018 Cap-and-Trade 13 Compliance Plan application and evidence (EB-2017-0255). 14 15 This evidence is organized as follows: 16 Tab 1 – Price Cap Index 17 Tab 2 – Parkway Delivery Obligation Reporting 18 Tab 3 – Gas Supply Memorandum

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1 2	PRICE CAP INDEX
3	The Agreement includes a price cap index ("PCI"), where rates are a function of the following
4	factors:
5	• an inflation factor ("I Factor");
6	• a productivity factor ("X Factor");
7	• certain non-routine adjustments ("Z Factors");
8	• certain predetermined pass-throughs ("Y Factors"); and,
9	• an adjustment for normalized average consumption ("NAC") to reflect changes in
10	consumption in the general service rate classes.
11	
12	This evidence is organized similarly as follows:
13	1. I Factor and X Factor Adjustments
14	2. Z Factor Adjustments
15	2.1. Tax Savings
16	3. Y Factor Adjustments
17	3.1. Cost of Gas and Upstream Transportation Costs
18	3.2. Demand Side Management Budget Changes
19	3.3. Lost Revenue Adjustment Mechanism for Contract Rate Classes
20	3.4. Unaccounted for Gas Volume Variances
21	3.5. Major Capital Additions
22	4. Normalized Average Consumption Adjustment

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1	5. Union North Cost Allocation and Rate Design Implementation
2	6. Customer Bill Impacts
3	7. Rate Schedule Changes
4	7.1. Update to Cap-and-Trade Unit Rate Presentation
5	7.2. Update to Rate M12 Schedule "C"
6	7.3. Update to Rate M13 Terms of Service
7	8. New Deferral Account Requests
8	9. Deferral Account Closure Requests
9	9.1. Energy East Pipeline Consultation Costs Deferral Account
10	10. Implementation
11	11. Distribution Interruptions

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1 A summary of Union's 2018 proposed revenue changes is provided in Table 1 below.

### Table 1 Proposed Changes in Revenue Effective January 1, 2018

Line		
No.	Particulars	(\$000's)
	Summary Change in Revenue (1):	
1	2018 Proposed in EB-2017-0087	1,272,665
2	2017 Approved in EB-2017-0278	1,211,406
3	Net Change (line 1 - line 2)	61,259
	Detail Change in Revenue:	
4	2018 Price Cap Index (0.51%)	4,639
5	2018 DSM Budget Change	4,702
6	2018 Capital Pass-throughs	52,855
7	2018 Parkway Delivery Obligation	(1,130)
8	2018 Gas Supply Plan	193
9	Total (line 4 through line 8)	61,259

### Notes:

(1) Revenue excludes Cap-and-Trade revenues.

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- 4 A description of supporting schedules is provided in the Overview of Working Papers
- 5 document following Tab 1.

#### 1. I FACTOR AND X FACTOR ADJUSTMENTS

- 2 The I Factor used in Union's PCI mechanism is the actual year-over-year percentage change
- 3 in the annualized average of four quarters of Statistics Canada's Gross Domestic Product
- 4 Implicit Price Index Final Domestic Demand ("GDP IPI FDD"). The I Factor is adjusted
- 5 annually on this basis with no restatement for adjustments by Statistics Canada. For 2018
- 6 Rates, the I Factor is 1.27%. It is based on the actual change in the GDP IPI FDD from 2016
- 7 Q2 to 2017 Q2. The calculation is provided at Rate Order, Working Papers, Schedule 1.
- 8 The approved annual X Factor for the IR term is expressed as a percentage of inflation.
- 9 Specifically, for each year of the IR term productivity is 60% of GDP IPI FDD, inclusive of a
- stretch factor. This results in an annual rate escalation factor, before the impact of Y Factor
- and Z Factor adjustments and earnings sharing, of 40% of GDP IPI FDD. For 2018 Rates, the
- 12 X Factor is 0.76% and the PCI is 0.51%.

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#### 2. Z FACTOR ADJUSTMENTS

- 15 2.1. <u>Tax Savings</u>
- 16 Consistent with the Agreement, Union will maintain an equal and symmetrical sharing of tax
- 17 changes over the IR term, sharing the impact of tax changes 50:50 as applied to the tax level
- reflected in rates. Beginning January 1, 2017, changes were made to the tax treatment of
- 19 cumulative eligible capital ("CEC") as described in Union's 2017 Rates application and
- evidence. The financial impact to 2018 Rates is approximately \$2,000, subject to 50:50 sharing.
- Due to materiality, Union has not reflected this amount in 2018 Rates.

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#### 3. Y FACTOR ADJUSTMENTS

- 2 The Agreement provided for a number of Y Factors which are not adjusted as part of the price
- 3 cap formula and are passed-through to customers in rates. The 2018 Y Factors are described
- 4 below:

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- 6 3.1. Cost of Gas and Upstream Transportation Costs (as Defined in EB-2011-0210)
- 7 Union's current upstream gas costs are as filed in Union's October 1, 2017 Quarterly Rate
- 8 Adjustment Mechanism ("QRAM") application and evidence (EB-2017-0278). Changes in
- 9 upstream gas costs will continue to be determined using the OEB-approved QRAM
- methodology. Rate Order, Working Papers, Schedule 15 provides the allocation of upstream
- transportation costs by rate class included in the current approved revenue.

- 13 3.2. DEMAND SIDE MANAGEMENT ("DSM") BUDGET CHANGES
- 14 Consistent with the OEB's revised Decision in the 2015-2020 DSM Plan proceeding (EB-
- 15 2015-0029) dated February 24, 2016, Union has included an approved DSM budget of \$63.3
- million in 2018 Rates. The difference between the 2018 DSM budget and actual 2018 DSM
- budget will be captured in the Demand Side Management Variance Account ("DSMVA").
- 18 The allocation of the 2018 DSM budget to rate classes can be found at Rate Order, Working
- 19 Papers, Schedule 11.

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3.3. Lost Revenue Adjustment Mechanism ("LRAM") for Contract Rate Classes 1 2 Union will continue to adjust volumes and calculate rates to capture the LRAM volume 3 impacts. As the audit processes associated with the 2015 and 2016 DSM Program results are 4 not yet complete. Union is not able to true-up the 2015 pre-audit volume adjustment made in 2017 Rates and proposes to adjust 2018 volumes by 2016 pre-audit results. Union will true-5 6 up the 2015 pre-audit volume adjustment made in 2017 Rates in the annual rates adjustment 7 application and evidence following receipt of final 2015 DSM Program results. The variance 8 related to the difference between the 2015 and 2016 pre-audit and post-audit results will be 9 captured in the LRAM Deferral Account until the LRAM volume impacts are trued up in an 10 annual rate adjustment as described above. 11 Consistent with 2017 Rates, the 2016 pre-audit LRAM results by rate class are determined 12 based on the rate class of a customer at December 31, 2016. In order to align the 2016 pre-13 audit LRAM results with the 2013 OEB-approved volumes, Union transferred a portion of 14 2016 LRAM pre-audit volumes for customers in Rate M7 (7.187 10<sup>3</sup>m<sup>3</sup>) to rate classes M4 15 16 and M5A based on the rate class of customers in 2013 OEB-approved volumes. Rate Order, 17 Working Papers, Schedule 17 provides the LRAM volume adjustments by rate class. 18 3.4. UNACCOUNTED FOR GAS ("UFG") VOLUME VARIANCES 19 20 Union has not made an adjustment to 2018 Rates associated with UFG volume variances. 21 Consistent with the Agreement, UFG cost changes resulting from a difference between the UFG

<sup>1</sup> EB-2016-0245, Tab 1, p.6.

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- 1 volume included in rates and the actual UFG volume will be recorded in the UFG Volume
- 2 Variance Account.<sup>2</sup>

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- 4 3.5. MAJOR CAPITAL ADDITIONS
- 5 Consistent with the Agreement, Union has treated approved major capital projects as Y Factor
- 6 adjustments to 2018 Rates.

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- 8 Union has included the OEB-approved 2018 costs for each of the following capital pass-
- 9 throughs, in 2018 Rates:
- 10 1. Parkway West Project EB-2012-0433;
- 2. Brantford-Kirkwall/Parkway D Project EB-2013-0074;
- 3. Dawn Parkway 2016 System Expansion Project EB-2014-0261;
- 4. Burlington Oakville Pipeline Project EB-2014-0182;
- 14 5. 2017 Dawn Parkway Project EB-2015-0200; and,
- 15 6. Panhandle Reinforcement Project EB-2016-0186.

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17 Please see Rate Order, Working Papers, Schedule 10 for the 2018 rate adjustments by rate class.

- 19 Panhandle Reinforcement Project
- The Panhandle Reinforcement Project ("Panhandle Project") was approved by the OEB on
- February 23, 2017 in the OEB's Decision and Order related to Union's Leave-to-Construct

<sup>&</sup>lt;sup>2</sup> Rate Order, Appendix F, p.19.

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2 capital pass-through treatment of the Panhandle Project subject to two conditions, "First, the 3 OEB is only pre-approving the recovery of the Project costs up to the current estimate of \$264 4 M. Second, the Project costs will only be incorporated into rates in 2018, assuming the Project is completed and in service." <sup>3</sup> In accordance with the OEB Decision, Union has included the cost 5 6 consequences of the Panhandle Project in 2018 Rates based on the estimated total capital cost of 7 \$264.5 million and the forecasted in-service date of November 1, 2017. 8 9 In the OEB Decision and Order, Union's proposal to use a 20-year depreciation period and a 10 revised cost allocation methodology was not approved by the OEB. Accordingly, Union has 11 prepared the total revenue requirement and allocation of the total revenue requirement to rate 12 classes based on OEB-approved depreciation rates and cost allocation methodologies. 13 14 The OEB Decision and Order included a directive for Union to update the Panhandle Project's 15 2018 delivery revenue forecast in its 2018 Rates application and evidence for OEB approval.<sup>4</sup> 16 Accordingly, Union has increased the 2018 incremental Panhandle Project revenue from \$1.572 17 million to \$3.104 million to reflect the incremental transmission and distribution margin

attributable to the Panhandle Project based on current approved rates. The update to the

incremental Panhandle Project revenue results in a net revenue requirement of \$14.574 million as

application and evidence (EB-2016-0186). In its Decision and Order, the OEB approved the

<sup>3</sup> EB-2016-0186, Decision and Order, p.22.

provided at Rate Order, Appendix G.

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<sup>&</sup>lt;sup>4</sup> EB-2016-0186, Decision and Order, pp.22-23.

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1 Union proposes to reduce the allocation of Panhandle Project costs by the incremental revenue 2 allocated to rate classes in proportion to the Panhandle System and St. Clair System design day 3 demands. The proposed treatment of incremental Panhandle Project revenue is consistent with 4 the OEB-approved cost allocation methodology of Panhandle System costs. The allocation of the 5 net revenue requirement to rate classes as included in 2018 Rates is provided at Rate Order, 6 Appendix G. 7 8 The OEB Decision and Order also directed Union to use the approved deferral account 9 (Panhandle Reinforcement Project Costs Deferral Account) to track 2017 net delivery revenue 10 requirement of the Panhandle Project, based on a forecast of \$4.768 million. The OEB 11 referenced the amount of \$4.768 million from EB-2016-0186, Exhibit A, Tab 8, Schedule 1 12 which was prepared based on Union's proposed 20 year depreciation period. Consistent with the 13 OEB Decision, the forecast of \$0.100 million from EB-2016-0186, Exhibit A, Appendix B, 14 Schedule 1 was the appropriate forecast at the time, as it was prepared based on OEB-approved 15 depreciation rates. However, the forecasted 2017 net delivery revenue requirement of the 16 Panhandle Project was adjusted, as noted above, to align with the OEB's Decision and Order which directed Union to update the Panhandle Project's delivery revenue to reflect the 17

incremental transmission and distribution margin attributable to the Panhandle Project.

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- 1 The OEB Decision and Order commented that Union may propose disposition of the 2017
- deferral account balance in its 2018 IRM application and evidence.<sup>5</sup> Consistent with the 2017
- 3 deferral account balances of other capital pass-through projects, Union will bring forward the
- 4 2017 balance for disposition as part of its 2017 Non-Commodity Deferral Account Disposition
- 5 proceeding in 2018.

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- 7 Union has included a revised draft Accounting Order for the Panhandle Project at Rate Order,
- 8 Appendix F, p.38 for OEB approval.

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### 4. NORMALIZED AVERAGE CONSUMPTION ADJUSTMENT

- 11 Consistent with the Agreement, Union adjusts general service rates annually during the 2014-
- 12 2018 IR term for changes in NAC. NAC incorporates all volume changes, including changes
- due to average use and DSM activities (LRAM) for general service rate classes.

- 15 Consistent with the 2017 methodology, Union adjusted the general service storage and
- delivery rates for the 2016 actual NAC, using the OEB-approved weather normal
- methodology blend of 50:50 (30-year average and 20-year declining trend). For 2018, the
- NAC adjustment is the variance between 2015 actual NAC and 2016 actual NAC, as seen in
- 19 Rate Order, Working Papers, Schedule 12.

<sup>&</sup>lt;sup>5</sup> EB-2016-0186, Decision and Order, p.23.

<sup>&</sup>lt;sup>6</sup> EB-2016-0245, Tab 1, p.8.

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#### 5. Union North Cost Allocation and Rate Design Implementation

- 2 In 2018 Rates, Union has implemented changes to Union North storage and transportation
- 3 ("S&T") rates in accordance with the Dawn Reference Price (EB-2015-0181) Settlement
- 4 Proposal (the "DRP Settlement") approved by the OEB on January 7, 2016.

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- 6 Union updated the 2018 Union North storage and transportation rates to reflect the Gas Supply
- 7 Plan for the 2018 calendar year as filed in EB-2015-0181 and agreed to in the DRP Settlement.
- 8 The changes to storage and transportation rates are based on a detailed cost allocation for each of
- 9 the new Union North West and Union North East Zones.

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- 11 The allocation for cost-based storage and transportation costs by zone is provided at Rate Order,
- Working Papers, Schedule 23. The 2018 Gas Supply Plan has been updated to reflect the
- reference price and tolls per the October 2017 QRAM (EB-2017-0278).

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### 6. CUSTOMER BILL IMPACTS

- 16 The net annual bill impact for a typical Union South residential customer consuming 2,200 m<sup>3</sup>
- per year will be an increase of \$9.60 per year and the net annual bill impact for a typical
- 18 Union North residential customer consuming 2,200 m<sup>3</sup> per year will be an increase ranging
- 19 from \$10.75 \$14.03 per year.

- Bill impacts do not reflect January 1, 2018 changes to Union's gas commodity and fuel rates
- that will be implemented with Union's January 2018 QRAM application and evidence or

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- 1 Union's Cap-and-Trade rates that will be implemented with Union's 2018 Cap-and-Trade
- 2 Compliance Plan application and evidence (EB-2017-0255).

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- 4 Union provides additional detail related to customer impacts in the following schedules:
- Rate Order, Working Papers, Schedule 6 provides average 2018 unit price changes for
   all in-franchise rate classes.
- Rate Order, Working Papers, Schedule 7 provides a summary of the approved 2017
   revenue changes for all rate classes.
- Rate Order, Working Papers, Schedule 8 provides customer bill impacts for general
   service rate classes: M1, M2, Rate 01 and Rate 10.
  - Rate Order, Working Papers, Schedule 9 provides the bill impact for all in-franchise rate classes for both sales service and direct purchase customers.

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### 7. RATE SCHEDULE CHANGES

Blackline versions of Union's rate schedules are provided at Rate Order, Appendix B.

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#### 7.1. UPDATE TO CAP-AND-TRADE UNIT RATE PRESENTATION

- 18 In accordance with the 2017 Cap-and-Trade Compliance Plan Decision (EB-2016-0296), Union
- 19 has updated the presentation of its rate schedules to separate the customer-related and facility-
- 20 related Cap-and-Trade charges that were previously embedded within delivery rates. Consistent
- 21 with the presentation of the rate schedules, Union also removed the Cap-and-Trade charges from
- 22 the calculation of delivery rates and supporting Working Papers as part of this application and

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1 evidence. These changes do not impact the total delivery charges or presentation of Cap-and-2 Trade charges on customers' bills. 3 4 Union has updated the wholesale service Rate M9, Rate M10 and Rate T3 rate schedules to 5 exclude the customer-related Cap-and-Trade unit rate. Union has not been billing wholesale 6 customers customer-related Cap-and-Trade charges because they are not covered by Union's 7 compliance obligation. Accordingly, it is not necessary for Union to provide the option for the 8 customer-related Cap-and-Trade unit rates on these rate schedules. 9 10 7.2. Update to Rate M12 Schedule "C" 11 Union is proposing to update the Rate M12 Schedule "C" to include the fuel ratio and fuel rate 12 for westerly transportation from Kirkwall to Dawn available under the M12-X service, effective 13 January 1, 2018. Union introduced the M12-X service as part of the C1 Kirkwall to Dawn and 14 M12-X proceeding (EB-2010-0296), which enabled shippers to receive and deliver gas between 15 any two M12 points (Dawn, Parkway or Kirkwall) on any day and in any direction. The 2018 16 M12-X Kirkwall to Dawn fuel ratio is set at 0.158% (or \$0.006/GJ), which is consistent with the 17 Rate C1 Kirkwall to Dawn transportation fuel ratio. Union has also updated the authorized 18 overrun Kirkwall to Dawn fuel ratio to be 0.778% under both Rate C1 and Rate M12. 19 20 Union is also proposing to remove the VT3 Westerly Parkway to Kirkwall and Parkway to Dawn fuel ratio and fuel rate from the Rate M12 Schedule "C", effective January 1, 2018. Union is 21 22 proposing to remove this charge as Union no longer offers this service under Rate M12. Union

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- only offers transportation from Parkway to Kirkwall and Dawn under Rate C1 or as part of the
- 2 M12-X service. The last Rate M12 contract for Parkway to Dawn service expired in 2014.

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- 4 7.3. <u>Update to Rate M13 Terms of Service</u>
- 5 Union is proposing to remove the reference to the General Terms and Conditions Schedule "A"
- 6 from the Rate M13 rate schedule, section (C) Terms of Service, effective January 1, 2018. Union
- 7 is proposing to remove the reference as Union no longer has Rate M13 customers with contracts
- 8 supported by the General Terms and Conditions Schedule "A".

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### 8. NEW DEFERRAL ACCOUNT REQUESTS

11 There are no new deferral account requests.

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#### 9. DEFERRAL ACCOUNT CLOSURE REQUESTS

- 9.1. Energy East Pipeline Consultation Costs ("EEPCC") Deferral Account No. 179-139
- 15 The EEPCC Deferral Account was established in 2014 as part of Union's 2015 Rates
- proceeding (EB-2014-0271) as a result of the November 12, 2013 letter from the Minister of
- 17 Energy requesting that the OEB examine and report on TransCanada Pipelines Limited's
- proposed Energy East Pipeline project. Consistent with section 30 of the Ontario Energy
- Board Act, 1998 (the "Act"), a portion of the costs incurred in complying with the Minister's
- 20 request were to be funded from all entities which are subject to the OEB's cost assessment
- 21 under section 26 of the Act. On July 11, 2014, the OEB allowed Union to create a deferral
- account for its allocation of the Energy East consultation costs. No further consultation costs

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1 are expected. Therefore, Union requests approval to close the EEPCC Deferral Account 2 effective January 1, 2018. 3 4 **10. IMPLEMENTATION** 5 Union proposes to implement new rates effective January 1, 2018 as described in the Rate 6 Setting Process of the EB-2013-0202 Settlement Agreement at Section 13.1. Union therefore 7 requests issuance of the final Rate Order by November 30, 2017. This timing allows 2018 Rates 8 to be implemented prospectively and aligns with the January 1, 2018 QRAM process. 9 10 In the event that the OEB does not issue a Rate Order by November 30, 2017 for 11 implementation, Union seeks an Order of the OEB declaring interim approval of Union's rates as 12 filed, as of January 1, 2018. Union proposes to deal with any retrospective impact of the OEB's 13 Decision through a rate rider for general service rate classes and a one-time adjustment for all 14 other rate classes, which will recover any changes in rates ultimately approved by the OEB's 15 Order with effect from January 1, 2018. 16 17 11. DISTRIBUTION INTERRUPTIONS 18 In Union's 2016 Rates Settlement Agreement (EB-2015-0116), Union agreed to provide 19 information on distribution interruptions as part of its annual rate application and evidence.

Please see Exhibit A, Tab 1, Appendix 1 for Union's 2017 Distribution Interruptions.

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# **2017 Distribution Interruption**

	Advanced						
	Notice of						
	Interruption					Number of	
	to					Non-	Overrun
	Customers	Interruption	Interruption	Interrupted	Interruption	Compliant	Volume
Location	(h:mm)	Start Date	End Date	Customers	Day	Customers	$(m^3)$
Sudbury	4:31	24/03/17	30/03/17	1	1	1	3380

Filed: 2017-09-26 EB-2017-0087 Rate Order

### EB-2017-0087 Rate Order for 2018 Rates Index of Appendices

Appendix A Summary of Changes to Sales Rates

Appendix B Rate Schedules

Appendix C Summary of Average Rate and Price Adjustment Changes For

Rates 25, M4, M5A, M7, T1 and T2 Interruptible Contracts

Appendix D Services Customer Notices

Appendix E Miscellaneous Non-Energy Charges

Appendix F Accounting Orders

Appendix G Revenue Requirement Calculations

# Appendix A

### **UNION GAS LIMITED**

#### Union North

### Summary of Changes to Sales Rates Rate 01A - Small Volume General Firm Service

		EB-2017-0278		EB-2017-0087
Line		Approved October 1, 2017	Rate	Approved January 1, 2018
No.	Particulars (cents/m³)	Rate (1)	Change	Rate
110.	- amodare (comorni)	(a)	(b)	(c)
1	Monthly Charge - All Zones	\$21.00		\$21.00
	Monthly Delivery Charge - All Zones			
2	First 100 m <sup>3</sup>	9.1028	0.2825	9.3853
3	Next 200 m <sup>3</sup>	8.8698	0.2759	9.1457
4	Next 200 m <sup>3</sup>	8.5021	0.2644	8.7665
5	Next 500 m <sup>3</sup>	8.1646	0.2539	8.4185
6	Over 1,000 m³	7.8858	0.2452	8.1310
7	Delivery - Price Adjustment (All Volumes)	1.2219 (2)		1.2219 (2)
	Cap-and-Trade Charges			
8	Cap-and-Trade Customer-Related Charge	3.3181		3.3181
9	Cap-and-Trade Facility-Related Charge	0.0509		0.0509
	Gas Transportation Service			
10	Union North West Zone	6.8585	0.0009	6.8594
11	Union North East Zone	3.0002	0.0283	3.0285
12	Transportation - Price Adjustment (Union North West)	0.6565 (3)		0.6565 (3)
13	Transportation - Price Adjustment (Union North East)	0.6881 (3)		0.6881 (3)
	Storage Service			
14	Union North West Zone	2.0547	0.2080	2.2627
15	Union North East Zone	6.6690	0.3320	7.0010
16	Storage - Price Adjustment (All Zones)	-		-
	Commodity Cost of Gas and Fuel			
17	Union North West Zone	10.3795	(0.0009)	10.3786
18	Union North East Zone	14.0136	(0.0009)	14.0127
19	Commodity and Fuel - Price Adjustment (Union North West)	1.1618 (4)		1.1618 (4)
20	Commodity and Fuel - Price Adjustment (Union North East)	0.9915 (4)		0.9915 (4)
21	System Expansion Surcharge (if applicable)	23.0000		23.0000

- (1) Approved rates presentation adjusted to separate the Cap-and-Trade charges which were previously embedded in delivery and transportation rates.
- (2) Includes a temporary charge of 1.2219 cents/m³ expiring March 31, 2018.
  (3) Prospective Recovery of gas supply deferral accounts, and a temporary charge of 0.7678 cents/m³ expiring March 31, 2018.
  (4) Prospective Recovery of gas supply deferral accounts.

#### **UNION GAS LIMITED** Union North Summary of Changes to Sales Rates Rate 10 - Large Volume General Firm Service

Line No.	Particulars (cents/m³)	EB-2017-0278	Rate Change (b)	EB-2017-0087 Approved January 1, 2018 Rate (c)
1	Monthly Charge - All Zones	\$70.00		\$70.00
	Monthly Delivery Charge - All Zones			
2	First 1,000 m <sup>3</sup>	7.6310	0.2799	7.9109
3	Next 9,000 m <sup>3</sup>	6.1985	0.2273	6.4258
4	Next 20,000 m <sup>3</sup>	5.5269	0.2293	5.7562
5	Next 70,000 m <sup>3</sup>	4.9901	0.2070	5.1971
6	Over 100,000 m <sup>3</sup>	2.9564	0.1226	3.0790
7	Delivery - Price Adjustment (All Volumes)	1.0857 (2)		1.0857 (2)
	Cap-and-Trade Charges			
8	Cap-and-Trade Customer-Related Charge	3.3181		3.3181
9	Cap-and-Trade Facility-Related Charge	0.0378		0.0378
	Gas Transportation Service			
10	Union North West Zone	6.0054	0.0002	6.0056
11	Union North East Zone	2.7620	0.0148	2.7768
12	Transportation - Price Adjustment (Union North West)	0.7330 (3)		0.7330 (3)
13	Transportation - Price Adjustment (Union North East)	0.7646 (3)		0.7646 (3)
	Storage Service			
14	Union North West Zone	1.5437	0.1629	1.7066
15	Union North East Zone	4.7078	0.2723	4.9801
16	Storage - Price Adjustment (All Zones)	-		-
	Commodity Cost of Gas and Fuel			
17	Union North West Zone	10.3795	(0.0009)	10.3786
18	Union North East Zone	14.0136	(0.0009)	14.0127
19	Commodity and Fuel - Price Adjustment (Union North West)	1.1618 (4)		1.1618 (4)
20	Commodity and Fuel - Price Adjustment (Union North East)	0.9915 (4)		0.9915 (4)
21	System Expansion Surcharge (if applicable)	23.0000		23.0000

### Notes:

- (1) Approved rates presentation adjusted to separate the Cap-and-Trade charges which were previously embedded in delivery and transportation rates.
  (2) Includes a temporary charge of 1.0857 cents/m³ expiring March 31, 2018.
- (3) Prospective Recovery of gas supply deferral accounts, and a temporary charge of 0.8439 cents/m³ expiring March 31, 2018.
   (4) Prospective Recovery of gas supply deferral accounts.

# UNION GAS LIMITED Union North Summary of Changes to Sales Rates Rate 20 - Medium Volume Firm Service

Line No.	Particulars (cents/m³)	EB-2017-0278	Rate Change (b)	EB-2017-0087 Approved January 1, 2018 Rate (c)
4	Martilla Ohanna			
1	Monthly Charge	\$884.46	(\$24.50)	\$859.96
	Delivery Demand Charge			
2	First 70,000 m <sup>3</sup>	28.6326	0.0112	28.6438
3	All over 70,000 m <sup>3</sup>	16.8374	0.0066	16.8440
	Delivery Commodity Charge			
4	First 852,000 m <sup>3</sup>	0.5413	(0.0007)	0.5406
5	All over 852,000 m³	0.3870	(0.0005)	0.3865
	Cap-and-Trade Charges	2 24 24		2 2404
6 7	Cap-and-Trade Customer-Related Charge Cap-and-Trade Facility-Related Charge	3.3181 0.0082		3.3181 0.0082
,	Cap-and-Trade Facility-Related Charge	0.0062		0.0082
	Monthly Gas Supply Demand Charge			
8	Union North West Zone	56.4242	0.8442	57.2684
9	Union North East Zone	50.1792	0.7262	50.9054
10	Gas Supply Demand - Price Adjustment (All Zones)	-		-
	Commodity Transportation 1			
11	Union North West Zone	3.6200	0.0024	3.6224
12	Union North East Zone	2.6498	(0.0048)	2.6450
13	Transportation 1 - Price Adjustment (Union North West)	(0.0966) (2)		(0.0966) (2)
14	Transportation 1 - Price Adjustment (Union North East)	(0.0650) (2)		(0.0650) (2)
	Commodity Transportation 2			
15	Union North West Zone	-		-
16	Union North East Zone	-		-
	Commodity Cost of Gas and Fuel			
17	Union North West Zone	10.1022	(0.0009)	10.1013
18	Union North East Zone	13.6374	(0.0009)	13.6365
19	Commodity and Fuel - Price Adjustment (Union North West)	1.1618 (2)		1.1618 (2)
20	Commodity and Fuel - Price Adjustment (Union North East)	0.9915 (2)		0.9915 (2)
	Bundled Storage Service (\$/GJ)			
21	Monthly Demand Charge	20.238	0.330	20.568
22	Commodity Charge	0.204	0.004	0.208
23	Storage Demand - Price Adjustment	-		-

Notes:

(1) Approved rates presentation adjusted to separate the Cap-and-Trade charges which were previously embedded in delivery and transportation rates.

(2) Prospective Recovery of gas supply deferral accounts.

# UNION GAS LIMITED Union North

# Summary of Changes to Sales Rates Rate 100 - Large Volume High Load Factor Firm Service

Line No.	Particulars (cents/m³)	EB-2017-0278 Approved October 1, 2017 Rate (1)	Rate Change	EB-2017-0087 Approved January 1, 2018 Rate
		(a)	(b)	(c)
1	Monthly Charge	\$1,372.75	(\$32.20)	\$1,340.55
2	Delivery Demand Charge All Zones	15.1083	(0.0244)	15.0839
3	Delivery Commodity Charge All Zones	0.2201	(0.0001)	0.2200
4 5	Cap-and-Trade Charges Cap-and-Trade Customer-Related Charge Cap-and-Trade Facility-Related Charge	3.3181 0.0004		3.3181 0.0004
6 7	Monthly Gas Supply Demand Charge Union North West Zone Union North East Zone	114.2215 161.5404	(1.3148) (0.7186)	112.9067 160.8218
8	Gas Supply Demand - Price Adjustment (All Zones)	-		-
9 10	Commodity Transportation 1 Union North West Zone Union North East Zone	6.4075 9.2385	(0.0711) (0.0372)	6.3364 9.2013
11 12	Transportation 1 - Price Adjustment (Union North West) Transportation 1 - Price Adjustment (Union North East)	-		-
13 14	Commodity Transportation 2 Union North West Zone Union North East Zone			: :
15 16	Commodity Cost of Gas and Fuel Union North West Zone Union North East Zone	10.1022 13.6374	(0.0009) (0.0009)	10.1013 13.6365
17 18	Commodity and Fuel - Price Adjustment (Union North West) Commodity and Fuel - Price Adjustment (Union North East)	1.1618 (2) 0.9915 (2)		1.1618 (2) 0.9915 (2)
19 20	Bundled Storage Service (\$/GJ)  Monthly Demand Charge  Commodity Charge	20.238 0.204	0.330 0.004	20.568 0.208
21	Storage Demand - Price Adjustment	-		-

### Notes

<sup>(1)</sup> Approved rates presentation adjusted to separate the Cap-and-Trade charges which were previously embedded in delivery and transportation rates.

<sup>(2)</sup> Prospective Recovery of gas supply deferral accounts.

# UNION GAS LIMITED Union North Summary of Changes to Sales Rates

Line No.	Particulars (cents/m³)	EB-2017-0278	Rate Change (b)	EB-2017-0087 Approved January 1, 2018 Rate (c)
1	Rate 25 - Large Volume Interruptible Service Monthly Charge	\$306.75	(\$17.39)	\$289.36
2	Delivery Charge - All Zones (2)  Maximum	5.0569	0.1969	5.2538
3 4	Cap-and-Trade Charges Cap-and-Trade Customer-Related Charge Cap-and-Trade Facility-Related Charge	3.3181 0.0017		3.3181 0.0017
5 6	Gas Supply Charges - All Zones Minimum Maximum	1.4848 675.9484		1.4848 675.9484

Notes:

(1) Approved rates presentation adjusted to separate the Cap-and-Trade charges which were previously embedded in delivery and transportation rates.

(2) Refer to Appendix C.

#### **UNION GAS LIMITED** Union South Summary of Changes to Sales Rates

Line No.	Particulars (cents/m³)  Utility Sales	EB-2017-0278	Rate Change (b)	EB-2017-0087 Approved January 1, 2018 Rate (c)
1	Commodity and Fuel	13.7312	(0.0009)	13.7303
2	Commodity and Fuel - Price Adjustment	3.4547 (2)		3.4547 (2)
3	Transportation	47.4050	(0.0000)	47.4050
4	Total Gas Supply Commodity Charge	17.1859	(0.0009)	17.1850
5	M4 Firm Commercial/Industrial  Minimum annual gas supply commodity charge	0.1902	(0.0009)	0.1893
3	will influin annual gas supply commounty charge	0.1902	(0.0009)	0.1095
6	M4 / M5A Interruptible Commercial/Industrial Minimum annual gas supply commodity charge	0.1902	(0.0009)	0.1893
	Storage and Transportation Supplemental Services - Rate T1, Rate T2 & Rate T3 Monthly demand charges: (\$/GJ)	<u>\$/GJ</u>		<u>\$/GJ</u>
7	Firm gas supply service	60.300		60.300
8	Firm backstop gas	1.530		1.530
	Commodity charges:			
9	Gas supply	3.549		3.549
10	Backstop gas	3.961	0.044	4.005
11	Reasonable Efforts Backstop Gas	4.914	0.119	5.033
12	Supplemental Inventory	Note (3)		Note (3)
13 14	Supplemental Gas Sales Service (cents/m³) Failure to Deliver	16.6785 2.717	0.1743 0.118	16.8528 2.835
15	Discretionary Gas Supply Service (DGSS)	Note (4)		Note (4)

- (1) Approved rates presentation adjusted to separate the Cap-and-Trade charges which were previously embedded in delivery and transportation rates.
   (2) Prospective Recovery of gas supply deferral accounts, and a temporary charge of 0.2371 cents/m³ expiring March 31, 2018.
   (3) The charge for banked gas purchases shall be the higher of the daily spot gas cost at Dawn in the month of or the month following the month in which gas is sold under this rate and shall not be less than Union's approved weighted average cost of gas.
- (4) Reflects the "back to back" price plus gas supply administration charge.

### UNION GAS LIMITED Union South Summary of Changes to Sales Rates

Line No.	Particulars (cents/m³)	EB-2017-0278	Rate Change (b)	EB-2017-0087 Approved January 1, 2018 Rate (c)
	Rate M1 - Small Volume General Service Rate	(4)	(6)	(0)
1	Monthly Charge	\$21.00		\$21.00
2	First 100 m <sup>3</sup>	4.6653	0.4454	5.1107
3	Next 150 m <sup>3</sup>	4.4242	0.4215	4.8457
4	All over 250 m <sup>3</sup>	3.8012	0.3599	4.1611
5	Delivery - Price Adjustment (All Volumes)	0.5143 (2)		0.5143 (2)
	Cap-and-Trade Charges			
6	Cap-and-Trade Customer-Related Charge	3.3181		3.3181
7	Cap-and-Trade Facility-Related Charge	0.0297		0.0297
8	Storage Service	0.7153	0.0175	0.7328
9	Storage - Price Adjustment			-
10	System Expansion Surcharge (if applicable)	23.0000		23.0000
	Rate M2 - Large Volume General Service Rate			
11	Monthly Charge	\$70.00		\$70.00
12	First 1,000 m <sup>3</sup>	4.6486	0.4333	5.0819
13	Next 6,000 m <sup>3</sup>	4.5609	0.4248	4.9857
14	Next 13,000 m <sup>3</sup>	4.3740	0.4301	4.8041
15	All over 20,000 m <sup>3</sup>	4.0546	0.3975	4.4521
16	Delivery - Price Adjustment (All Volumes)	0.3363 (3)		0.3363 (3)
	Cap-and-Trade Charges			
17	Cap-and-Trade Customer-Related Charge	3.3181		3.3181
18	Cap-and-Trade Facility-Related Charge	0.0209		0.0209
19	Storage Service	0.6252	0.0229	0.6481
20	Storage - Price Adjustment	-		-
21	System Expansion Surcharge (if applicable)	23.0000		23.0000

- (1) Approved rates presentation adjusted to separate the Cap-and-Trade charges which were previously embedded in delivery and transportation rates.
   (2) Includes a temporary charge of 0.5143 cents/m³ expiring March 31, 2018.
   (3) Includes a temporary charge of 0.3363 cents/m³ expiring March 31, 2018.

#### **UNION GAS LIMITED** Union South Summary of Changes to Sales Rates

Line		EB-2017-0278 Approved October 1, 2017	Rate	EB-2017-0087 Approved January 1, 2018
No.	Particulars (cents/m³)	Rate (1)	Change	Rate
		(a)	(b)	(c)
	Rate M4 - Firm comm/ind contract rate			
	Monthly demand charge:			
1	First 8,450 m <sup>3</sup>	56.9923	5.2607	62.2530
2	Next 19,700 m <sup>3</sup>	25.5539	2.3588	27.9127
3	All over 28,150 m <sup>3</sup>	21.4688	1.9817	23.4505
	Monthly delivery commodity charge:			
4	First block	1.3523	0.2268	1.5791
5	All remaining use	0.5306	0.0782	0.6088
	D. I. D. A. II. ( A (All)) ( )			
6	Delivery - Price Adjustment (All Volumes)	-		-
	Cap-and-Trade Charges			
7	Cap-and-Trade Charges Cap-and-Trade Customer-Related Charge	3.3181		3.3181
8	Cap-and-Trade Customer-Related Charge Cap-and-Trade Facility-Related Charge	0.0280		0.0280
O	oap-and-rhade radiity-related onlarge	0.0200		0.0200
9	Minimum annual firm delivery commodity charge	1.5705	0.2259	1.7964
Ü	This is a second of the second	1101.00	0.2200	
	Interruptible contracts (2)			
10	Monthly Charge	\$654.15	(\$10.10)	\$644.05
	Daily delivery commodity charge:		,	
11	2,400 m³ to 17,000 m³	2.9653	0.0742	3.0395
12	17,000 m <sup>3</sup> to 30,000 m <sup>3</sup>	2.8354	0.0742	2.9096
13	30,000 m³ to 50,000 m³	2.7671	0.0742	2.8413
14	50,000 m³ to 60,000 m³	2.7192	0.0742	2.7934
15	Delivery - Price Adjustment (All Volumes)	-		-
	0 17 1 0			
40	Cap-and-Trade Charges	0.0404		0.0404
16	Cap-and-Trade Customer-Related Charge	3.3181		3.3181
17	Cap-and-Trade Facility-Related Charge	0.0249		0.0249
18	Minimum annual interruptible delivery commodity charge	3.1804	0.0733	3.2537
10	William annual interruptible delivery commodity charge	3.1004	0.0700	0.2007
	Rate M5A - interruptible comm/ind contract			
	Firm contracts (2)			
19	Monthly demand charge	31.7959	3.0122	34.8081
20	Monthly delivery commodity charge	2.3066	0.0504	2.3570
22	Delivery - Price Adjustment (All Volumes)	-		-
	Cap-and-Trade Charges			
23	Cap-and-Trade Customer-Related Charge	3.3181		3.3181
24	Cap-and-Trade Facility-Related Charge	0.0249		0.0249
	laterwatikle eartweet (0)			
05	Interruptible contracts (2)	<b>CC 4.4 C</b>	(\$40.40)	ФО 4.4. ОБ
25	Monthly Charge	\$654.15	(\$10.10)	\$644.05
26	Daily delivery commodity charge: 2,400 m³ to 17,000 m³	2.9653	0.0742	3.0395
20 27	17,000 m³ to 30,000 m³	2.8354	0.0742	2.9096
28	30,000 m³ to 50,000 m³	2.7671	0.0742	2.8413
28 29	50,000 m³ to 60,000 m³	2.7192	0.0742	2.7934
20	23,000 111 10 00,000 111	2.1 192	0.07 42	2.7304
30	Delivery - Price Adjustment (All Volumes)	-		_
	Cap-and-Trade Charges			
31	Cap-and-Trade Customer-Related Charge	3.3181		3.3181
32	Cap-and-Trade Facility-Related Charge	0.0249		0.0249
33	Minimum annual interruptible delivery commodity charge	3.1804	0.0733	3.2537

### Notes:

Approved rates presentation adjusted to separate the Cap-and-Trade charges which were previously embedded in delivery and transportation rates.
 Price changes to individual interruptible and seasonal contract rates are provided in Appendix C.

## UNION GAS LIMITED Union South Summary of Changes to Sales Rates

Line No.	Particulars (cents/m³)	EB-2017-0278	Rate <u>Change</u> (b)	EB-2017-0087 Approved January 1, 2018 Rate (c)
	Rate M7 - Special large volume contract			
1 2	Firm  Monthly demand charge  Monthly delivery commodity charge	30.8246 0.3873	4.0964 (0.0250)	34.9210 0.3623
3	Delivery - Price Adjustment	-		-
4	Interruptible (2) Monthly delivery commodity charge: Maximum	5.5675	0.9384	6.5059
5	Delivery - Price Adjustment	-		-
6	Seasonal (2)  Monthly delivery commodity charge:  Maximum	5.3234	0.9384	6.2618
7	Delivery - Price Adjustment	-		-
8 9	Cap-and-Trade Charges Cap-and-Trade Customer-Related Charge Cap-and-Trade Facility-Related Charge	3.3181 0.0288		3.3181 0.0288
10 11	Rate M9 - Large wholesale service  Monthly demand charge  Monthly delivery commodity charge	22.3154 0.2177	1.2243 (0.0389)	23.5397 0.1788
12	Delivery - Price Adjustment	-		-
13	Cap-and-Trade Charges Cap-and-Trade Facility-Related Charge	0.0248		0.0248
14	Rate M10 - Small wholesale service  Monthly delivery commodity charge	6.7289	0.4448	7.1737
15	Cap-and-Trade Charges Cap-and-Trade Facility-Related Charge	0.0258		0.0258

 <sup>(1)</sup> Approved rates presentation adjusted to separate the Cap-and-Trade charges which were previously embedded in delivery and transportation rates.
 (2) Price changes to individual interruptible and seasonal contract rates are provided in Appendix C.

## UNION GAS LIMITED Union South Summary of Changes to Contract Carriage Rates

Line No.	Particulars (cents/m³)	EB-2017-0278	Rate Change	EB-2017-0087 Approved January 1, 2018 Rate
		(a)	(b)	(c)
	Contract Carriage Service Rate T1 - Storage and Transportation			
	Storage (\$ / GJ)			
	Monthly demand charges:			
1	Firm space	0.011		0.011
	Firm Injection/Withdrawal Right			
2	Union provides deliverability inventory	1.459	(0.002)	1.457
3	Customer provides deliverability inventory	1.186	(0.002)	1.184
4	Firm incremental injection	1.186	(0.002)	1.184
5	Interruptible withdrawal	1.186	(0.002)	1.184
	Commodity charges:			
6	Withdrawal	0.022		0.022
7	Customer provides compressor fuel	0.008		0.008
8	Injection	0.022		0.022
9	Customer provides compressor fuel	0.008		0.008
10	Storage fuel ratio - customer provides fuel	0.406%	0.002%	0.408%
	Transportation (cents / m³)	07.4070		44.4000
11	Monthly demand charge first 28,150 m <sup>3</sup>	35.4376	5.7260	41.1636
12	Monthly demand charge next 112,720 m <sup>3</sup>	24.4833	3.9560	28.4393
	Firm commodity charges:			
13	Union provides compressor fuel - All volumes	0.1782	(0.0198)	0.1584
14	Customer provides compressor fuel - All volumes	0.1360	(0.0222)	0.1138
	·		,	
	Interruptible commodity charges: (2)			
15	Maximum - Union provides compressor fuel	5.5675	0.9384	6.5059
16	Maximum - customer provides compressor fuel	5.5253	0.9360	6.4613
	Cap-and-Trade Charges			
17	Cap-and-Trade Customer-Related Charge	3.3181		3.3181
18	Cap-and-Trade Customer-Related Charge	0.0167		0.0167
10	oup and Trade Labinty Related Orlange	0.0107		0.0107
19	Transportation fuel ratio - customer provides fuel	0.305%	0.018%	0.323%
	Authorized overrun services Storage (\$ / GJ)			
	Commodity charges			
20	Injection / Withdrawals	0.086	0.100%	0.087
21	Customer provides compressor fuel	0.056		0.056
22	Transportation commodity charge (cents/m³)	1.3433	0.1684	1.5117
23	Customer provides compressor fuel	1.3011	0.1660	1.4671
	1 1			7
		•		<b>.</b>
24	Monthly Charge	\$1,905.94	(\$10.12)	\$1,895.82

 <sup>(1)</sup> Approved rates presentation adjusted to separate the Cap-and-Trade charges which were previously embedded in delivery and transportation rates.
 (2) Price changes to individual interruptible contract rates are provided in Appendix C.

## UNION GAS LIMITED Union South Summary of Changes to Contract Carriage Rates

Line No.	Particulars (cents/m³)	EB-2017-0278	Rate Change (b)	EB-2017-0087 Approved January 1, 2018 Rate (c)
		(a)	(6)	(0)
	Contract Carriage Service Rate T2 - Storage and Transportation			
	Storage (\$ / GJ)			
	Monthly demand charges:			
1	Firm space	0.011		0.011
0	Firm Injection/Withdrawal Right	4.450	(0.000)	4 457
2 3	Union provides deliverability inventory Customer provides deliverability inventory	1.459 1.186	(0.002) (0.002)	1.457 1.184
3 4	Firm incremental injection	1.186	(0.002)	1.184
5	Interruptible withdrawal	1.186	(0.002)	1.184
			(0.002)	
	Commodity charges:			
6	Withdrawal	0.022		0.022
7	Customer provides compressor fuel	0.008		0.008
8	Injection Customer provides compressor fuel	0.022 0.008		0.022 0.008
9 10	Storage fuel ratio - customer provides fuel	0.406%	0.002%	0.408%
10	otorage ratio - dustomer provides ratio	0.40070	0.00270	0.40070
	Transportation (cents / m³)			
11	Monthly demand charge first 140,870 m <sup>3</sup>	26.4455	6.2340	32.6795
12	Monthly demand charge all over 140,870 m <sup>3</sup>	13.9884	3.2975	17.2859
	Firm commodity charges:			
13	Union provides compressor fuel - All volumes	0.0797	(0.0107)	0.0690
14	Customer provides compressor fuel - All volumes	0.0406	(0.0124)	0.0282
		3.3.00	(0.0.1=.)	0.0202
	Interruptible commodity charges: (2)			
15	Maximum - Union provides compressor fuel	5.5675	0.9384	6.5059
16	Maximum - customer provides compressor fuel	5.5284	0.9367	6.4651
	Cap-and-Trade Charges			
17	Cap-and-Trade Customer-Related Charge	3.3181		3.3181
18	Cap-and-Trade Facility-Related Charge	0.0115		0.0115
19	Transportation fuel ratio - customer provides fuel	0.283%	0.012%	0.295%
	Authorite ad a comun against			
	Authorized overrun services Storage (\$ / GJ)			
	Commodity charges			
20	Injection / Withdrawals	0.086	0.001	0.087
21	Customer provides compressor fuel	0.056		0.056
00		0.0404	0.4040	4.404
22 23	Transportation commodity charge (cents/m³) Customer provides compressor fuel	0.9491	0.1943 0.1926	1.1434 1.1026
23	Customer provides compressor ruer	0.9100	0.1926	1.1026
24	Monthly Charge	\$5,513.81	(\$76.65)	\$5,437.16

Notes:

(1) Approved rates presentation adjusted to separate the Cap-and-Trade charges which were previously embedded in delivery and transportation rates.

(2) Price changes to individual interruptible contract rates are provided in Appendix C.

# UNION GAS LIMITED Union South Summary of Changes to Contract Carriage Rates

Line No.	Particulars (cents/m³)	EB-2017-0278 Approved October 1, 2017 Rate (1)	Rate Change	EB-2017-0087 Approved January 1, 2018 Rate
		(a)	(b)	(c)
	Rate T3 - Storage and Transportation			
	Storage (\$ / GJ)			
	Monthly demand charges:			
1	Firm space	0.011		0.011
	Firm Injection/Withdrawal Right		(0.000)	
2	Union provides deliverability inventory	1.459	(0.002)	1.457
3 4	Customer provides deliverability inventory Firm incremental injection	1.186 1.186	(0.002) (0.002)	1.184 1.184
5	Interruptible withdrawal	1.186	(0.002)	1.184
3	тетириые жинагамаг	1.100	(0.002)	1.104
	Commodity charges:			
6	Withdrawal	0.022		0.022
7	Customer provides compressor fuel	0.008		0.008
8	Injection	0.022		0.022
9	Customer provides compressor fuel	0.008	0.0000/	0.008
10	Storage fuel ratio - Customer provides fuel	0.406%	0.002%	0.408%
	Transportation (cents / m³)			
11	Monthly demand charge	16.7213	1.2674	17.9887
12	Union provides compressor fuel - All volumes	0.1629	(0.0342)	0.1287
13	Customer provides compressor fuel - All volumes	0.1104	(0.0387)	0.0717
	Cap-and-Trade Charges			
14	Cap-and-Trade Facility-Related Charge	0.0235		0.0235
15	Transportation fuel ratio - Customer provides fuel	0.380%	0.032%	0.412%
	Authorized overrun services			
	Storage (\$ / GJ)			
	Commodity charges			
16	Injection / Withdrawals	0.086	0.001	0.087
17	Customer provides compressor fuel	0.056	0.001	0.056
18	Transportation commodity charge (cents/m³)	0.7126	0.0075	0.7201
19	Customer provides compressor fuel	0.6601	0.0030	0.6631
	Monthly Charge			
20	City of Kitchener	\$19,968.19	(\$129.41)	\$19,838.78
21	Natural Resource Gas	\$3,065.32	(\$19.87)	\$3,045.46
22	Six Nations	\$1,021.77	(\$6.62)	\$1,015.15

Notes:
(1) Approved rates presentation adjusted to separate the Cap-and-Trade charges which were previously embedded in delivery and transportation rates.

# UNION GAS LIMITED Union South Summary of Changes to Unbundled Rates

Line No.	Particulars (cents/m³)	EB-2017-0278	Rate Change (b)	EB-2017-0087 Approved January 1, 2018 Rate (c)
	U2 Unbundled Service_			
	Storage (\$ / GJ)			
	Monthly demand charges:			
	Standard Storage Service (SSS)			
1	Combined Firm Space & Deliverability	0.023		0.023
	Standard Peaking Service (SPS)			
2	Combined Firm Space & Deliverability	0.114		0.114
2	Ingramantal firm injection right	1.030	(0.002)	1.028
3 4	Incremental firm injection right Incremental firm withdrawal right	1.030	(0.002)	1.028
4	incrementar ilim withdrawarnghi	1.030	(0.002)	1.020
	Commodity charges:			
5	Injection customer provides compressor fuel	0.026		0.026
6	Withdrawal customer provides compressor fuel	0.026		0.026
7	Storage fuel ratio - Customer provides fuel	0.406%	0.002%	0.408%
	Authorized overrun services Storage (\$ / GJ) Commodity charges:			
8	Injection customer provides compressor fuel	0.060		0.060
9	Withdrawal customer provides compressor fuel	0.060		0.060
•	Trinidianal diagrams, promised delingredadi fudi	0.000		0.000

Notes:

(1) Approved rates presentation adjusted to separate the Cap-and-Trade charges which were previously embedded in delivery and transportation rates.

### **UNION GAS LIMITED** Summary of Changes to Storage and Transportation Rates

Line No.	Particulars (\$/GJ)	EB-2017-0278 Approved October 1, 2017 Rate (1)	Rate Change	EB-2017-0087 Proposed January 1, 2018 Rate
		(a)	(b)	(c)
	M12 Transportation Service			
	Firm transportation			
	Monthly demand charges:			
1	Dawn to Kirkwall	2.865	0.289	3.154
2	Dawn to Parkway	3.402	0.314	3.716
3	Kirkwall to Parkway	0.537	0.024	0.561
4	F24-T	0.070		0.070
_	M12-X Firm Transportation	4.000	0.054	4.500
5	Between Dawn, Kirkwall and Parkway	4.239	0.351	4.590
6	Commodity charges: Easterly	Note (2)		Note (2)
7	Westerly	Note (2)		Note (2)
8	Parkway (TCPL / EGT) to Parkway (Cons) / Lisgar	Note (2)		Note (2)
O	r anway (101 E7 E01) to r anway (00110) / Elogar	14010 (2)		14018 (2)
	Cap-and-Trade Facility-Related Charges:			
9	Dawn to Kirkwall / Parkway (Cons) / Lisgar	0.006		0.006
10	Dawn to Parkway (TCPL / EGT)	0.009		0.009
11	Kirkwall to Parkway (Cons) / Lisgar	0.002		0.002
12	Kirkwall to Parkway (TCPL / EGT)	0.005		0.005
13	Parkway to Dawn / Kirkwall	0.003		0.003
14	Kirkwall to Dawn	0.002		0.002
15	Parkway (TCPL / EGT) to Parkway (Cons) / Lisgar	0.002		0.002
	<u>Limited Firm/Interruptible</u> Monthly demand charges:			
16	Maximum	8.165	0.753	8.918
	Commodity charges :			
17	Others	Note (2)		Note (2)
40	Authorized Overrun Transportation commodity charges: Easterly:	Note (0)		N-4 (O)
18	Dawn to Kirkwall - Union supplied fuel	Note (2)		Note (2)
19 20	Dawn to Parkway - Union supplied fuel Kirkwall to Parkway - Union supplied fuel	Note (2) Note (2)		Note (2) Note (2)
21	Dawn to Kirkwall - Shipper supplied fuel	0.094	(2) 0.010	0.104 (2)
22	Dawn to Parkway - Shipper supplied fuel	0.112	(2) 0.010	0.122 (2)
23	Kirkwall to Parkway - Shipper supplied fuel	0.018	(2)	0.018 (2)
	M12-X Firm Transportation		( )	,
24	Between Dawn, Kirkwall and Parkway - Union supplied fuel	Note (2)		Note (2)
25	Between Dawn, Kirkwall and Parkway - Shipper supplied fuel:	0.139	(2) 0.012	0.151 (2)
	M13 Transportation of Locally Produced Gas			
26	Monthly fixed charge per customer station	\$952.72	4.860	\$957.58
27	Transmission commodity charge to Dawn	0.035		0.035
28	Commodity charge - Union supplied fuel	0.006		0.006
29	Commodity charge - Shipper supplied fuel	Note (3)		Note (3)
30	Cap-and-Trade Facility-Related Charge	0.002		0.002
24	Authorized Overrup Union cumplied fire!	0.074	0.070	0.444
31 32	Authorized Overrun - Union supplied fuel Authorized Overrun - Shipper supplied fuel	0.074 0.069	0.070 (3) 0.070	0.144 0.139 (3)
32	Authorized Overruit - Shipper Supplied fuel	0.069	(3) 0.070	0.139 (3)

- (1) Approved rates presentation adjusted to separate the cap-and-trade charges which were previously embedded in transportation rates.
  (2) Monthly fuel rates and fuel and commodity ratios per Schedule "C".
  (3) Plus shipper supplied fuel per rate schedule.

# <u>UNION GAS LIMITED</u> <u>Summary of Changes to Storage and Transportation Rates</u>

Line No.	Particulars (\$/GJ)	EB-2017-0278	_	Rate Change (b)	EB-2017-0087 Proposed January 1, 2018 Rate (c)
	M16 Storage Transportation Service	(α)		(5)	(6)
1	Monthly fixed charge per customer station	\$1,515.67		7.730	\$1,523.40
2	Monthly demand charges: East of Dawn	0.770		0.004	0.774
3	West of Dawn	1.045		2.110	3.155
4	Transmission commodity charge to Dawn	0.035			0.035
	Transportation Fuel Charges to Dawn:				
5	East of Dawn - Union supplied fuel	0.006			0.006
6	West of Dawn - Union supplied fuel	0.006			0.006
7 8	East of Dawn - Shipper supplied fuel West of Dawn - Shipper supplied fuel	Note (2) Note (2)			Note (2) Note (2)
		(-)			(-/
	Transportation Fuel Charges to Pools:			(0.004)	
9	East of Dawn - Union supplied fuel	0.007		(0.001)	0.006
10 11	West of Dawn - Union supplied fuel East of Dawn - Shipper supplied fuel	0.016 Note (2)			0.016 Note (2)
12	West of Dawn - Shipper supplied fuel	Note (2)			Note (2)
		, ,			
13	Cap-and-Trade Facility-Related Charges to Dawn: East of Dawn - All Shippers	0.002			0.002
14	West of Dawn - All Shippers	0.002			0.002
	Trocker Built 7 iii Grippers	0.002			0.002
	Cap-and-Trade Facility-Related Charges to Pool:				
15	East of Dawn - All Shippers	0.002			0.002
16	West of Dawn - All Shippers	0.005			0.005
	Authorized Overrun				
	Transportation Fuel Charges to Dawn:				
17	East of Dawn - Union supplied fuel	0.065		0.001	0.066
18 19	West of Dawn - Union supplied fuel East of Dawn - Shipper supplied fuel	0.074 0.060	(2)	0.070	0.144 0.060 (2)
20	West of Dawn - Shipper supplied fuel	0.069	(2) (2)	0.070	0.139 (2)
_0	Transportation Fuel Charges to Pools:	0.000	(-)	0.070	3.133 (2)
21	East of Dawn - Union supplied fuel	0.032			0.032
22	West of Dawn - Union supplied fuel	0.050		0.070	0.120
23 24	East of Dawn - Shipper supplied fuel West of Dawn - Shipper supplied fuel	0.025 0.034	(2) (2)	0.070	0.025 (2) 0.104 (2)
24	West of Dawn - Shipper supplied fuel	0.034	(2)	0.070	0.104 (2)
	C1 - Cross Franchise Transportation Service				
	<u>Transportation service</u>				
25	Monthly demand charges: St. Clair / Bluewater & Dawn	1.045		2.110	3.155
26 26	Ojibway & Dawn	1.045		2.110	3.155
27	Parkway to Dawn	0.837		0.037	0.874
28	Parkway to Kirkwall	0.837		0.037	0.874
29	Kirkwall to Dawn	1.475		0.067	1.542
30	Dawn to Kirkwall	2.865		0.289	3.154
31 32	Dawn to Parkway Kirkwall to Parkway	3.402 0.537		0.314 0.024	3.716 0.561
32 33	Dawn to Dawn-Vector	0.029		0.024	0.030
34	Dawn to Dawn-TCPL	0.138		0.001	0.139
	Commodity charges:				
35	St. Clair / Bluewater & Dawn - Union supplied fuel (Nov. 1 - Mar. 31)	0.009			0.009
36	St. Clair / Bluewater & Dawn - Union supplied fuel (Apr. 1 - Oct. 31)	0.007			0.007
37	Ojibway & Dawn - Union supplied fuel (Nov. 1 - Mar. 31)	0.011			0.011
38	Ojibway & Dawn - Union supplied fuel (Apr. 1 - Oct. 31)	0.016			0.016
39	Parkway to Kirkwall / Dawn - Union supplied fuel (Nov. 1 - Mar. 31)	0.006		0.004	0.006
40 41	Parkway to Kirkwall / Dawn - Union supplied fuel (Apr. 1 - Oct. 31) Kirkwall to Dawn - Union supplied fuel (Nov. 1 - Mar. 31)	0.010 0.006		0.001	0.011 0.006
41 42	Kirkwall to Dawn - Union supplied fuel (Nov. 1 - Mar. 31)  Kirkwall to Dawn - Union supplied fuel (Apr. 1 - Oct. 31)	0.006			0.006
43	Dawn to Kirkwall - Union supplied fuel (Nov. 1 - Mar. 31)	0.000			0.000
44	Dawn to Kirkwall - Union supplied fuel (Apr. 1 - Oct. 31)	0.011			0.011
45	Dawn to Parkway - Union supplied fuel (Nov. 1 - Mar. 31)	0.036		0.001	0.037
46	Dawn to Parkway - Union supplied fuel (Apr. 1 - Oct.31)	0.020		0.001	0.021
47 48	Kirkwall to Parkway - Union supplied fuel (Nov. 1 - Mar. 31)	0.015 0.015			0.015 0.015
40	Kirkwall to Parkway - Union supplied fuel (Apr. 1 - Oct.31)	0.015			0.015

### Notes:

<sup>(1)</sup> Approved rates presentation adjusted to separate the cap-and-trade charges which were previously embedded in transportation rates.(2) Plus shipper supplied fuel per rate schedule.

## <u>UNION GAS LIMITED</u> <u>Summary of Changes to Storage and Transportation Rates</u>

Line		EB-2017-0278 Approved October 1, 2017	Rate	EB-2017-0087 Proposed January 1, 2018
No.	Particulars (\$/GJ)	Rate (1)	<u>Change</u>	Rate
	C1 - Cross Franchise Transportation Service	(a)	(b)	(c)
	Transportation service cont'd			
1	St. Clair / Bluewater & Dawn - Shipper supplied fuel (Nov. 1 - Mar. 31)	Note (2)		Note (2)
2	St. Clair / Bluewater & Dawn - Shipper supplied fuel (Apr. 1 - Oct. 31)	Note (2)		Note (2)
3 4	Ojibway & Dawn - Shipper supplied fuel (Nov. 1 - Mar. 31) Ojibway & Dawn - Shipper supplied fuel (Apr. 1 - Oct. 31)	Note (2) Note (2)		Note (2) Note (2)
5	Parkway to Kirkwall / Dawn - Shipper supplied fuel (Nov. 1 - Mar. 31)	Note (2)		Note (2)
6	Parkway to Kirkwall / Dawn - Shipper supplied fuel (Apr. 1 - Oct. 31)	Note (2)		Note (2)
7	Kirkwall to Dawn - Shipper supplied fuel (Nov. 1 - Mar. 31)	Note (2)		Note (2)
8	Kirkwall to Dawn - Shipper supplied fuel (Apr. 1 - Oct. 31)	Note (2)		Note (2)
9 10	Dawn to Kirkwall - Shipper supplied fuel (Nov. 1 - Mar. 31) Dawn to Kirkwall - Shipper supplied fuel (Apr. 1 - Oct. 31)	Note (2) Note (2)		Note (2) Note (2)
11	Dawn to Parkway - Shipper supplied fuel (Nov. 1 - Mar. 31)	Note (2)		Note (2)
12	Dawn to Parkway - Shipper supplied fuel (Apr. 1 - Oct.31)	Note (2)		Note (2)
13	Kirkwall to Parkway - Shipper supplied fuel (Nov. 1 - Mar. 31)	Note (2)		Note (2)
14	Kirkwall to Parkway - Shipper supplied fuel (Apr. 1 - Oct.31)	Note (2)		Note (2)
15 16	Dawn to Dawn-Vector - Shipper supplied fuel (Nov. 1 - Mar. 31)	Note (2)		Note (2)
16 17	Dawn to Dawn-Vector - Shipper supplied fuel (Apr. 1 - Oct . 31)  Dawn to Dawn-TCPL - Shipper supplied fuel (Nov. 1 - Mar. 31)	Note (2) Note (2)		Note (2) Note (2)
18	Dawn to Dawn-TCPL - Shipper supplied fuel (Apr. 1 - Oct . 31)	Note (2)		Note (2)
19	Dawn(Tecumseh), Dawn(Facilities or TCPL), Dawn (Vector) and Dawn (TSLE)	Note (2)		Note (2)
20	Interruptible and Short Term (1 year or less) Firm Transportation:	75.00		75.00
20	Maximum	75.00		75.00
	Cap-and-Trade Facility-Related Charges:			
21	St. Clair / Bluewater & Dawn	0.004		0.004
22	Ojibway & Dawn	0.004		0.004
23 24	Parkway to Dawn	0.003 0.003		0.003
24 25	Parkway to Kirkwall Kirkwall to Dawn	0.003		0.003 0.002
26	Dawn to Kirkwall / Parkway (Cons) / Lisgar	0.006		0.006
27	Dawn to Parkway (TCPL)	0.009		0.009
28	Kirkwall to Parkway (Cons) / Lisgar	0.002		0.002
29	Kirkwall to Parkway (TCPL)	0.005		0.005
30 31	Dawn to Dawn-Vector Dawn to Dawn-TCPL	0.003 0.004		0.003 0.004
	Authorized Overrun			
	Firm transportation commodity charges:			
32	St. Clair / Bluewater & Dawn - Union supplied fuel (Nov. 1 - Mar. 31)	0.044	0.069	0.113
33 34	St. Clair / Bluewater & Dawn - Union supplied fuel (Apr. 1 - Oct. 31)	0.042 0.045	0.069 0.070	0.111 0.115
3 <del>4</del> 35	Ojibway & Dawn - Union supplied fuel (Nov. 1 - Mar. 31) Ojibway & Dawn - Union supplied fuel (Apr. 1 - Oct. 31)	0.045	0.070	0.115
36	Parkway to Kirkwall / Dawn - Union supplied fuel (Nov. 1 - Mar. 31)	0.139	0.011	0.150
37	Parkway to Kirkwall / Dawn - Union supplied fuel (Apr. 1 - Oct. 31)	0.144	0.011	0.155
38	Kirkwall to Dawn - Union supplied fuel (Nov. 1 - Mar. 31)	0.054	0.024	0.078
39 40	Kirkwall to Dawn - Union supplied fuel (Apr. 1 - Oct. 31)	0.054 0.143	0.024 0.010	0.078 0.153
40 41	Dawn to Kirkwall - Union supplied fuel (Nov. 1 - Mar. 31) Dawn to Kirkwall - Union supplied fuel (Apr. 1 - Oct. 31)	0.143	0.010	0.133
42	Dawn to Parkway - Union supplied fuel (Nov. 1 - Mar. 31)	0.170	0.011	0.181
43	Dawn to Parkway - Union supplied fuel (Apr. 1 - Oct.31)	0.154	0.011	0.165
44	Kirkwall to Parkway - Union supplied fuel (Nov. 1 - Mar. 31)	0.055	0.001	0.056
45 46	Kirkwall to Parkway - Union supplied fuel (Apr. 1 - Oct.31)	0.054	0.001	0.055
46 47	St. Clair / Bluewater & Dawn - Shipper supplied fuel (Nov. 1 - Mar. 31) St. Clair / Bluewater & Dawn - Shipper supplied fuel (Apr. 1 - Oct. 31)	0.034 0.034	(2) 0.070 (2) 0.070	0.104 (2) 0.104 (2)
48	Ojibway & Dawn - Shipper supplied fuel (Nov. 1 - Mar. 31)	0.034	(2) 0.070	0.104 (2)
49	Ojibway & Dawn - Shipper supplied fuel (Apr. 1 - Oct. 31)	0.034	(2) 0.070	0.104 (2)
50	Parkway to Kirkwall / Dawn - Shipper supplied fuel (Nov. 1 - Mar. 31)	0.112	(2) 0.010	0.122 (2)
51 50	Parkway to Kirkwall / Dawn - Shipper supplied fuel (Apr. 1 - Oct. 31)	0.112	(2) 0.010	0.122 (2)
52 53	Kirkwall to Dawn - Shipper supplied fuel (Nov. 1 - Mar. 31) Kirkwall to Dawn - Shipper supplied fuel (Apr. 1 - Oct. 31)	0.049 0.049	(2) 0.002 (2) 0.002	0.051 (2) 0.051 (2)
54	Dawn to Kirkwall - Shipper supplied fuel (Nov. 1 - Mar. 31)	0.049	(2) 0.002	0.104 (2)
55	Dawn to Kirkwall - Shipper supplied fuel (Apr. 1 - Oct. 31)	0.094	(2) 0.010	0.104 (2)
56	Dawn to Parkway - Shipper supplied fuel (Nov. 1 - Mar. 31)	0.112	(2) 0.010	0.122 (2)
57	Dawn to Parkway - Shipper supplied fuel (Apr. 1 - Oct.31)	0.112	(2) 0.010	0.122 (2)
58 59	Kirkwall to Parkway - Shipper supplied fuel (Nov. 1 - Mar. 31) Kirkwall to Parkway - Shipper supplied fuel (Apr. 1 - Oct.31)	0.018 0.018	(2) (2)	0.018 (2) 0.018 (2)
60	Dawn to Dawn-Vector - Shipper supplied fuel (Nov. 1 - Mar. 31)	0.018	(2)	0.018 (2)
61	Dawn to Dawn-Vector - Shipper supplied fuel (Apr. 1 - Oct . 31)	0.001	(2)	0.001 (2)
62	Dawn to Dawn-TCPL - Shipper supplied fuel (Nov. 1 - Mar. 31)	0.005	(2)	0.005 (2)
63	Dawn to Dawn-TCPL - Shipper supplied fuel (Apr. 1 - Oct . 31)	0.005	(2)	0.005 (2)

- Notes:

  (1) Approved rates presentation adjusted to separate the cap-and-trade charges which were previously embedded in transportation rates.

  (2) Plus shipper supplied fuel per rate schedule.

## Appendix B



Effective 2018-01-01 **Rate 01A** Page 1 of 2

## RATE 01A - SMALL VOLUME GENERAL FIRM SERVICE

#### **ELIGIBILITY**

Any customer in Union's North West and North East Zones who is an end user whose total gas requirements at that location are equal to or less than 50,000 m<sup>3</sup> per year.

#### **SERVICES AVAILABLE**

The following services are available under this rate schedule:

## (a) Sales Service

For continuous supply of natural gas by Union and associated transportation and storage services necessary to ensure deliverability in accordance with the customer's needs. For this service, the Monthly, Delivery and Gas Supply Charges shall apply.

## (b) Transportation Service

For continuous delivery on Union's distribution system from the Point of Receipt on TransCanada's system to the Point of Consumption on the customer's premises of natural gas owned by the customer and transported by TransCanada under a firm transportation service tariff or equivalent National Energy Board Order. For this service, the Monthly and Delivery Charges shall apply. Unless otherwise authorized by Union, customers who initiate a movement to Transportation Service from a Sales Service or Bundled Transportation Service must accept an assignment from Union of transportation capacity on upstream pipeline systems.

Transportation Service customers in the Union North East Zone may contract with Union for transportation service from Dawn to the customer's delivery area. The charges for the transportation service will consist of the Rate C1 Dawn-Parkway firm transportation rate and applicable fuel charges, in accordance with Union's Rate C1 rate schedule, and all applicable third party (i.e. TransCanada) transportation charges on upstream pipelines from Parkway to the customer's delivery area.

## (c) Bundled Transportation Service

For continuous delivery by Union of gas owned by the customer and for the associated transportation and storage services necessary to ensure deliverability in accordance with the customer's needs. For this service the Monthly, and Delivery Charges, as well as the Storage and Transportation Charges of the Gas Supply Charge shall apply.

## MONTHLY RATES AND CHARGES

APPLICABLE TO ALL SERVICES	Union <u>North West</u>	Union <u>North East</u>	
MONTHLY CHARGE	\$21.00	\$21.00	
DELIVERY CHARGE	¢ per m³	¢ per m³	
First 100 m <sup>3</sup> per month @	9.3853	9.3853	
Next 200 m <sup>3</sup> per month @	9.1457	9.1457	
Next 200 m <sup>3</sup> per month @	8.7665	8.7665	
Next 500 m <sup>3</sup> per month @	8.4185	8.4185	
Over 1,000 m <sup>3</sup> per month @	8.1310	8.1310	
Delivery-Price Adjustment (All Volumes) (1)	1.2219	1.2219	
<u>CAP-AND-TRADE CHARGES (in addition to Delivery Charge)</u> Cap-and-Trade Customer-Related Charge (if applicable)	3.3181	3.3181	
Cap-and-Trade Facility-Related Charge	0.0509	0.0509	
			•

## Notes:

(1) Includes a temporary charge of 1.2219 cents/m<sup>3</sup> expiring March 31, 2018.



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## ADDITIONAL CHARGES FOR SALES SERVICE

#### GAS SUPPLY CHARGES

Gas Supply Charge (if applicable)

The gas supply charge is comprised of charges for transportation and for commodity and fuel. The applicable rates are provided in Schedule "A".

SYSTEM EXPANSION SURCHARGE ("SES") (if applicable)

The system expansion surcharge is applied to all volumes consumed for a defined term and is applicable to customers within the following approved community expansion project areas:

<u>Community Expansion Project</u> Prince Township SES Rate (¢ per m³) 23.0000 SES Term Expiry
December 31, 2039

## **MONTHLY BILL**

The monthly bill will equal the sum of the monthly charges plus the rates multiplied by the applicable gas quantities delivered plus all applicable taxes. If the customer transports its own gas, the Gas Supply Charge under Sales Service will not apply.

#### MINIMUM MONTHLY BILL

The Minimum Monthly Bill shall be the Monthly Charge.

#### **DELAYED PAYMENT**

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

## **SERVICE AGREEMENT**

Customers providing their own gas supply in whole or in part, for transportation by Union, must enter into a Service Agreement with Union.

## TERMS AND CONDITIONS OF SERVICE

- 1. If multiple end-users are receiving service from a customer under this rate, for billing purposes, the Monthly Charge, the Delivery Charge and any other charge that is specific to the location of each end-user shall be used to develop a monthly bill for each end-user at each location. Upon request, possibly for a fee, Union will combine the individual bills on a single invoice or statement for administrative convenience. However, Union will not combine the quantities or demands of several end-use locations so that eligibility to a different rate class will result. Further, Union will not combine the monthly billing data of individual end-users to generate a single bill which is less than the sum of the monthly bills of the individual end-users involved at each location.
- 2. Customers must enter into a Service Agreement with Union prior to the commencement of service.
- 3. The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multiyear prices may also be negotiated, which may be higher than the identified rates.

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#### RATE 10 - LARGE VOLUME GENERAL FIRM SERVICE

#### **ELIGIBILITY**

Any customer in Union's North West and North East Zones who is an end-user whose total firm gas requirements at one or more Company-owned meters at one location exceed 50,000 m<sup>3</sup> per year.

#### **SERVICES AVAILABLE**

The following services are available under this rate schedule:

#### (a) Sales Service

For continuous supply of natural gas by Union and associated transportation and storage services necessary to ensure deliverability in accordance with the customer's needs. For this service, the Monthly, Delivery and Gas Supply Charges shall apply.

## (b) Transportation Service

For continuous delivery on Union's distribution system from the Point of Receipt on TransCanada's system to the Point of Consumption on the customer's premises of natural gas owned by the customer and transported by TransCanada under a firm transportation service tariff or equivalent National Energy Board Order. For this service, the Monthly, and Delivery Charges shall apply. Unless otherwise authorized by Union, customers who initiate a movement to Transportation Service from a Sales Service or Bundled Transportation Service must accept an assignment from Union of transportation capacity on upstream pipeline systems. Customers may reduce their assignment of transportation capacity in compliance with Union's Turnback Policy.

Transportation Service customers in the Union North East Zone may contract with Union for transportation service from Dawn to the customer's delivery area. The charges for the transportation service will consist of the Rate C1 Dawn-Parkway firm transportation rate and applicable fuel charges, in accordance with Union's Rate C1 rate schedule, and all applicable third party (i.e. TransCanada) transportation charges on upstream pipelines from Parkway to the customer's delivery area.

## (c) Bundled Transportation Service

For continuous delivery by Union of gas owned by the customer and for the associated transportation and storage services necessary to ensure deliverability in accordance with the customer's needs. For this service the Monthly, and Delivery Charges, as well as the Storage and Transportation Charges of the Gas Supply Charge shall apply.

## MONTHLY RATES AND CHARGES

APPLICABLE TO ALL SERVICES	Union <u>North West</u>	Union <u>North East</u>	
MONTHLY CHARGE	\$70.00	\$70.00	
DELIVERY CHARGE	¢ per m <sup>3</sup>	¢ per m³	
First 1,000 m <sup>3</sup> per month @	7.9109	7.9109	
Next 9,000 m <sup>3</sup> per month @	6.4258	6.4258	
Next 20,000 m <sup>3</sup> per month @	5.7562	5.7562	
Next 70,000 m <sup>3</sup> per month @	5.1971	5.1971	
Over 100,000 m <sup>3</sup> per month @	3.0790	3.0790	
Delivery-Price Adjustment (All Volumes) (1)	1.0857	1.0857	
CAP-AND-TRADE CHARGES (in addition to Delivery Charge) Cap-and-Trade Customer-Related Charge (if applicable) Cap-and-Trade Facility-Related Charge	3.3181 0.0378	3.3181 0.0378	

## Notes:

(1) Includes a temporary charge of 1.0857 cents/m³ expiring March 31, 2018.



Effective 2018-01-01 **Rate 10** Page 2 of 2

## ADDITIONAL CHARGES FOR SALES SERVICE

#### GAS SUPPLY CHARGES

Gas Supply Charge (if applicable)

The gas supply charge is comprised of charges for transportation and for commodity and fuel. The applicable rates are provided in Schedule "A".

SYSTEM EXPANSION SURCHARGE ("SES") (if applicable)

The system expansion surcharge is applied to all volumes consumed for a defined term and is applicable to customers within the following approved community expansion project areas:

<u>Community Expansion Project</u> Prince Township SES Rate (¢ per m³) 23.0000 SES Term Expiry
December 31, 2039

#### MONTHLY BILL

The monthly bill will equal the sum of the monthly charges plus the rates multiplied by the applicable gas quantities delivered plus all applicable taxes. If the customer transports its own gas, the Gas Supply Charge under Sales Service will not apply.

## MINIMUM MONTHLY BILL

The Minimum Monthly Bill shall be the Monthly Charge.

#### **DELAYED PAYMENT**

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

## **SERVICE AGREEMENT**

Customers providing their own gas supply in whole or in part, for transportation by Union and customers purchasing gas from Union with maximum daily requirements in excess of 3,000 m<sup>3</sup> per day must enter into a Service Agreement with Union.

## TERMS AND CONDITIONS OF SERVICE

- 1. Service shall be for a minimum term of one year.
- 2. If multiple end-users are receiving service from a customer under this rate, for billing purposes, the Monthly Charge, the Delivery Charge and any other charge that is specific to the location of each end-user shall be used to develop a monthly bill for each end-user at each location. Upon request, possibly for a fee, Union will combine the individual bills on a single invoice or statement for administrative convenience. However, Union will not combine the quantities or demands of several end-use locations so that eligibility to a different rate class will result. Further, Union will not combine the monthly billing data of individual end-users to generate a single bill which is less than the sum of the monthly bills of the individual end-users involved at each location.
- 3. Customers must enter into a Service Agreement with Union prior to the commencement of service.
- 4. For the purposes of qualifying for a rate class, the total quantities of gas consumed or expected to be consumed on the customer's contiguous property will be used, irrespective of the number of meters installed.
- 5. The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated, which may be higher than the identified rates.

Effective January 1, 2018

O.E.B. Order # EB-2017-0087

Chatham, Ontario



Effective 2018-01-01 **Rate 20** Page 1 of 4

#### RATE 20 - MEDIUM VOLUME FIRM SERVICE

#### **ELIGIBILITY**

Any customer in Union's North West and North East Zones who is an end-user or who is authorized to serve an end-user of gas through one or more Company-owned meters at one location, and whose total maximum daily requirements for firm or combined firm and interruptible service is 14,000 m<sup>3</sup> or more.

#### SERVICES AVAILABLE

The following services are available under this rate schedule:

#### (a) Sales Service

For continuous supply of natural gas by Union and associated transportation and storage services necessary to ensure deliverability in accordance with the customer's needs. For this service, the Monthly, Delivery and Gas Supply Charges shall apply.

## (b) Transportation Service

For continuous delivery on Union's distribution system from the Point of Receipt on TransCanada's system to the Point of Consumption on the customer's premises of natural gas owned by the customer. The customer is responsible for obtaining the requisite regulatory approvals for the supply and transmission of such gas to Union's distribution system. For this service, the Monthly, Delivery, Transportation Account and Diversion Transaction Charges shall apply. Unless otherwise authorized by Union, customers who initiate a movement to Transportation Service from a Sales Service or Bundled Transportation Service must accept an assignment from Union of transportation capacity on upstream pipeline systems. Customers may reduce their assignment of transportation capacity in compliance with Union's Turnback Policy.

Transportation Service customers in the Union North East Zone may contract with Union for transportation service from Dawn to the customer's delivery area. The charges for the transportation service will consist of the Rate C1 Dawn-Parkway firm transportation rate and applicable fuel charges, in accordance with Union's Rate C1 rate schedule, and all applicable third party (i.e. TransCanada) transportation charges on upstream pipelines from Parkway to the customer's delivery area.

## (c) Bundled Transportation Service

For continuous delivery by Union of gas owned by the customer and for the associated transportation and storage services necessary to ensure deliverability in accordance with the customer's needs. For this service the Monthly, Delivery, Gas Supply Demand and Commodity Transportation Charges shall apply.

## (d) Storage Service

For load balancing purposes for customers using Transportation Service on this rate schedule. If at the sole discretion of Union, adequate supplies exist, bundled and unbundled storage and delivery/redelivery services will be provided.

The charge for Bundled Storage Service will consist of the charges for Transportation Service plus the charges for Bundled Storage Service.

Note: Union has a short-term intermittent gas supply service under Rate 30 of which customers may avail themselves, if they qualify for use of the service.



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#### MONTHLY RATES AND CHARGES

## APPLICABLE TO ALL SERVICES - ALL ZONES (1)

MONTHLY CHARGE	\$859.96	
DELIVERY CHARGES (cents per month per m³)		
Monthly Demand Charge for first 70,000 m <sup>3</sup> of Contracted Daily Demand	28.6438	
Monthly Demand Charge for all units over 70,000 m <sup>3</sup> of Contracted Daily Demand	16.8440	
Commodity Charge for first 852,000 m <sup>3</sup> of gas volumes delivered	0.5406	Ì
Commodity Charge for all units over 852,000 m <sup>3</sup> of gas volumes delivered	0.3865	
CAP-AND-TRADE CHARGES (in addition to Delivery Charges)		l
Cap-and-Trade Customer-Related Charge (if applicable)	3.3181	
Cap-and-Trade Facility-Related Charge	0.0082	l

## Notes:

(1) Either the utility or a customer, or potential customer, may apply to the Ontario Energy Board to fix rates, charges and terms and conditions applicable thereto, different from the rates, charges and terms and conditions specified herein if changed rates, charges and terms and conditions are considered by either party to be necessary, desirable and in the public interest.

## **ADDITIONAL CHARGES FOR SALES SERVICE**

## Gas Supply Charge

The gas supply charge is comprised of charges for transportation and for commodity and fuel. The applicable rates are provided in Schedule "A".

## **Commodity Transportation**

Charge 1 applies for all gas volumes delivered in the billing month up to the volume represented by the Contract Demand multiplied by the number of days in the billing month multiplied by 0.4.

Charge 2 applies for all additional gas volumes delivered in the billing month.

## **HEAT CONTENT ADJUSTMENT**

The gas supply commodity charges hereunder will be adjusted upwards or downwards as described below if the average total heating value of the gas per cubic metre (m³) determined in accordance with Union's Terms and Conditions in any month falls above or below 37.89 MJ per m³, respectively.

The adjustment shall be determined by multiplying the amount otherwise payable by a fraction, where the numerator is the monthly weighted average total heating value per cubic meter and the denominator 37.89.



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\$0.884

#### COMMISSIONING AND DECOMMISSIONING RATE

The contract may provide that the Monthly Demand Charges specified above shall not apply on all or part of the daily contracted demand used by the customer either during the testing, commissioning and phasing in of gas using equipment or, alternatively, in the decommissioning and phasing out of gas using equipment being displaced by other gas using equipment, for a period not to exceed one year ("the transition period"). To be eligible the new or displaced gas using equipment must be separately meterable. In such event, the contract will provide the following rates that such volume during the transitional period will be charged.

	Union <u>North West</u>	Union <u>North East</u>
MONTHLY CHARGE	\$859.96	\$859.96
DELIVERY CHARGES Commodity Charge for each unit	cents per m <sup>3</sup>	cents per m <sup>3</sup>
of gas volumes delivered	2.4240	2.4240
CAP-AND-TRADE CHARGES (in addition to Delivery Charges) Cap-and-Trade Customer-Related Charge (if applicable) Cap-and-Trade Facility-Related Charge	3.3181 0.0082	3.3181 0.0082

## **GAS SUPPLY CHARGES**

The gas supply charge is comprised of charges for transportation and for commodity and fuel.

The applicable rates are provided in Schedule "A".

## ADDITIONAL CHARGES FOR TRANSPORTATION AND STORAGE SERVICES – ALL ZONES

For customers that currently have installed or will require installing telemetering equipment \$226.76

## BUNDLED (T-SERVICE) STORAGE SERVICE CHARGES

Monthly Demand Charge for each unit of Contracted Daily Storage Withdrawal Entitlement (\$/GJ/Month) \$20.568

Monthly Storage Demand- Price Adjustment for each unit of Contracted Daily Storage Withdrawal Entitlement: (\$/GJ/Month) 
Commodity Charge for each unit of gas withdrawn from storage (\$/GJ) \$0.208

The Authorized Overrun Commodity Charge is payable on all quantities on any Day in excess of the customer's contractual rights, for which authorization has been received. Overrun will be authorized by Union at its sole discretion.

Authorized Overrun Commodity Charge on each additional unit of gas Union authorizes for withdrawal from storage (\$/GJ)

## **DIVERSION TRANSACTION CHARGE**

Charge to a customer Receiving Delivery of diverted gas each time such customer requests a diversion and Union provides the service:

\$10.00



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#### THE BILL

The bill will equal the sum of the charges for all services selected plus the rates multiplied by the applicable gas quantities delivered or withdrawn for each service chosen plus all applicable taxes. If the customer transports its own gas, the Gas Supply Charge under Sales Service will not apply. If the customer selects Union's Sales Service which includes the Gas Supply Charge, <u>no</u> additional charges for Transportation and Storage Services will apply.

#### MINIMUM BILL

The minimum bill shall be the Monthly Charge, the Transportation Account Charge and the Demand Charges, as applicable.

## **DELAYED PAYMENT**

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

### **SERVICE AGREEMENT**

All customers must enter into a Service Agreement with Union before receiving service under this rate schedule.

#### TERMS AND CONDITIONS OF SERVICE

- 1. Service shall be for a minimum term of one year.
- 2. If multiple end-users are receiving service from a customer under this rate, for billing purposes, the Monthly Charge, the Delivery Charge, the Transportation Account Charge and any other charge that is specific to the location of each end-user shall be used to develop a monthly bill for each end-user at each location. Upon request, possibly for a fee, Union will combine the individual bills on a single invoice or statement for administrative convenience. However, Union will not combine the quantities or demands of several end-use locations so that eligibility to a different rate class will result. Further, Union will not combine the billing data of individual end-users to generate a single bill which is less than the sum of the bills of the individual end-users involved at each location.
- 3. Customers must enter into a Service Agreement with Union prior to the commencement of service.
- 4. For the purposes of qualifying for a rate class, the total quantities of gas consumed or expected to be consumed on the customer's contiguous property will be used, irrespective of the number of meters installed.
- 5. The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated, which may be higher than the identified rates.

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## RATE 25 - LARGE VOLUME INTERRUPTIBLE SERVICE

#### **ELIGIBILITY**

Any customer in Union's North West and North East Zones who is an end-user or who is authorized to serve an end-user of gas through one or more Company-owned meters at one location, and whose total maximum daily interruptible requirement is 3,000 m³ or more or the interruptible portion of a maximum daily requirement for combined firm and interruptible service is 14,000 m³ or more and whose operations, in the judgement of Union, can readily accept interruption and restoration of gas service.

## **SERVICES AVAILABLE**

The following services are available under this rate schedule:

## (a) Sales Service

For interruptible supply of natural gas by Union and associated transportation services necessary to ensure its delivery in accordance with customer's needs. For this service, the Monthly, Delivery and Gas Supply Charges shall apply.

## (b) Transportation Service

For delivery of natural gas owned by the customer on Union's distribution system from the Point of Receipt from TransCanada's system to the Point of Consumption on the customer's or end-user's premises, providing that, in the judgement of Union, acting reasonably, the customer-owned gas does not displace service from Union under a Rate 20 or Rate 100 contract specific to that location. The customer is responsible for obtaining the requisite regulatory approvals for the supply and transmission of such gas to Union's distribution system. For this service, the Monthly, Delivery, Transportation Account and Diversion Transaction Charges shall apply.

Transportation Service customers in the Union North East Zone may contract with Union for transportation service from Dawn to the customer's delivery area. The charges for the transportation service will consist of the Rate C1 Dawn-Parkway firm transportation rate and applicable fuel charges, in accordance with Union's Rate C1 rate schedule, and all applicable third party (i.e. TransCanada) transportation charges on upstream pipelines from Parkway to the customer's delivery area.

NOTE: Union has a short-term intermittent gas supply service under Rate 30 which customers may avail themselves of, if they qualify for use of the service.

## MONTHLY RATES AND CHARGES

## APPLICABLE TO ALL SERVICES - ALL ZONES (1)

MONTHLY CHARGE	\$289.36	
<u>DELIVERY CHARGES</u> A Delivery Price for all volumes delivered to the customer to be negotiated between Union and the customer and the	cents per m <sup>3</sup>	
average price during the period in which these rates remain in effect shall not exceed:	5.2538	
CAP-AND-TRADE CHARGES (in addition to Delivery Charges) Cap-and-Trade Customer-Related Charge (if applicable) Cap-and-Trade Facility-Related Charge	3.3181 0.0017	
<u>UNAUTHORIZED OVERRUN NON - COMPLIANCE RATE</u> Unauthorized overrun gas taken any month during a period when a notice of interruption is in effect.	cents per m <sup>3</sup> 233.7000	

## Notes:

(1) Either the utility or a customer, or potential customer, may apply to the Ontario Energy Board to fix rates, charges and terms and conditions applicable thereto, different from the rates, charges and terms and conditions specified herein if changed rates, charges and terms and conditions are considered by either party to be necessary, desirable and in the public interest.



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## **ADDITIONAL CHARGES FOR SALES SERVICE**

#### Gas Supply Charge

As per applicable rate provided in Schedule "A".

## Interruptible Service

Applicable all year at a price agreed upon between Union and the customer and the average price during the period in which these rates remain in effect.

#### **HEAT CONTENT ADJUSTMENT**

The gas supply commodity charges hereunder will be adjusted upwards or downwards as described below if the average total heating value of the gas per cubic metre (m³) determined in accordance with Union's Terms and Conditions in any month falls above or below 37.89 MJ per m³, respectively.

The adjustment shall be determined by multiplying the amount otherwise payable by a fraction, where the numerator is the monthly weighted average total heating value per cubic meter and the denominator 37.89.

## ADDITIONAL CHARGES FOR TRANSPORTATION - ALL ZONES

## MONTHLY TRANSPORTATION ACCOUNT CHARGE:

For customers that currently have installed or will require installing telemetering equipment.

\$226.76

#### THE BILL

The bill will equal the sum of the monthly charges for all services selected plus the rates multiplied by the applicable gas volumes delivered or withdrawn for each service chosen plus all applicable taxes. If the customer transports its own gas, the Gas Supply Charge under Sales Service will not apply. If the customer selects Union's Sales Service which includes the Gas Supply Charge, no additional charges for Transportation will apply.

## MINIMUM BILL

The minimum bill shall be the Monthly Charge and the Transportation Account Charge, if applicable.

## **DELAYED PAYMENT**

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

## **SERVICE AGREEMENT**

All customers must enter into a Service Agreement with Union before receiving service under this rate schedule.



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#### TERMS AND CONDITIONS OF SERVICE

- 1. Service shall be for a minimum term of one year.
- 2. If multiple end-users are receiving service from a customer under this rate, for billing purposes, the Monthly Charge, the Delivery Charge, the Transportation Account Charge and any other charge that is specific to the location of each end-user shall be used to develop a monthly bill for each end-user at each location. Upon request, Union will combine the individual bills on a single invoice or statement for administrative convenience. However, Union will not combine the volumes or demands of several end-use locations so that eligibility to a different rate class will result. Further, Union will not combine the monthly billing data of individual end-users to generate a single bill which is less than the sum of the monthly bills of the individual end-users involved at each location.
- 3. Customers must enter into a Service Agreement with Union prior to the commencement of service.
- 4. For the purposes of qualifying for a rate class, the total volumes of gas consumed or expected to be consumed on the customer's contiguous property will be used, irrespective of the number of meters installed.
- 5. The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated, which may be higher than the identified rates.

Effective January 1, 2018

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## RATE 30 - INTERMITTENT GAS SUPPLY SERVICE AND SHORT TERM STORAGE / BALANCING SERVICE

#### **ELIGIBILITY**

Any customer in Union's North West and North East Zones already connected to Union's gas distribution system who is an end-user or is authorized to serve an end-user.

#### SERVICE AVAILABLE

For intermittent, short-term gas supply which will be a substitute for energy forms other than Company owned gas sold under other rate schedules. This may include situations where customer-owned gas supplies are inadequate and short-term backstopping service is requested or during a situation of curtailment on the basis of price when the purchase price of Spot gas is outside the interruptible service price range. The gas supply service available hereunder is offered only in conjunction with service to the customer under an applicable firm or interruptible service rate schedule of Union. The service is for intermittent gas supply and short term storage / balancing service and will be billed in combination with Monthly, Delivery, and other applicable charges for such services under the applicable rate schedule. Gas supply under this rate will be provided when, at the sole discretion of Union, adequate supplies are available.

### **GAS SUPPLY CHARGE**

The gas supply charge shall be \$5.00 per 10<sup>3</sup>m<sup>3</sup> plus the greater of the incremental cost of gas for Union and the customer's gas supply charge.

#### SHORT TERM STORAGE / BALANCING SERVICE

Short Term Storage / Balancing Service is:

- i) a combined space and interruptible deliverability service for short-term or off-peak storage in Union's storage facilities, OR
- ii) short-term firm deliverability, OR
- iii) a component of an operational balancing service offered.

In negotiating the rate to be charged for service, the matters that are to be considered include:

- i) the minimum amount of storage service to which a customer is willing to commit,
- ii) whether the customer is contracting for firm or interruptible service during Union's peak or non-peak periods,
- iii) utilization of facilities, and
- iv) competition.

A commodity charge to be negotiated between Union and the customer not to exceed \$6.000/GJ.

## THE BILL

The bill for gas supply and/or short term supplemental services under this rate shall be rendered in conjunction with the billing for delivery and other services under the customer's applicable rate for such services.

### **SERVICE AGREEMENT**

All customers must enter into a Service Agreement with Union for this service and must agree therein to curtail or interrupt use of gas under this rate schedule whenever requested to do so by Union.

## TERMS AND CONDITIONS OF SERVICE

- 1. Failure of the customer to interrupt or curtail use of gas on this rate as requested by Union shall be subject to the Unauthorized Overrun Gas Penalty as provided in Union's Terms and Conditions. Anytime the customer has such failure, Union reserves the right to cancel service under this rate.
- 2. The Terms and Conditions of the applicable rate schedule for delivery of the gas sold hereunder shall also apply.
- 3. The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated, which may be higher than the identified rates.

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### RATE 100 - LARGE VOLUME HIGH LOAD FACTOR FIRM SERVICE

#### **ELIGIBILITY**

Any customer in Union's North West and North East Zones who is an end-user or who is authorized to serve an end-user of gas through one or more Company-owned meters at one location, and whose maximum daily requirement for firm service is 100,000 m<sup>3</sup> or more, and whose annual requirement for firm service is equal to or greater than its maximum daily requirement multiplied by 256.

#### **SERVICES AVAILABLE**

The following services are available under this rate schedule:

## (a) Sales Service

For continuous supply of natural gas by Union and associated transportation and storage services necessary to ensure deliverability in accordance with the customer's needs. For this service, the Monthly, Delivery and Gas Supply Charges shall apply.

## (b) Transportation Service

For continuous delivery on Union's distribution system from the Point of Receipt on TransCanada's system to the Point of Consumption on the customer's premises of natural gas owned by the customer. The customer is responsible for obtaining the requisite regulatory approvals for the supply and transmission of such gas to Union's distribution system. For this service, the Monthly, Delivery, Transportation Account and Diversion Transaction Charges shall apply. Unless otherwise authorized by Union, customers who initiate a movement to Transportation Service from a Sales Service or Bundled Transportation Service must accept an assignment from Union of transportation capacity on upstream pipeline systems. Customers may reduce their assignment of transportation capacity in compliance with Union's Turnback Policy.

Transportation Service customers in the Union North East Zone may contract with Union for transportation service from Dawn to the customer's delivery area. The charges for the transportation service will consist of the Rate C1 Dawn-Parkway firm transportation rate and applicable fuel charges, in accordance with Union's Rate C1 rate schedule, and all applicable third party (i.e. TransCanada) transportation charges on upstream pipelines from Parkway to the customer's delivery area.

## (c) Bundled Transportation Service

For continuous delivery by Union of gas owned by the customer and for the associated transportation and storage services necessary to ensure deliverability in accordance with the customer's needs. For this service the Monthly, Delivery, Gas Supply Demand and Commodity Transportation Charges shall apply.

## (d) Storage Service

For load balancing purposes for customers using Transportation Service on this rate schedule. If at the sole discretion of Union, adequate supplies exist, bundled and unbundled storage and delivery/redelivery services will be provided.

The charge for Bundled Storage Service will consist of the charges for Transportation Service plus the charges for Bundled Storage Service.

<u>NOTE</u>: Union has a short-term intermittent gas supply service under Rate 30 which customers may avail themselves of, if they qualify for use of the service.



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### MONTHLY RATES AND CHARGES

## APPLICABLE TO ALL SERVICES - ALL ZONES (1)

MONTHLY CHARGE	\$1,340.55
<u>DELIVERY CHARGES</u> (cents per Month per m <sup>3</sup> of Daily Contract Demand) Monthly Demand Charge for each unit of Contracted Daily Demand	15.0839
Commodity Charge for each unit of gas volumes delivered (cents/m³)	0.2200
CAP-AND-TRADE CHARGES (in addition to Delivery Charges) Cap-and-Trade Customer-Related Charge (if applicable) Cap-and-Trade Facility-Related Charge	3.3181 0.0004

## Notes:

(1) Either the utility or a customer, or potential customer, may apply to the Ontario Energy Board to fix rates, charges and terms and conditions applicable thereto, different from the rates, charges and terms and conditions specified herein if changed rates, charges and terms and conditions are considered by either party to be necessary, desirable and in the public interest.

## ADDITIONAL CHARGES FOR SALES SERVICE

## Gas Supply Charges

The gas supply charge is comprised of charges for transportation and for commodity and fuel. The applicable rates are provided in Schedule "A".

#### **Commodity Transportation**

Charge 1 applies for all gas volumes delivered in the billing month up to the volume represented by the Contract Demand multiplied by the number of days in the billing month multiplied by 0.3.

Charge 2 applies for all additional gas volumes delivered in the billing month.

## **HEAT CONTENT ADJUSTMENT**

The gas supply commodity charges hereunder will be adjusted upwards or downwards as described below if the average total heating value of the gas per cubic metre (m³) determined in accordance with Union's Terms and Conditions in any month falls above or below 37.89 MJ per m³, respectively.

The adjustment shall be determined by multiplying the amount otherwise payable by a fraction, where the numerator is the monthly weighted average total heating value per cubic meter and the denominator 37.89.



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## COMMISSIONING AND DECOMMISSIONING RATE

The contract may provide that the Monthly Demand Charges specified above shall not apply on all or part of the daily contracted demand used by the customer either during the testing, commissioning and phasing in of gas using equipment or, alternatively, in the decommissioning and phasing out of gas using equipment being displaced by other gas using equipment, for a period not to exceed one year ("the transitional period"). To be eligible the new or displaced gas using equipment must be separately meterable. In such event, the contract will provide the following rates that such volume during the transitional period will be charged.

	Union <u>North West</u>	Union <u>North East</u>
MONTHLY CHARGE	\$1,340.55	\$1,340.55
<u>DELIVERY CHARGES (cents per m³)</u> Commodity Charge for each unit of gas volumes delivered	0.9284	0.9284
<u>CAP-AND-TRADE CHARGES (in addition to Delivery Charges)</u> Cap-and-Trade Customer-Related Charge (if applicable) Cap-and-Trade Facility-Related Charge	3.3181 0.0004	3.3181 0.0004

## **GAS SUPPLY CHARGES**

The gas supply charge is comprised of charges for transportation and for commodity and fuel.

The applicable rates are provided in Schedule "A".

## ADDITIONAL CHARGES FOR TRANSPORTATION AND STORAGE SERVICES - ALL ZONES

MONTHLY TRANSPORTATION ACCOUNT CHARGE  For customers that currently have installed or will require installing telemetering equipment	\$226.76
BUNDLED (T-SERVICE) STORAGE SERVICE CHARGES  Monthly Demand Charge for each unit of Contracted Daily Storage Withdrawal Entitlement (\$/GJ/Month)  Monthly Storage Demand- Price Adjustment for each unit of Contracted Daily Storage Withdrawal Entitlement: (\$/GJ/Month)	\$20.568 -
Commodity Charge for each unit of gas withdrawn from storage (\$/GJ)	\$0.208

The Authorized Overrun Commodity Charge is payable on all quantities on any Day in excess of the customer's contractual rights, for which authorization has been received. Overrun will be authorized by Union at its sole discretion.

Authorized Overrun Commodity Charge on each additional unit of gas Union authorizes for withdrawal from storage (\$/GJ)

## **DIVERSION TRANSACTION CHARGE**

Charge to a customer Receiving Delivery of diverted gas each time such customer requests a diversion and Union provides the service:

\$10.00

\$0.884



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#### THE BILL

The bill will equal the sum of the charges for all services selected plus the rates multiplied by the applicable gas quantities delivered or withdrawn for each service chosen plus all applicable taxes. If the customer transports its own gas, the Gas Supply Charge under Sales Service will not apply. If the customer selects Union's Sales Service which includes the Gas Supply Charge, <u>no</u> additional charges for Transportation and Storage Services will apply.

#### MINIMUM BILL

The minimum bill shall be the Monthly Charge, the Transportation Account Charge and the Demand Charges, as applicable.

## **DELAYED PAYMENT**

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

#### **SERVICE AGREEMENT**

All customers must enter into a Service Agreement with Union before receiving service under this rate schedule.

## TERMS AND CONDITIONS OF SERVICE

- 1. Service shall be for a minimum term of one year.
- 2. If multiple end-users are receiving service from a customer under this rate, for billing purposes, the Monthly Charge, the Delivery Charge, the Transportation Account Charge and any other charge that is specific to the location of each end-user shall be used to develop a monthly bill for each end-user at each location. Upon request, possibly for a fee, Union will combine the individual bills on a single invoice or statement for administrative convenience. However, Union will not combine the quantities or demands of several end-use locations so that eligibility to a different rate class will result. Further, Union will not combine the billing data of individual end-users to generate a single bill which is less than the sum of the bills of the individual end-users involved at each location.
- 3. Customers must enter into a Service Agreement with Union prior to the commencement of service.
- 4. For the purposes of qualifying for a rate class, the total quantities of gas consumed or expected to be consumed on the customer's contiguous property will be used, irrespective of the number of meters installed.
- 5. The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated, which may be higher than the identified rates.



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# Union Gas Limited Union North Gas Supply Charges

## (A) Availability

Available to customers in Union's North West and North East Delivery Zones.

## (B) Applicability:

To all sales customers served under Rate 01A, Rate 10, Rate 20, Rate 100 and Rate 25.

## (C) Rates

<u>Utility Sales</u>	Union North West	Union North East
Rate 01A (cents / m <sup>3</sup> )		
Storage	2.2627	7.0010
Storage - Price Adjustment	10.3786	- 14.0127
Commodity and Fuel (1) Commodity and Fuel - Price Adjustment	1.1618	0.9915
Transportation	6.8594	3.0285
Transportation - Price Adjustment	0.6565	0.6881
Total Gas Supply Charge	21.319	25.7218
Rate 10 (cents / m³)		
Storage	1.7066	4.9801
Storage - Price Adjustment	-	-
Commodity and Fuel (1)	10.3786	14.0127
Commodity and Fuel - Price Adjustment	1.1618	0.9915
Transportation	6.0056	2.7768
Transportation - Price Adjustment	0.7330	0.7646
Total Gas Supply Charge	<u> 19.9856</u>	23.5257

### Notes:

(1) The Commodity and Fuel rate includes a gas supply administration charge of 0.1893 cents/m³.



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# Union Gas Limited Union North Gas Supply Charges

## **Utility Sales**

Rate 20 (cents / m <sup>3</sup> )	Union North West	Union North East
Commodity and Fuel (1) Commodity and Fuel - Price Adjustment Commodity Transportation - Charge 1 Transportation 1 - Price Adjustment Commodity Transportation - Charge 2 Monthly Gas Supply Demand Gas Supply Demand - Price Adjustment	10.1013 1.1618 3.6224 (0.0966) - 57.2684	13.6365 0.9915 2.6450 (0.0650) - 50.9054
Commissioning and Decommissioning Rate	6.5862	5.4112
Rate 100 (cents / m <sup>3</sup> )		
Commodity and Fuel (1) Commodity and Fuel - Price Adjustment Commodity Transportation - Charge 1 Commodity Transportation - Charge 2 Monthly Gas Supply Demand	10.1013 1.1618 6.3364 - 112.9067	13.6365 0.9915 9.2013 - 160.8218
Commissioning and Decommissioning Rate	8.0185	11.4967
Rate 25 (cents / m <sup>3</sup> )		
Gas Supply Charge: Interruptible Service Minimum Maximum	1.4848 675.9484	1.4848 675.9484
Natural Gas Liquefaction Service (\$ / GJ) (2)		
Gas Supply Charge: Interruptible Service Minimum Maximum		0.3919 178.3976

## Notes:

- (1) The Commodity and Fuel rate includes a gas supply administration charge of 0.1893 cents/m³.
- (2) Billing in energy (\$/GJ) will only apply to the Natural Gas Liquefaction Service.

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## SMALL VOLUME GENERAL SERVICE RATE

## (A) Availability

Available to customers in Union's Southern Delivery Zone.

## (B) Applicability

To general service customers whose total consumption is equal to or less than 50,000 m<sup>3</sup> per year.

#### (C) Rates

The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated which may be higher than the identified rates.

a) Monthly Charge \$21.00

## b) Delivery Charge

	First Next All Over	100 m <sup>3</sup> 150 m <sup>3</sup> 250 m <sup>3</sup>	5.1107 4.8457 4.1611	¢ per m³ ¢ per m³ ¢ per m³
	Delivery - Price Adjustr	nent (All Volumes) (1)	0.5143	¢ per m³
		es (in addition to Delivery Charge) ner-Related Charge (if applicable) -Related Charge	3.3181 0.0297	¢ per m³ ¢ per m³
c)	Storage Charge (if app	licable)	0.7328	¢ per m³
	Storage - Price Adjustn	nent (All Volumes)	-	¢ per m³

Applicable to all bundled customers (sales and bundled transportation service).

## d) Gas Supply Charge (if applicable)

The gas supply charge is comprised of charges for transportation and for commodity and fuel. The applicable rates are provided in Schedule "A".

## e) System Expansion Surcharge ("SES") (if applicable)

The system expansion surcharge is applied to all volumes consumed for a defined term and is applicable to customers within the following approved community expansion project areas:

Community Expansion Project	SES Rate (¢ per m³)	SES Term Expiry
Kettle and Stony Point First Nation and Lambton Shores	23.0000	December 31, 2029
Milverton, Rostock and Wartburg	23.0000	December 31, 2032
Delaware Nation of Moraviantown First Nation	23.0000	December 31, 2057

During any month in which a customer terminates service or begins service, the fixed charge for the month will be prorated to such customer.

### Notes

(1) Includes a temporary charge of 0.5143 cents/m³ expiring March 31, 2018.

## (D) Supplemental Service to Commercial and Industrial Customers Under Group Meters

Combination of readings from several meters may be authorized by the Company and the Company will not reasonably withhold authorization in cases where meters are located on contiguous pieces of property of the same owner not divided by a public right-of-way.



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## (E) Delayed Payment

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

## (F) Direct Purchase

Unless otherwise authorized by Union, customers who are delivering gas to Union under direct purchase arrangements must obligate to deliver at a point(s) specified by Union, and must acquire and maintain firm transportation on all upstream pipeline systems. Customers initiating direct purchase arrangements, who previously received Gas Supply service, must also accept, unless otherwise authorized by Union, an assignment from Union of transportation capacity on upstream pipeline systems.

## (G) Overrun Charge

In the event that a direct purchase customer fails to deliver its contracted volumes to Union, and Union has the capability to continue to supply the customer, Union will do so. The customer may pay for the identified delivery charge and the total gas supply charge for utility sales provided in Schedule "A" per m³, plus 7¢ per m³.

Overrun Delivery Charge	5.8435	¢ per m³
<u>Cap-and-Trade Charges (in addition to Delivery Charge)</u> Cap-and-Trade Customer-Related Charge (if applicable) Cap-and-Trade Facility-Related Charge	3.3181 0.0297	¢ per m³ ¢ per m³

## (H) Bundled Direct Purchase Delivery

Where a customer elects transportation service under this rate schedule, the customer must enter into a Bundled T Gas Contract with Union for delivery of gas to Union. Bundled T Gas Contract Rates and Gas Purchase Contract Rates are described in rate schedule R1.

## (I) Company Policy Relating to Terms of Service

- a. Customers who temporarily discontinue service during any twelve consecutive months without payment of the monthly fixed charge for the months in which the gas is temporarily disconnected shall pay for disconnection and reconnection.
- b. When gas is delivered at an absolute pressure in excess of 101.325 kilopascals, then for purposes of measurement, hereunder, such volume of gas shall be corrected to an absolute pressure of 101.325 kilopascals. Atmospheric pressure is assumed to be the levels shown below in kilopascals (absolute) regardless of the actual atmospheric pressure at which the gas is measured and delivered.

	Assumed		Assumed
	Atmospheric		Atmospheric
	Pressure		Pressure
<u>Zone</u>	<u>kPa</u>		<u>kPa</u>
1	100.148	7	97.582
2	99.494	8	97.065
3	98.874	9	96.721
4	98.564	10	100.561
5	98.185	11	99.321
6	97.754	12	98.883

Effective January 1, 2018 Chatham, Ontario O.E.B. Order # EB-2017-0087



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## LARGE VOLUME GENERAL SERVICE RATE

## (A) Availability

Available to customers in Union's Southern Delivery Zone.

## (B) Applicability

To general service customers whose total consumption is greater than 50,000 m<sup>3</sup> per year.

## (C) Rates

The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated which may be higher than the identified rates.

a) Monthly Charge \$70.00

## b) Delivery Charge

	First Next Next All Over	1 000 m <sup>3</sup> 6 000 m <sup>3</sup> 13 000 m <sup>3</sup> 20 000 m <sup>3</sup>	5.0819 4.9857 4.8041 4.4521	¢ per m³ ¢ per m³
	Delivery – Price	e Adjustment (All Volumes) (1)	0.3363	\$ ¢ per m³
	Cap-and-Trade	Charges (in addition to Delivery Charge) Customer-Related Charge (if applicable) Facility-Related Charge	3.3181 0.0209	
c)	Storage Charge	e (if applicable)	0.6481	¢ per m³
	Storage - Price	Adjustment (All Volumes)	-	¢ per m³

Applicable to all bundled customers (sales and bundled transportation service).

## d) Gas Supply Charge (if applicable)

The gas supply charge is comprised of charges for transportation and for commodity and fuel. The applicable rates are provided in Schedule "A".

## e) System Expansion Surcharge ("SES") (if applicable)

The system expansion surcharge is applied to all volumes consumed for a defined term and is applicable to customers within the following approved community expansion project areas:

Community Expansion Project	SES Rate (¢ per m³)	SES Term Expiry
Kettle and Stony Point First Nation and Lambton Shores	23.0000	December 31, 2029
Milverton, Rostock and Wartburg	23.0000	December 31, 2032
Delaware Nation of Moraviantown First Nation	23.0000	December 31, 2057

During any month in which a customer terminates service or begins service, the fixed charge for the month will be prorated to such customer.

### Notes:

(1) Includes a temporary charge of 0.3363 cents/m³ expiring March 31, 2018.

## (D) Supplemental Service to Commercial and Industrial Customers Under Group Meters

Combination of readings from several meters may be authorized by the Company and the Company will not reasonably withhold authorization in cases where meters are located on contiguous pieces of property of the same owner not divided by a public right-of-way.



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## (E) Delayed Payment

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

### (F) Direct Purchase

Unless otherwise authorized by Union, customers who are delivering gas to Union under direct purchase arrangements must obligate to deliver at a point(s) specified by Union, and must acquire and maintain firm transportation on all upstream pipeline systems. Customers initiating direct purchase arrangements, who previously received Gas Supply service, must also accept, unless otherwise authorized by Union, an assignment from Union of transportation capacity on upstream pipeline systems.

## (G) Overrun Charge

In the event that a direct purchase customer fails to deliver its contracted volumes to Union, and Union has the capability to continue to supply the customer, Union will do so. The customer may pay for the identified delivery charge and the total gas supply charge for utility sales provided in Schedule "A" per m³, plus 7¢ per m³.

Overrun Delivery Charge	5.7300	¢ per m³	
Cap-and-Trade Charges (in addition to Delivery Charge)			Ī
Cap-and-Trade Customer-Related Charge (if applicable)	3.3181	¢ per m³	
Cap-and-Trade Facility-Related Charge	0.0209	¢ per m³	

## (H) Bundled Direct Purchase Delivery

Where a customer elects transportation service under this rate schedule, the customer must enter into a Bundled T Gas Contract with Union for delivery of gas to Union. Bundled T Gas Contract Rates and Gas Purchase Contract Rates are described in rate schedule R1.

## (I) Company Policy Relating to Terms of Service

- a. Customers who temporarily discontinue service during any twelve consecutive months without payment of the monthly fixed charge for the months in which the gas is temporarily disconnected shall pay for disconnection and reconnection.
- b. When gas is delivered at an absolute pressure in excess of 101.325 kilopascals, then for purposes of measurement, hereunder, such volume of gas shall be corrected to an absolute pressure of 101.325 kilopascals. Atmospheric pressure is assumed to be the levels shown below in kilopascals (absolute) regardless of the actual atmospheric pressure at which the gas is measured and delivered.

	Assumed		Assumed
	Atmospheric		Atmospheric
	Pressure		Pressure
<u>Zone</u>	<u>kPa</u>		<u>kPa</u>
1	100.148	7	97.582
2	99.494	8	97.065
3	98.874	9	96.721
4	98.564	10	100.561
5	98.185	11	99.321
6	97.754	12	98.883

Effective January 1, 2018 Chatham, Ontario O.E.B. Order # EB-2017-0087



Effective 2018-01-01 Rate M4 Page 1 of 3

## FIRM INDUSTRIAL AND COMMERCIAL CONTRACT RATE

## (A) Availability

Available to customers in Union's Southern Delivery Zone.

## (B) Applicability

To a customer who enters into a contract for the purchase or transportation of gas for a minimum term of one year that specifies a daily contracted demand between 2 400 m³ and 60 000 m³.

## (C) Rates

The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated which may be higher than the identified rates.

1. Bills will be rendered monthly and shall be the total of:

## (i) A Monthly Demand Charge

First	8 450 m <sup>3</sup> of daily contracted demand	62.2530	¢ per m³
Next	19 700 m <sup>3</sup> of daily contracted demand	27.9127	¢ per m³
All Over	28 150 m <sup>3</sup> of daily contracted demand	23.4505	¢ per m³

## (ii) A Monthly Delivery Commodity Charge

First 422 250 m <sup>3</sup> delivered per month	1.5791	¢ per m³
Next volume equal to 15 days use of daily contracted demand	1.5791	¢ per m³
For remainder of volumes delivered in the month	0.6088	¢ per m³

Delivery - Price Adjustment (All Volumes) - ¢ per m³

## <u>Cap-and-Trade Charges (in addition to Delivery Commodity Charge)</u>

Cap-and-Trade Customer-Related Charge (if applicable)	3.3181	¢ per m³
Cap-and-Trade Facility-Related Charge	0.0280	¢ per m³

## (iii) Gas Supply Charge (if applicable)

The gas supply charge is comprised of charges for transportation and for commodity and fuel. The applicable rates are provided in Schedule "A".

## 2. Overrun Charge

Authorized overrun gas is available provided that it is authorized by Union in advance. Union will not unreasonably withhold authorization. Overrun means gas taken on any day in excess of 103% of contracted daily demand. Authorized overrun will be available April 1 through October 31 at the identified authorized overrun delivery charge and, if applicable, the total gas supply charge for utility sales provided in Schedule "A" per m³ for all volumes purchased.

Unauthorized overrun gas taken in any month shall be paid for at the identified unauthorized overrun delivery charge for the delivery and the total gas supply charge for utility sales provided in Schedule "A" per m³ for all gas supply volumes purchased.

Authorized Overrun Delivery Charge	3.6258	¢ per m³
Unauthorized Overrun Delivery Charge	5.8435	¢ per m³
Can and Trade Charges (in addition to Delivery Charge)		
Cap-and-Trade Charges (in addition to Delivery Charge)		
Cap-and-Trade Customer-Related Charge (if applicable)	3.3181	¢ per m³
Authorized Cap-and-Trade Facility-Related Charge	0.0280	¢ per m³
Unauthorized Cap-and-Trade Facility-Related Charge	0.0297	¢ per m³



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## 3. Firm Minimum Annual Charge

In each contract year, the customer shall purchase from Union or pay for a minimum volume of gas or transportation services equivalent to 146 days use of firm contracted demand. Overrun gas volumes will not contribute to the minimum volume. In the event that the customer shall not take such minimum volume the customer shall pay an amount equal to the deficiency from the minimum volume times the identified firm minimum annual delivery charge and, if applicable a gas supply commodity charge provided in Schedule "A".

Firm Minimum Annual Delivery Charge

1.7964 ¢ per m<sup>3</sup>

In the event that the contract period exceeds one year the annual minimum volume will be prorated for any part year.

## 4. Interruptible Service

Union may agree, in its sole discretion, to combine a firm service with an interruptible service provided that the amount of interruptible volume to be delivered and agreed upon by Union and the customer shall be no less than 350,000 m<sup>3</sup> per year.

The price of all gas delivered by Union pursuant to any contract, contract amendment, or contract renewal shall be determined on the basis of the following schedules:

## a) (i) Monthly Delivery Commodity Charge

Daily Contracted Demand Level (CD)		
$2400\mathrm{m}^3 \le \mathrm{CD} < 17000\mathrm{m}^3$	3.0395	¢ per m³
$17\ 000\ \text{m}^3 \le \text{CD} <\ 30\ 000\ \text{m}^3$	2.9096	¢ per m³
$30\ 000\ \text{m}^3 \le \text{CD} < 50\ 000\ \text{m}^3$	2.8413	¢ per m³
$50\ 000\ \text{m}^3 \le \text{CD} \le 60\ 000\ \text{m}^3$	2.7934	¢ per m³
		•

Delivery - Price Adjustment (All Volumes)	-	¢ per m³
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Cap-and-Trade Charges (in addition to Delivery Commodity Charge)		
Cap-and-Trade Customer-Related Charge (if applicable)	3.3181	¢ per m³
Cap-and-Trade Facility-Related Charge	0.0249	¢ per m³

## (ii) Days Use of Interruptible Contract Demand

The price determined under Paragraph 4(a) of "Rates" will be reduced by the amount based on the number of Days Use of Contracted Demand as scheduled below:

For 75 days use of contracted demand	0.0530	¢ per m³
For each additional days use of contracted demand up		
to a maximum of 275 days, an additional discount of	0.00212	¢ per m³

## (iii) Gas Supply Charge (if applicable)

The gas supply charge is comprised of charges for transportation and for commodity and fuel. The applicable rates are provided in Schedule "A".

(iv) Monthly Charge \$644.05 per month



Effective 2018-01-01 **Rate M4** Page 3 of 3

b) In each contract year, the customer shall take delivery from Union, or in any event pay for, if available and not accepted by the customer, a minimum volume of gas or transportation services as specified in the contract between the parties and which will not be less than 350 000 m³ per annum. Overrun volumes will not contribute to the minimum volume. In the event that the customer shall not take such minimum volume, the customer shall pay an amount equal to the deficiency from the minimum volume times the identified interruptible minimum annual delivery charge, and if applicable, a gas supply charge provided in Schedule "A".

In the event that the contract period exceeds one year, the annual minimum volume will be prorated for any part year.

Interruptible Minimum Annual Delivery Charge

3.2537 ¢ per m<sup>3</sup>

c) Overrun gas is available without penalty provided that it is authorized by Union in advance. Union will not unreasonably withhold authorization. Overrun means gas taken on any day in excess of 105% of contracted daily demand.

Unauthorized overrun gas taken in any month shall be paid for at the identified unauthorized overrun delivery charge and the total gas supply charge for utility sales provided in Schedule "A" per m³ for all gas supply volumes purchased.

Unauthorized Overrun Delivery Charge	5.8435	¢ per m³
<u>Cap-and-Trade Charges (in addition to Delivery Charge)</u> Cap-and-Trade Customer-Related Charge (if applicable) Cap-and-Trade Facility-Related Charge	3.3181 0.0297	¢ per m³ ¢ per m³

#### <u>Unauthorized Overrun Non-Compliance Rate:</u>

Unauthorized overrun gas taken any month during a period when a notice of interruption is in effect shall be paid for at the rate of 233.7000 ¢ per m³ (\$60 per GJ) for the delivery.

## (D) Delayed Payment

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

## (E) Direct Purchase

Unless otherwise authorized by Union, customers who are delivering gas to Union under direct purchase arrangements must obligate to deliver at a point(s) specified by Union, and must acquire and maintain firm transportation on all upstream pipeline systems for all volumes. Customers initiating direct purchase arrangements, who previously received Gas Supply service, must also accept, unless otherwise authorized by Union, an assignment from Union of transportation capacity on upstream pipeline systems.

## (F) Bundled Direct Purchase Delivery

Where a customer elects transportation service under this rate schedule the customer must enter into a Bundled T Gas Contract with Union for delivery of gas to Union.

Bundled T Gas Contract Rates and Gas Purchase Contract Rates are described in rate schedule R1.

Effective January 1, 2018 O.E.B. Order # EB-2017-0087 Chatham, Ontario



Effective 2018-01-01 **Rate M5A** Page 1 of 2

## INTERRUPTIBLE INDUSTRIAL AND COMMERCIAL CONTRACT RATE

### (A) Availability

Available to customers in Union's Southern Delivery Zone.

## (B) Applicability

To a customer who enters into a contract for the purchase or transportation of gas for a minimum term of one year that specifies a daily contracted demand between 2 400 m³ and 60 000 m³ inclusive.

## (C) Rates

The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated which may be higher than the identified rates.

1. Interruptible Service

The price of all gas delivered by Union pursuant to any contract, contract amendment, or contract renewal shall be determined on the basis of the following schedules:

(i) Monthly Delivery Commodity Charge

$2400\mathrm{m}^3\leq\mathrm{CD}<17000\mathrm{m}^3$	3.0395	¢ per m³
$17\ 000\ \text{m}^3 \le \text{CD} <\ 30\ 000\ \text{m}^3$	2.9096	¢ per m³
$30\ 000\ \text{m}^3 \le \text{CD} <\ 50\ 000\ \text{m}^3$	2.8413	¢ per m³
$50\ 000\ \text{m}^3 \le \text{CD} \le 60\ 000\ \text{m}^3$	2.7934	¢ per m³

Delivery - Price Adjustment (All Volumes) - ¢ per m³

Cap-and-Trade Charges	(in addition to Delivery	Commodity	Charge)
Can and Trada Custama	r Dolated Charge (if a	nnliaghla)	

Cap-and-Trade Customer-Related Charge (if applicable)	3.3181	¢ per m³
Cap-and-Trade Facility-Related Charge	0.0249	¢ per m³

(ii) Days Use of Interruptible Contract Demand

The price determined under Paragraph 1(a) of "Rates" will be reduced by the amount based on the number of Days Use of Contracted Demand as scheduled below:

For 75 days use of contracted demand	0.0530	¢ per m³
For each additional days use of contracted demand up		
to a maximum of 275 days, an additional discount of	0.0021	¢ per m³

(iii) Gas Supply Charge (if applicable)

The gas supply charge is comprised of charges for transportation and for commodity and fuel. The applicable rates are provided in Schedule "A".

(iv) Monthly Charge \$644.05 per month

2. In each contract year, the customer shall take delivery from Union, or in any event pay for, if available and not accepted by the customer, a minimum volume of gas or transportation services as specified in the contract between the parties and which will not be less than 350 000 m³ per annum. Overrun volumes will not contribute to the minimum volume. In the event that the customer shall not take such minimum volume, the customer shall pay an amount equal to the deficiency from the minimum volume times the identified interruptible minimum annual delivery charge, and if applicable, a gas supply charge provided in Schedule "A".

In the event that the contract period exceeds one year, the annual minimum volume will be prorated for any part year.

Interruptible Minimum Annual Delivery Charge

3.2537 ¢ per m³



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3. Overrun gas is available without penalty provided that it is authorized by Union in advance. Union will not unreasonably withhold authorization. Overrun means gas taken on any day in excess of 105% of contracted daily demand.

Unauthorized overrun gas taken in any month shall be paid for at the identified unauthorized overrun delivery charge and the total gas supply charge for utility sales provided in Schedule "A" per m³ for all gas supply volumes purchased.

Unauthorized Overrun Delivery Charge	5.8435	¢ per m³
Cap-and-Trade Charges (in addition to Delivery Charge)		
Cap-and-Trade Customer-Related Charge (if applicable)	3.3181	¢ per m³
Cap-and-Trade Facility-Related Charge	0.0297	¢ per m³

## **Unauthorized Overrun Non-Compliance Rate:**

Unauthorized overrun gas taken any month during a period when a notice of interruption is in effect shall be paid for at the rate of 233.7000 ¢ per m³ (\$60 per GJ) for the delivery.

## 4. Non-Interruptible Service

Union may agree, in its sole discretion, to combine an interruptible service with a firm service in which case the amount of firm daily demand to be delivered shall be agreed upon by Union and the customer.

- a) The monthly demand charge for firm daily deliveries will be 34.8081 ¢ per m<sup>3</sup>.
- b) The commodity charge for firm service shall be the rate for firm service at Union's firm rates net of a monthly demand charge of 34.8081 ¢ per m³ of daily contracted demand. The commodity charge includes cap-and-trade facility-related charges related to the firm service.
- c) The interruptible commodity charge will be established under Clause 1 of this schedule.

## (D) Delayed Payment

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

## (E) Direct Purchase

Unless otherwise authorized by Union, customers who are delivering gas to Union under direct purchase arrangements must obligate to deliver at a point(s) specified by Union, and must acquire and maintain firm transportation on all upstream pipeline systems. Customers initiating direct purchase arrangements, who previously received Gas Supply service, must also accept, unless otherwise authorized by Union, an assignment from Union of transportation capacity on upstream pipeline systems.

## (F) Bundled Direct Purchase Delivery

Where a customer elects transportation service under this rate schedule the customer must enter into a Bundled T Gas Contract with Union for delivery of gas to Union.

Bundled T Gas Contract Rates and Gas Purchase Contract Rates are described in rate schedule R1.

Effective January 1, 2018 O.E.B. Order # EB-2017-0087 Chatham, Ontario



Effective 2018-01-01 **Rate M7** Page 1 of 2

## SPECIAL LARGE VOLUME INDUSTRIAL AND COMMERCIAL CONTRACT RATE

## (A) Availability

Available to customers in Union's Southern Delivery Zone.

## (B) Applicability

To a Customer

- a) who enters into a contract for the purchase or transportation of gas for a minimum term of one year that specifies a combined maximum daily requirement for firm, interruptible and seasonal service of at least 60 000 m<sup>3</sup>; and
- b) who has site specific energy measuring equipment that will be used in determining energy balances.

## (C) Rates

The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated which may be higher than the identified rates.

- 1. Bills will be rendered monthly and shall be the total of:
- (i) A Monthly Demand Charge

A negotiated Monthly Demand Charge for each m<sup>3</sup> of daily contracted firm demand up to 34.9210 ¢ per m<sup>3</sup>

(ii) A Monthly Delivery Commodity Charge

(1)	A Monthly Firm Delivery Commodity Charge for all		
	firm volumes of	0.3623	¢ per m³
	and a Delivery - Price Adjustment of	-	¢ per m³

(2) A Monthly Interruptible Delivery Commodity Charge for all interruptible volumes to be negotiated between Union and the customer not to exceed an annual average of and a Delivery - Price Adjustment of 6.5059 ¢ per m³

- ¢ per m³

(3) A Monthly Seasonal Delivery Commodity Charge for all seasonal volumes to be negotiated between Union and the customer not to exceed an annual average of and a Delivery - Price Adjustment of . ¢ per m³

Cap-and-Trade Charges (in addition to Delivery Commodity Charge)
Cap-and-Trade Customer-Related Charge (if applicable)
Cap-and-Trade Facility-Related Charge
3.3181 ¢ per m³
0.0288 ¢ per m³

## (iii) Gas Supply Charge (if applicable)

The gas supply charge is comprised of charges for transportation and for commodity and fuel. The applicable rates are provided in Schedule "A".

### (iv) Overrun Gas

Overrun gas is available without penalty provided that it is authorized by Union in advance. Union will not unreasonably withhold authorization.

Unauthorized overrun gas taken in any month shall be paid for at the M1 rate in effect at the time the overrun occurs, plus, if applicable, the total gas supply charge for utility sales provided in Schedule "A" per m³ for all the gas supply volumes purchased.

Cap-and-Trade Charges (in addition to Delivery Charge)	
Cap-and-Trade Customer-Related Charge (if applicable)	3.3181 ¢ per m <sup>3</sup>
Cap-and-Trade Facility-Related Charge	0.0297 ¢ per m³



Effective 2018-01-01 **Rate M7** Page 2 of 2

### Unauthorized Overrun Non-Compliance Rate:

Unauthorized overrun gas taken any month during a period when a notice of interruption is in effect shall be paid for at the rate of 233.7000 ¢ per m³ (\$60 per GJ) for the delivery.

- 2. In negotiating the Monthly Interruptible and Seasonal Commodity Charges, the matters to be considered include:
  - (a) The volume of gas for which the customer is willing to contract,
  - (b) The load factor of the customer's anticipated gas consumption, the pattern of annual use, and the minimum annual quantity of gas which the customer is willing to contract to take or in any event pay for,
  - (c) Interruptible or curtailment provisions, and
  - (d) Competition.
- 3. In each contract year, the customer shall take delivery from Union, or in any event, pay for if available and not accepted by the customer, a minimum volume of gas as specified in the contract between the parties. Overrun gas volumes will not contribute to the minimum volume.
- 4. The contract may provide that the Monthly Demand Charge specified in Rate Section 1 above shall not apply on all or part of the daily contracted firm demand used by the customer during the testing, commissioning, phasing in, decommissioning and phasing out of gas-using equipment for a period not to exceed one year (the "transition period"). In such event, the contract will provide for a Monthly Delivery Commodity Charge to be applied on such volume during the transition at the identified commissioning and decommissioning rate and the total gas supply charge for utility sales provided in Schedule "A" per m³, if applicable.

Commissioning and Decommissioning Rate	4.6628	¢ per m³
<u>Cap-and-Trade Charges (in addition to Commissioning and Decommissioning Rate)</u> Cap-and-Trade Customer-Related Charge (if applicable) Cap-and-Trade Facility-Related Charge	3.3181 0.0288	¢ per m³ ¢ per m³

5. Either the utility or a customer, or potential customer, may apply to the Ontario Energy Board to fix rates and other charges different from the rates and other charges specified herein if the changed rates and other charges are considered by either party to be necessary, desirable and in the public interest.

## (D) Delayed Payment

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

### (E) Direct Purchase

Unless otherwise authorized by Union, customers who are delivering gas to Union under direct purchase arrangements must obligate to deliver at a point(s) specified by Union, and must acquire and maintain firm transportation on all upstream pipeline systems. Customers initiating direct purchase arrangements, who previously received Gas Supply service, must also accept, unless otherwise authorized by Union, an assignment from Union of transportation capacity on upstream pipeline systems.

## (F) Bundled Direct Purchase Delivery and Short Term Supplemental Services

Where a customer elects transportation service and/or a short term supplemental service under this rate schedule, the customer must enter into a Contract under rate schedule R1.

Effective January 1, 2018 O.E.B. Order # EB-2017-0087 Chatham, Ontario



Effective 2018-01-01 **Rate M9** Page 1 of 2

#### LARGE WHOLESALE SERVICE RATE

## (A) Availability

Available to customers in Union's Southern Delivery Zone.

## (B) Applicability

To a distributor who enters into a contract to purchase and/or receive delivery of a firm supply of gas for distribution to its customers and who agrees to take or pay for an annual quantity of at least two million cubic metres.

#### (C) Rates

The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated which may be higher than the identified rates.

(i) A Monthly Demand Charge of established daily demand determined in accordance with the service contract, such demand charge to be computed on a calendar month basis and a pro-rata charge to be made for the fraction of a calendar month which will occur if the day of first regular delivery does not fall on the first day of a month.

23.5397 ¢ per m³

(ii) A Delivery Commodity Charge for gas delivered of and a Delivery - Price Adjustment of

0.1788 ¢ per m³ • ¢ per m³

<u>Cap-and-Trade Charges (in addition to Delivery Commodity Charge)</u> Cap-and-Trade Facility-Related Charge

0.0248 ¢ per m<sup>3</sup>

(iii) Gas Supply Charge (if applicable)

The gas supply charge is comprised of charges for transportation and for commodity and fuel. The applicable rates are provided in Schedule "A".

## (D) Delayed Payment

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

## (E) Direct Purchase

Unless otherwise authorized by Union, customers who are delivering gas to Union under direct purchase arrangements must obligate to deliver at a point(s) specified by Union, and must acquire and maintain firm transportation on all upstream pipeline systems. Customers initiating direct purchase arrangements, who previously received Gas Supply service, must also accept, unless otherwise authorized by Union, an assignment from Union of transportation capacity on upstream pipeline systems.



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## (F) Overrun Charge

Authorized:

For all quantities on any day in excess of 103% of the customer's contractual rights, for which authorization has been received, the customer will be charged at the identified authorized overrun delivery charge. Overrun will be authorized by Union at its sole discretion.

Unauthorized:

For all quantities on any day in excess of 103% of the customer's contractual rights, for which authorization has not been received, the customer will be charged at the identified unaurthorized overrun delivery charge.

Authorized Overrun Delivery Charge

Unauthorized Overrun Delivery Charge

0.9527 ¢ per m³
36.0000 ¢ per m³

<u>Cap-and-Trade Charges (in addition to Delivery Charge)</u> Cap-and-Trade Facility-Related Charge

0.0248 ¢ per m³

## (G) Bundled Direct Purchase Delivery

Where a customer elects transportation service under this rate schedule the customer must enter into a Bundled T Gas Contract with Union for delivery of gas to Union.

Bundled T Gas Contract Rates and Gas Purchase Contract Rates are described in rate schedule R1.

Effective January 1, 2018 O.E.B. Order # EB-2017-0087

Chatham, Ontario



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## SMALL WHOLESALE SERVICE RATE

## (A) Availability

Available to customers in Union's Southern Delivery Zone.

## (B) Applicability

To a non-contract distributor who purchases and/or receives delivery of a firm supply of gas for distribution only to its own customers.

### (C) Rates

The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated which may be higher than the identified rates.

1. A Delivery Commodity Charge of

7.1737 ¢ per m<sup>3</sup>

<u>Cap-and-Trade Charges (in addition to Delivery Commodity Charge)</u>
Cap-and-Trade Facility-Related Charge

0.0258 ¢ per m<sup>3</sup>

## 2. Gas Supply Charge (if applicable)

The gas supply charge is comprised of charges for transportation and for commodity and fuel. The applicable rates are provided in Schedule "A".

## (D) Delayed Payment

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

### (E) Direct Purchase

Unless otherwise authorized by Union, customers who are delivering gas to Union under direct purchase arrangements must obligate to deliver at a point(s) specified by Union, and must acquire and maintain firm transportation on all upstream pipeline systems. Customers initiating direct purchase arrangements must also accept, unless otherwise authorized by Union, an assignment from Union of transportation capacity on upstream pipeline systems.

## (F) Overrun Charge

In the event that a direct purchase customer fails to deliver its contracted volumes to Union, and Union has the capability to continue to supply the customer, Union will do so. This gas shall be paid for at the identified unauthorized overrun delivery charge and, if applicable, the total gas supply charge for utility sales provided in Schedule "A" per m³, plus 7¢ per m³ for all gas supply volumes purchased.

Unauthorized Overrun Delivery Charge

5.8435 ¢ per m<sup>3</sup>

Cap-and-Trade Charges (in addition to Delivery Charge)

Cap-and-Trade Facility-Related Charge

0.0297 ¢ per m<sup>3</sup>

### (G) Bundled Direct Purchase Delivery

Where a customer elects transportation service under this rate schedule, the customer must enter into a Bundled T Gas Contract with Union for delivery of gas to Union.

Bundled T Gas Contract Rates and Gas Purchase Contract Rates are described in rate schedule R1.

Effective January 1, 2018

Chatham, Ontario

O.E.B. Order # EB-2017-0087



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## BUNDLED DIRECT PURCHASE CONTRACT RATE

## (A) Availability

Available to customers in Union's Southern Delivery Zone.

## (B) Applicability

To a customer who enters into a Receipt Contract or Gas Purchase Contract for delivery and/or sale of gas to Union.

## (C) Rates

		Demand Charge <u>Rate/GJ/month</u>	Commodity Charges/Credits <u>Rate/GJ</u>
a)	Transportation by Union For gas delivered to Union at any point other than the Ontario Point(s) of Receipt, Union will charge a customer all approved tolls and charges, incurred by Union to transport the gas to the		
b)	Firm Backstop Gas Applied to the contracted Firm Backstop Gas Supply Service	\$1.530	
	Backstop Gas Commodity Charge On all quantities supplied by Union to the Ontario Point(s) of Receipt		\$4.005
c)	Reasonable Efforts Backstop Gas Paid on all quantities of gas supplied by Union to the customer's Point(s) of Consumption		\$5.033
d)	Banked Gas Purchase		
	T-service		Note (1)
e)	Failure to Deliver Applied to all quantities not delivered to Union in the event the customer's supply fails		\$2.835
f)	Short Term Storage / Balancing Service (2)		
	Maximum		\$6.000
g)	Discretionary Gas Supply Service ("DGSS")		Note (3)
h)	Parkway Delivery Commitment Incentive ("PDCI")		\$(0.159)



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#### Notes:

- (1) The charge for banked gas purchases shall be the higher of the daily spot cost at Dawn in the month of or the month following the month in which gas is sold under this rate and shall not be less than Union's approved weighted average cost of gas.
- (2) Short Term Storage / Balancing Service is:
  - i) a combined space and interruptible deliverability service for short-term or off-peak storage in Union's storage facilities, OR
  - ii) short-term firm deliverability, OR
  - iii) a component of an operational balancing service offered.

In negotiating the rate to be charged for short term storage services, the matters that are to be considered include:

- i) The minimum amount of storage service to which a customer is willing to commit,
- ii) Whether the customer is contracting for firm or interruptible service during Union's peak or non-peak periods,
- iii) Utilization of facilities, and
- iv) Competition.
- (3) Discretionary Gas Supply Service price reflects the "back-to-back" price plus gas supply administration charge.



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### STORAGE AND TRANSPORTATION RATES FOR CONTRACT CARRIAGE CUSTOMERS

# (A) Availability

Available to customers in Union's Southern Delivery Zone.

# (B) Applicability

To a customer:

- a) whose qualifying annual transportation volume for combined firm and interruptible service is at least 2 500 000 m<sup>3</sup> or greater and has a daily firm contracted demand up to 140,870 m<sup>3</sup>; and
- b) who enters into a Carriage Service Contract with Union for the transportation or the storage and transportation of Gas for use at facilities located within Union's gas franchise area; and
- c) who has meters with electronic recording at each Point of Consumption; and
- d) who has site specific energy measuring equipment that will be used in determining energy balances; and
- e) for whom Union has determined transportation and/or storage capacity is available.

For the purposes of qualifying for a rate class, the total quantities of gas consumed or expected to be consumed on the customer's contiguous property will be used, irrespective of the number of meters installed.

# (C) Rates

The following rates shall be charged for all quantities contracted or handled as appropriate. The identified rates represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated, which may be higher than the identified rates.

# STORAGE SERVICE:

STORAGE SERVICE.	Demand Charge <u>Rate/GJ/mo</u>	Commodity Charge <u>Rate/GJ</u>	omers Providing <u>Compressor Fuel</u> Commodity  Charge <u>Rate/GJ</u>
a) Annual Firm Storage Space Applied to contracted Maximum Annual Storage Space	\$0.011		
b) Annual Firm Injection/Withdrawal Right: Applied to the contracted Maximum Annual Firm Injection/Withdrawal Right Union provides deliverability Inventory Customer provides deliverability Inventory (4)	\$1.457 \$1.184		
c) Incremental Firm Injection Right: Applied to the contracted Maximum Incremental Firm Injection Right	\$1.184		
d) Annual Interruptible Withdrawal Right: Applied to the contracted Maximum Annual Interruptible Withdrawal Right	\$1.184		



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					omers Providing Compressor Fuel
		Demand Charge	Commodity Charge	Fuel	Commodity Charge
		Rate/GJ/mo	Rate/GJ	Ratio	Rate/GJ
e)	Withdrawal Commodity Paid on all quantities withdrawn from storage up to the Maximum				
	Daily Storage Withdrawal Quantity		\$0.022	0.408%	\$0.008
f)	Injection Commodity Paid on all quantities injected into storage up to the Maximum Daily		¢0.022	0.4000/	¢0.000
	Storage Injection Quantity		\$0.022	0.408%	\$0.008
g)	Short Term Storage / Balancing Service Maximum		\$6.000		

### Notes:

- 1. Demand charges for Annual Services are paid monthly during the term of the contract for not less than one year unless Union, in its sole discretion, accepts a term of less than one year. Demand charges apply whether Union or the customer provides the fuel.
- 2. Annual Firm Injection Rights are equal to 100% of their respective Annual Firm Withdrawal Rights. Injection Rights in excess of the Annual Firm Injection Rights will be charged at the Incremental Firm Injection Right.
- 3. Annual Firm Storage Space

The maximum storage space available to a customer at the rates specified herein is determined by one of the following storage allocation methodologies:

# 3.1 Aggregate Excess

Aggregate excess is the difference between the customer's total 151-day winter consumption (November 1 through March 31) and the customer's average daily consumption (Daily Contract Quantity) for the contract year multiplied by 151 days of winter. This calculation will be done using two years of historical data (with 25% weighting for each year) and one year of forecast data (with 50% weighting). If a customer is new, or an existing customer is undergoing a significant change in operations, the allocation will be based on forecast consumption only, as negotiated between Union and the customer. Once sufficient historical information is available for the customer, the standard calculation will be done. At each contract renewal, the aggregate excess calculation will be performed to set the new space allocation.

# 3.2 Obligated daily contract quantity multiple of 15

Obligated daily contract quantity is the firm daily quantity of gas which the customer must deliver to Union. The 15 x obligated daily contract quantity calculation will be done using the daily contract quantity for the upcoming contract year. At each contract renewal, the 15 x obligated daily contract quantity calculation will be performed to set the new space allocation.

Customers may contract for less than their maximum entitlement of firm storage space.

### 4. Annual Injection/Withdrawal Right

The maximum level of deliverability available to a customer at the rates specified herein is determined by one of the following methodologies:

4.1 The greater of obligated daily contract quantity or firm daily contract demand less obligated daily contract quantity.

Customers may contract for less than their maximum entitlement of deliverability. A customer may contract up to this maximum entitlement with a combination of firm and interruptible deliverability as specified in Section (C) Storage Service.

- 5. Additional storage space or deliverability, in excess of the allocated entitlements per Notes 3 and 4, may be available at market prices.
- 6. Storage Space and Withdrawal Rights are not assignable to any other party without the prior written consent of Union.



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- 7. Deliverability Inventory being defined as 20% of annual storage space.
- 8. Short Term Storage / Balancing Service is:
  - i) a combined space and interruptible deliverability service for short-term or off-peak storage in Union's storage facilities, or
  - ii) short-term firm deliverability, or
  - iii) a component of an operational balancing service offered.

In negotiating the rate to be charged for service, the matters that are to be considered include:

- i) The minimum amount of storage service to which a customer is willing to commit,
- ii) Whether the customer is contracting for firm or interruptible service during Union's peak or non-peak periods,
- iii) Utilization of facilities, and
- iv) Competition.

TRANSPORTATION CHARGES:		Union Providing Compressor Fuel		omers Providing Compressor Fuel	
	Demand Charge	Commodity Charge	Fuel Ratio (5)	Commodity Charge	
	Rate/m³/mo	Rate/m <sup>3</sup>		Rate/m <sup>3</sup>	
a) Annual Firm Transportation     Applied to the Firm Daily Contract Demand					
First 28,150 m <sup>3</sup> per month	41.1636 ¢				
Next 112,720 m <sup>3</sup> per month	28.4393 ¢				
b) Firm Transportation Commodity Paid on all firm quantities redelivered to the customer's Point(s) of Consumption Commodity Charge (All volumes)		0.1584 ¢	0.323%	0.1138 ¢	ı
c) Interruptible Transportation Commodity Paid on all interruptible quantities redelivered to the customer's Point(s) of Consumption		U.1304 ♥	0.32370	0.1130 ¢	l
Maximum		6.5059 ¢	0.323%	6.4613 ¢	
Cap-and-Trade Charges (in addition to Transportation Commod	dity Charge)				
Cap-and-Trade Customer-Related Charge (if applicable)		3.3181 ¢		3.3181 ¢	
Cap-and-Trade Facility-Related Charge		0.0167 ¢		0.0167 ¢	

# Notes:

- 1. All demand charges are paid monthly during the term of the contract for not less than one year unless Union, at its sole discretion, accepts a term of less than one year. Demand charges apply whether Union or the customer provides the fuel.
- 2. In negotiating the rate to be charged for the transportation of gas under Interruptible Transportation, the matters that are to be considered include:
  - a) The amount of the interruptible transportation for which customer is willing to contract,
  - b) The anticipated load factor for the interruptible transportation quantities,
  - c) Interruptible or curtailment provisions, and
  - d) Competition.
- 3. In each contract year, the customer shall pay for a Minimum Interruptible Transportation Activity level as specified in the Contract. Overrun activity will not contribute to the minimum activity level.
- 4. Transportation fuel ratios do not apply to customers served from dedicated facilities directly connected to third party transmission systems with custody transfer metering at the interconnect.
- 5. Either Union or a customer, or potential customer, may apply to the Ontario Energy Board to fix rates and other charges different from the rates and other charges specified herein if the changed rates and other charges are considered by either party to be necessary, desirable and in the public interest.



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### **SUPPLEMENTAL CHARGES:**

Rates for supplemental services are provided in Schedule "A".

### Notes:

1. All demand charges are paid monthly during the term of the contract for not less than one year unless Union, in its sole discretion, accepts a term of less than one year.

### **OVERRUN SERVICE:**

### 1. Annual Storage Space

#### **Authorized**

Authorized Overrun is provided as Storage/Balancing Service. It is payable on all quantities on any Day in excess of the customer's contracted Maximum Storage Space. Overrun will be authorized by Union at is sole discretion. Storage Space Overrun equal to the customer's firm deliveries from TCPL: less the customer's Firm Daily Contract Demand, all multiplied by the Days of Interruption called during the period of November 1 to March 31, will be automatically authorized until the following July 1.

### Unauthorized

If in any month, the customer has gas in storage in excess of the contracted Maximum Storage Space, and which has not been authorized by Union or provided for under a short term supplemental storage service, such an event will constitute an occurrence of Unauthorized Overrun. The Unauthorized Overrun rate will be \$6.000 per GJ applied to the greatest excess for each occurrence.

If on any Day the gas storage balance for the account of the customer is less than zero, the Unauthorized Overrun charge will apply for each GJ of gas below a zero inventory level and this amount of gas shall be deemed not to have been withdrawn from storage. The gas shall be deemed to have been sold to the customer at the highest spot price at Dawn in the month of occurrence and the month following occurrence as identified in the Canadian Gas Price Reporter and shall not be less than Union's approved weighted average cost of gas If the customer has contracted to provide its own deliverability inventory, the zero inventory level shall be deemed to mean twenty percent (20%) of the Annual Firm Storage Space.

# 2. Injection, Withdrawals and Transportation

### Authorized

The following Overrun rates are applied to any quantities transported, injected or withdrawn in excess of 103% of the Contract parameters. Overrun will be authorized by Union at its sole discretion.

Automatic authorization of Injection Overrun will be given during all Days a customer has been interrupted.

# Firm or Interruptible Service

	Union Providing Compressor Fuel	<del>-</del>	
	Commodity Charge	Fuel Ratio	Commodity Charge
Storage Injections	\$0.087/GJ	0.881%	\$0.056/GJ
Storage Withdrawals	\$0.087/GJ	0.881%	\$0.056/GJ
Transportation	1.5117 ¢/m³	0.323%	1.4671 ¢/m³
<u>Cap-and-Trade Charges (in addition to Transportation Charge)</u> Cap-and-Trade Customer-Related Charge (if applicable) Cap-and-Trade Facility-Related Charge	3.3181 ¢/m³ 0.0167 ¢/m³		3.3181 ¢/m³ 0.0167 ¢/m³



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### Unauthorized

For all quantities on any Day in excess of 103% of the customer's contractual rights, for which authorization has not been received, the customer will be charged the identified unauthorized overrun charge, as appropriate.

Unauthorized Overrun Storage Injections and Withdrawals Charge	\$1.500	per GJ	
Unauthorized Overrun Transportation Charge	5.8435	¢ per m³	
<u>Cap-and-Trade Charges (in addition to Transportation Charge)</u> Cap-and-Trade Customer-Related Charge (if applicable) Cap-and-Trade Facility-Related Charge	3.3181 0.0297	¢ per m³ ¢ per m³	

# **Unauthorized Overrun Non-Compliance Rate:**

Unauthorized overrun gas taken any month during a period when a notice of interruption is in effect shall be paid for at the rate of 233.7000 ¢ per m³ (\$60 per GJ) for the delivery.

# 3. Storage / Balancing Service

**Authorized** 

The following Overrun rates are applied to any quantities stored in excess of the Contract parameters. Overrun will be authorized by Union Gas at its sole discretion.

Space	Firm Service <u>Rate/GJ</u> \$6.000
Injection / Withdrawal	\$0.000
Maximum	\$6.000

### **OTHER SERVICES & CHARGES:**

# 1. Monthly Charge

In addition to the rates and charges described previously for each Point of Consumption, a Monthly Charge shall be applied as follows:

Monthly Charge \$1,895.82

# 2. Diversion of Gas

The availability of the right to divert gas will be based on Union's ability to accommodate the diversion. The price to be charged for the right to divert shall be determined through negotiation.

# 3. Delivery Obligations

Unless otherwise authorized by Union, all other customers who are delivering gas to Union under direct purchase arrangements must obligate to deliver at a point(s) specified by Union and must acquire and maintain firm transportation on all upstream pipeline systems. Customers initiating direct purchase arrangements, who previously received Gas Supply service, must also accept, unless otherwise authorized by Union, an assignment from Union of transportation capacity on upstream pipeline systems.



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# 4. Additional Service Information

Additional information on Union's T1 service offering can be found at: www.uniongas.com/business/account-services/unionline/contracts-rates/T1-service-features

The additional information consists of, but is not limited to, the following:

- Storage space and deliverability entitlement;
- ii. The determination of gas supply receipt points and delivery obligations;
- iii. The nomination schedule;
- iv. The management of multiple redelivery points by a common fuel manager; and
- v. The availability of supplemental transactional services including title transfers.

# 5. Parkway Delivery Commitment Incentive ("PDCI")

For all Parkway Delivery Obligation ("PDO") volumes delivered to Union.

Rate/GJ

PDCI

\$(0.159)

# (D) Delayed Payment

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

Effective January 1, 2018 O.E.B. Order # EB-2017-0087 Chatham, Ontario

Supersedes EB-2017-0278 Rate Schedule effective October 1, 2017.



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# STORAGE AND TRANSPORTATION RATES FOR CONTRACT CARRIAGE CUSTOMERS

# (A) Availability

Available to customers in Union's Southern Delivery Zone.

# (B) Applicability

To a customer:

- a) who has a daily firm contracted demand of at least 140 870 m<sup>3</sup>. Firm and/or interruptible daily contracted demand of less than 140,870 m<sup>3</sup> cannot be combined for the purposes of qualifying for this rate class; and
- b) who enters into a Carriage Service Contract with Union for the transportation or the storage and transportation of Gas for use at facilities located within Union's gas franchise area; and
- c) who has meters with electronic recording at each Point of Consumption; and
- d) who has site specific energy measuring equipment that will be used in determining energy balances; and
- e) for whom Union has determined transportation and/or storage capacity is available.

For the purposes of qualifying for a rate class, the total quantities of gas consumed or expected to be consumed on the customer's contiguous property will be used, irrespective of the number of meters installed.

# (C) Rates

The following rates shall be charged for all quantities contracted or handled as appropriate. The identified rates represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated, which may be higher than the identified rates.

# **STORAGE SERVICE:**

	Demand Charge <u>Rate/GJ/mo</u>	Commodity Charge <u>Rate/GJ</u>	omers Providing <u>Compressor Fuel</u> Commodity  Charge <u>Rate/GJ</u>
a) Annual Firm Storage Space Applied to contracted Maximum Annual Storage Space	\$0.011		
b) Annual Firm Injection/Withdrawal Right: Applied to the contracted Maximum Annual Firm Injection/Withdrawal Right Union provides deliverability Inventory Customer provides deliverability Inventory (4)	\$1.457 \$1.184		
c) Incremental Firm Injection Right: Applied to the contracted Maximum Incremental Firm Injection Right	\$1.184		
d) Annual Interruptible Withdrawal Right: Applied to the contracted Maximum Annual Interruptible Withdrawal Right	\$1.184		



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	Demond	0		omers Providing  Compressor Fuel
	Demand Charge	Commodity Charge	Fuel	Commodity Charge
a) Mills drawal Common ellips	Rate/GJ/mo	Rate/GJ	<u>Ratio</u>	Rate/GJ
e) Withdrawal Commodity Paid on all quantities withdrawn from storage up to the Maximum Daily Storage Withdrawal Quantity		\$0.022	0.408%	\$0.008
f) Injection Commodity  Paid on all quantities injected into  storage up to the Maximum Daily				
Storage Injection Quantity		\$0.022	0.408%	\$0.008
g) Short Term Storage / Balancing Service Maximum		\$6.000		
h) Daily Variance Account Interruptible Injections/Withdrawals				
Paid on all quantities withdrawn from and				
injected into the Daily Variance Account up to the Maximum Injection/Withdrawal Quantity		\$0.087	0.881%	\$0.056

### Notes:

- 1. Demand charges for Annual Services are paid monthly during the term of the contract for not less than one year unless Union, in its sole discretion, accepts a term of less than one year. Demand charges apply whether Union or the customer provides the fuel.
- 2. Annual Firm Injection Rights are equal to 100% of their respective Annual Firm Withdrawal Rights. Injection Rights in excess of the Annual Firm Injection Rights will be charged at the Incremental Firm Injection Right.
- 3. Annual Firm Storage Space

The maximum storage space available to a customer at the rates specified herein is determined by one of the following storage allocation methodologies:

# 3.1 Aggregate Excess

Aggregate excess is the difference between the customer's total 151-day winter consumption (November 1 through March 31) and the customer's average daily consumption (Daily Contract Quantity) for the contract year multiplied by 151 days of winter. This calculation will be done using two years of historical data (with 25% weighting for each year) and one year of forecast data (with 50% weighting). If a customer is new, or an existing customer is undergoing a significant change in operations, the allocation will be based on forecast consumption only, as negotiated between Union and the customer. Once sufficient historical information is available for the customer, the standard calculation will be done. At each contract renewal, the aggregate excess calculation will be performed to set the new space allocation.

## 3.2 Obligated daily contract quantity multiple of 15

Obligated daily contract quantity is the firm daily quantity of gas which the customer must deliver to Union. The 15 x obligated daily contract quantity calculation will be done using the daily contract quantity for the upcoming contract year. At each contract renewal, the 15 x obligated daily contract quantity calculation will be performed to set the new space allocation.

3.3 For new, large (daily firm transportation demand requirements in excess of 1,200,000 m³/day) gas fired power generation customers, storage space is determined by peak hourly consumption x 24 x 4 days. Should the customer elect firm deliverability less than their maximum entitlement (see Note 4.2), the maximum storage space available at the rates specified herein is 10 x firm storage deliverability contracted, not to exceed peak hourly consumption x 24 x 4 days.

### 3.4 Contract Demand mulitple of 10

For customers with non-obligated supply and who are not eligible for Section 3.3 above, the maximum storage space is determined as 9 x firm daily Contract Demand and the Daily Variance Account maximum storage space is determined as 1 x firm daily Contract Demand.

Customers may contract for less than their maximum entitlement of firm storage space.



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4. Annual Injection/Withdrawal Right

The maximum level of deliverability available to a customer at the rates specified herein is determined by one of the following methodologies:

- 4.1 The greater of obligated daily contract quantity or firm daily contract demand less obligated daily contract quantity.
- 4.2 For new, large (daily firm transportation demand requirements in excess of 1,200,000 m³/day) gas fired power generation customers, the maximum entitlement of firm storage deliverability is 24 times the customer's peak hourly consumption, with 1.2% firm deliverability available at the rates specified herein.
- 4.3 For customers with non-obligated supply and are not eligible for Section 4.2 above, the firm storage deliverability is determined as 1.2% of firm storage space, excluding the firm storage space associated with the Daily Variance Account. For the Daily Variance Account, the storage deliverability is available on an interruptible basis up to the customer's firm contracted demand.

Customers may contract for less than their maximum entitlement of deliverability. A customer may contract up to this maximum entitlement with a combination of firm and interruptible deliverability as specified in Section (C) Storage Service.

- 5. Additional storage space or deliverability, in excess of the allocated entitlements per Notes 3 and 4, may be available at market prices.
- 6. Storage Space and Withdrawal Rights are not assignable to any other party without the prior written consent of Union.
- 7. Deliverability Inventory being defined as 20% of annual storage space.
- 8. Short Term Storage / Balancing Service is:
  - i) a combined space and interruptible deliverability service for short-term or off-peak storage in Union's storage facilities, or
  - ii) short-term firm deliverability, or
  - iii) a component of an operational balancing service offered.

In negotiating the rate to be charged for service, the matters that are to be considered include:

- i) The minimum amount of storage service to which a customer is willing to commit,
- ii) Whether the customer is contracting for firm or interruptible service during Union's peak or non-peak periods,
- iii) Utilization of facilities, and
- iv) Competition.

# TRANSPORTATION CHARGES:

TRANSI ORTATION CHARGES.		Union Providing Compressor Fuel		omers Providing Compressor Fuel	
	Demand Charge	Commodity Charge	Fuel Ratio (5)	Commodity Charge	- -
	Rate/m³/mo	Rate/m <sup>3</sup>		Rate/m <sup>3</sup>	
a) Annual Firm Transportation Demand     Applied to the Firm Daily Contract Demand					
First 140,870 m <sup>3</sup> per month	32.6795 ¢				
All over 140,870 m <sup>3</sup> per month	17.2859 ¢				
b) Firm Transportation Commodity Paid on all firm quantities redelivered to the customer's Point(s) of Consumption Commodity Charge (All volumes)		0.0690 ¢	0.295%	0.0282 ¢	1
<ul> <li>c) Interruptible Transportation Commodity         Paid on all interruptible quantities redelivered to the customer's Point(s) of Consumption     </li> </ul>					
Maximum		6.5059 ¢	0.295%	6.4651 ¢	
<u>Cap-and-Trade Charges (in addition to Transportation Com</u> Cap-and-Trade Customer-Related Charge (if applicable) Cap-and-Trade Facility-Related Charge	modity Charge)	3.3181 ¢ 0.0115 ¢		3.3181 ¢ 0.0115 ¢	



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### Notes:

- 1. All demand charges are paid monthly during the term of the contract for not less than one year unless Union, at its sole discretion, accepts a term of less than one year. Demand charges apply whether Union or the customer provides the fuel.
- 2. Effective January 1, 2007, new customers and existing customers with incremental daily firm demand requirements in excess of 1,200,000 m<sup>3</sup>/day and who are directly connected to i) the Dawn-Trafalgar transmission system in close proximity to Parkway or ii) a third party pipeline, have the option to pay for service using a Billing Contract Demand. The Billing Contract Demand shall be determined by Union such that the annual revenues over the term of the contract will recover the invested capital, return on capital and operating and maintenance costs associated with the dedicated service in accordance with Union's system expansion policy. The firm transportation demand charge will be applied to the Billing Contract Demand. For customers choosing the Billing Contract Demand option, the authorized transportation overrun rate will apply to all volumes in excess of the Billing Contract Demand but less than the daily firm demand requirement.
- 3. In negotiating the rate to be charged for the transportation of gas under Interruptible Transportation, the matters that are to be considered include:
  - a) The amount of the interruptible transportation for which customer is willing to contract,
  - b) The anticipated load factor for the interruptible transportation quantities,
  - c) Interruptible or curtailment provisions, and
  - d) Competition.
- 4. In each contract year, the customer shall pay for a Minimum Interruptible Transportation Activity level as specified in the Contract. Overrun activity will not contribute to the minimum activity level.
- 5. Transportation fuel ratios do not apply to customers served from dedicated facilities directly connected to third party transmission systems with custody transfer metering at the interconnect.
- 6. Firm transportation fuel ratio does not apply to new customers or existing customers with incremental daily firm demand requirements in excess of 1,200,000 m<sup>3</sup>/day that contract for M12 Dawn to Parkway transportation service equivalent to 100% of their daily firm demand requirement. If a customer with a daily firm demand requirement in excess of 1,200,000 m<sup>3</sup>/day contracts for M12 Dawn to Parkway transportation service at less than 100% of their firm daily demand requirement, the firm transportation fuel ratio will be applicable to daily volumes not transported under the M12 transportation contract.
- 7. Either Union or a customer, or potential customer, may apply to the Ontario Energy Board to fix rates and other charges different from the rates and other charges specified herein if the changed rates and other charges are considered by either party to be necessary, desirable and in the public interest.

### **SUPPLEMENTAL CHARGES:**

Rates for supplemental services are provided in Schedule "A".

# Notes:

1. All demand charges are paid monthly during the term of the contract for not less than one year unless Union, in its sole discretion, accepts a term of less than one year.

# **OVERRUN SERVICE:**

1. Annual Storage Space

Authorized

Authorized Overrun is provided as Storage/Balancing Service. It is payable on all quantities on any Day in excess of the customer's contracted Maximum Storage Space. Overrun will be authorized by Union at is sole discretion. Storage Space Overrun equal to the customer's firm deliveries from TCPL: less the customer's Firm Daily Contract Demand, all multiplied by the Days of Interruption called during the period of November 1 to March 31, will be automatically authorized until the following July 1. Authorized Overrun is not applicable to the Daily Variance Account.



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If in any month, the customer has gas in storage in excess of the contracted Maximum Storage Space, and which has not been authorized by Union or provided for under a short term supplemental storage service, such an event will constitute an occurrence of Unauthorized Overrun. The Unauthorized Overrun rate will be \$6.000 per GJ applied to the greatest excess for each occurrence.

Effective

If on any Day the gas storage balance for the account of the customer is less than zero, the Unauthorized Overrun charge will apply for each GJ of gas below a zero inventory level and this amount of gas shall be deemed not to have been withdrawn from storage. The gas shall be deemed to have been sold to the customer at the highest spot price at Dawn in the month of occurrence and the month following occurrence as identified in the Canadian Gas Price Reporter and shall not be less than Union's approved weighted average cost of gas If the customer has contracted to provide its own deliverability inventory, the zero inventory level shall be deemed to mean twenty percent (20%) of the Annual Firm Storage Space.

# 2. Injection, Withdrawals and Transportation

# <u>Authorized</u>

The following Overrun rates are applied to any quantities transported, injected or withdrawn in excess of 103% of the Contract parameters. Overrun will be authorized by Union at its sole discretion. The Authorized Overrun rates are not applicable to the Daily Variance Account.

Automatic authorization of Injection Overrun will be given during all Days a customer has been interrupted.

	Union Providing Compressor Fuel		omers Providing Compressor Fuel	
	Commodity Charge	Fuel Ratio	Commodity Charge	
Storage Injections	\$0.087/GJ	0.881%	\$0.056/GJ	
Storage Withdrawals	\$0.087/GJ	0.881%	\$0.056/GJ	
Transportation	1.1434 ¢/m³	0.295%	1.1026 ¢/m³	
<u>Cap-and-Trade Charges (in addition to Transportation Charge)</u> Cap-and-Trade Customer-Related Charge (if applicable) Cap-and-Trade Facility-Related Charge	3.3181 ¢/m³ 0.0115 ¢/m³		3.3181 ¢/m³ 0.0115 ¢/m³	

# **Unauthorized**

For all quantities on any Day in excess of 103% of the customer's contractual rights, for which authorization has not been received, the customer will be charged the identified unauthorized overrun charge, as appropriate. For the Daily Variance Account, this unauthorized storage overrun rate will be charged on all quantities in excess of the Daily Variance Account maximum injection/withdrawal quantity.

Unauthorized Overrun Storage Injections and Withdrawals Charge	\$1.500	per GJ
Unauthorized Overrun Transportation Charge	5.8435	¢ per m³
<u>Cap-and-Trade Charges (in addition to Transportation Charge)</u> Cap-and-Trade Customer-Related Charge (if applicable) Cap-and-Trade Facility-Related Charge	3.3181 0.0297	¢ per m³ ¢ per m³

## Unauthorized Overrun Non-Compliance Rate:

Unauthorized overrun gas taken any month during a period when a notice of interruption is in effect shall be paid for at the rate of 233.7000 ¢ per m<sup>3</sup> (\$60 per GJ) for the delivery.



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# 3. Storage / Balancing Service

Authorized

The following Overrun rates are applied to any quantities stored in excess of the Contract parameters. Overrun will be authorized by Union Gas at its sole discretion.

 $\begin{array}{ccc} & & & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ &$ 

Injection / Withdrawal
Maximum \$6.000

### **OTHER SERVICES & CHARGES:**

# 1. Monthly Charge

In addition to the rates and charges described previously for each Point of Consumption, a Monthly Charge shall be applied as follows:

Monthly Charge \$5,437.16

### 2. Diversion of Gas

The availability of the right to divert gas will be based on Union's ability to accommodate the diversion. The price to be charged for the right to divert shall be determined through negotiation.

# 3. Delivery Obligations

The delivery options available to customers are detailed at: www.uniongas.com/business/account-services/unionline/contracts-rates/T1-service-features

Unless otherwise authorized by Union, all other customers who are delivering gas to Union under direct purchase arrangements must obligate to deliver at a point(s) specified by Union and must acquire and maintain firm transportation on all upstream pipeline systems. Customers initiating direct purchase arrangements, who previously received Gas Supply service, must also accept, unless otherwise authorized by Union, an assignment from Union of transportation capacity on upstream pipeline systems.

# 4. Nominations

Effective January 1, 2007, new customers and existing customers with incremental daily firm demand requirements in excess of 1,200,000 m³/day who have non obligated deliveries may contract to use Union's 5 additional nomination windows (13 in total) for the purposes of delivering gas to Union. These windows are in addition to the standard NAESB and TCPL STS nomination windows. Customers taking the additional nomination window service will pay an additional monthly demand charge of \$0.000/GJ/day/month multiplied by the non-obligated daily contract quantity.



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Rate/GJ

### 5. Additional Service Information

Additional information on Union's T2 service offering can be found at: www.uniongas.com/business/account-services/unionline/contracts-rates/T1-service-features

The additional information consists of, but is not limited to, the following:

- i. Storage space and deliverability entitlement;
- ii. The determination of gas supply receipt points and delivery obligations;
- iii. The nomination schedule:
- iv. The management of multiple redelivery points by a common fuel manager; and
- v. The availability of supplemental transactional services including title transfers.

# 6. Parkway Delivery Commitment Incentive ("PDCI")

For all Parkway Delivery Obligation ("PDO") volumes delivered to Union.

PDCI \$(0.159)

# (D) Delayed Payment

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

Effective January 1, 2018

O.E.B. Order # EB-2017-0087

Chatham, Ontario

Supersedes EB-2017-0278 Rate Schedule effective October 1, 2017.



Effective 2018-01-01 **Rate T3** Page 1 of 5

# STORAGE AND TRANSPORTATION RATES FOR CONTRACT CARRIAGE CUSTOMERS

# (A) Availability

Available to customers in Union's Southern Delivery Zone.

# (B) Applicability

To a Distributor:

- a) whose minimum annual transportation of natural gas is 700 000 m<sup>3</sup> or greater; and
- b) who enters into a Carriage Service Contract with Union for the transportation or the storage and transportation of Gas for distribution to its customers; and
- c) who has meters with electronic recording at each Point of Redelivery; and
- d) for whom Union has determined transportation and/or storage capacity is available.

# (C) Rates

The following rates shall be charged for all quantities contracted or handled as appropriate. The identified rates represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated, which may be higher than the identified rates.

### STORAGE SERVICE:

				mers Providing Compressor Fuel
	Demand	Commodity	THEIL OWIT	Commodity
	Charge	Charge	Fuel	Charge
) A 15' C' C	Rate/GJ/mo	Rate/GJ	<u>Ratio</u>	Rate/GJ
<ul> <li>a) Annual Firm Storage Space</li> <li>Applied to contracted Maximum</li> <li>Annual Storage Space</li> </ul>	\$0.011			
<ul> <li>b) Annual Firm Injection/Withdrawal Right:</li> <li>Applied to the contracted Maximum</li> <li>Annual Firm Injection/Withdrawal Right</li> </ul>				
Union provides deliverability Inventory	\$1.457			
Customer provides deliverability Inventory (4)	\$1.184			
c) Incremental Firm Injection Right: Applied to the contracted Maximum Incremental Firm Injection Right	\$1.184			
d) Annual Interruptible Withdrawal Right: Applied to the contracted Maximum Annual Interruptible Withdrawal Right	\$1.184			
e) Withdrawal Commodity Paid on all quantities withdrawn from storage up to the Maximum Daily Storage Withdrawal Quantity		\$0.022	0.408%	\$0.008
<ul> <li>f) Injection Commodity         Paid on all quantities injected into storage up to the Maximum Daily Storage Injection Quantity     </li> </ul>		\$0.022	0.408%	\$0.008
g) Short Term Storage / Balancing Service Maximum		\$6.000		



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#### Notes:

- 1. Demand charges for Annual Services are paid monthly during the term of the contract for not less than one year unless Union, in its sole discretion, accepts a term of less than one year. Demand charges apply whether Union or the customer provides the fuel.
- 2. Annual Firm Injection Rights are equal to 100% of their respective Annual Firm Withdrawal Rights. Injection Rights in excess of the Annual Firm Injection Rights will be charged at the Incremental Firm Injection Right.
- 3. Annual Firm Storage Space

The maximum storage space available to a customer at the rates specified herein is determined by one of the following storage allocation methodologies:

3.1 Aggregate Excess

Aggregate excess is the difference between the customer's total 151-day winter consumption (November 1 through March 31) and the customer's average daily consumption (Daily Contract Quantity) for the contract year multiplied by 151 days of winter. This calculation will be done using two years of historical data (with 25% weighting for each year) and one year of forecast data (with 50% weighting). If a customer is new, or an existing customer is undergoing a significant change in operations, the allocation will be based on forecast consumption only, as negotiated between Union and the customer. Once sufficient historical information is available for the customer, the standard calculation will be done. At each contract renewal, the aggregate excess calculation will be performed to set the new space allocation.

3.2 Obligated daily contract quantity multiple of 15

Obligated daily contract quantity is the firm daily quantity of gas which the customer must deliver to Union. The 15 x obligated daily contract quantity calculation will be done using the daily contract quantity for the upcoming contract year. At each contract renewal, the 15 x obligated daily contract quantity calculation will be performed to set the new space allocation.

Customers may contract for less than their maximum entitlement of firm storage space.

4. Annual Injection/Withdrawal Right

The maximum level of deliverability available to a customer at the rates specified herein is determined to be the greater of obligated daily contract quantity or firm daily contract demand less obligated daily contract quantity.

Customers may contract for less than their maximum entitlement of deliverability. A customer may contract up to this maximum entitlement with a combination of firm and interruptible deliverability as specified in Section (C) Storage Service.

- 5. Additional storage space or deliverability, in excess of the allocated entitlements per Notes 3 and 4, may be available at market prices.
- 6. Storage Space and Withdrawal Rights are not assignable to any other party without the prior written consent of Union.
- 7. Deliverability Inventory being defined as 20% of annual storage space.
- 8. Short Term Storage / Balancing Service is:
  - i) a combined space and interruptible deliverability service for short-term or off-peak storage in Union's storage facilities, OR
  - ii) short-term firm deliverability, OR
  - iii) a component of an operational balancing service offered.

In negotiating the rate to be charged for this service, the matters that are to be considered include:

- i) The minimum amount of storage service to which a customer is willing to commit,
- ii) Whether the customer is contracting for firm or interruptible service during Union's peak or non-peak periods,
- iii) Utilization of facilities, and
- iv) Competition.



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# TRANSPORTATION CHARGES:

		O Company		stomers Providing n Compressor Fuel	
	Demand Charge	Commodity Charge	Fuel Ratio	Commodity Charge	
	Rate/m³/mo	Rate/m <sup>3</sup>		Rate/m <sup>3</sup>	
a) Annual Firm Transportation Demand     Applied to the Firm Daily Contract Demand	17.9887 ¢				
<ul> <li>b) Firm Transportation Commodity</li> <li>Paid on all firm quantities redelivered to the Customer's Point(s) of Redelivery</li> </ul>		0.1287 ¢	0.412%	0.0717 ¢	[
<u>Cap-and-Trade Charges (in addition to Transportation</u> Cap-and-Trade Facility-Related Charge	Commodity Charge)	0.0235 ¢		0.0235 ¢	

### Notes:

1. All demand charges are paid monthly during the term of the contract for not less than one year unless Union, in its sole discretion, accepts a term of less than one year. Demand charges apply whether Union or the customer provides the fuel.

### SUPPLEMENTAL CHARGES

Rates for supplemental services are provided in Schedule "A".

# Notes:

1. All demand charges are paid monthly during the term of the contract for not less than one year unless Union, in its sole discretion, accepts a term of less than one year.

### **OVERRUN SERVICE**

# 1. Annual Storage Space

### **Authorized**

Authorized Overrun is provided as Storage/Balancing Service. It is payable on all quantities on any Day in excess of the customer's contracted Maximum Storage Space. Overrun will be authorized by Union at is sole discretion.

# Unauthorized

If in any month, the customer has gas in storage in excess of the contracted Maximum Storage Space, and which has not been authorized by Union or provided for under a short term supplemental storage service, such an event will constitute an occurrence of Unauthorized Overrun. The Unauthorized Overrun rate will be \$6.000 per GJ applied to the greatest excess for each occurrence.

If on any Day, the gas storage balance for the account of the customer is less than zero, the Unauthorized Overrun charge will apply for each GJ of gas below a zero inventory level and this amount of gas shall be deemed not to have been withdrawn from storage. The gas shall be deemed to have been sold to the customer at the highest spot price at Dawn in the month of occurrence and the month following occurrence as identified in the Canadian Gas Price Reporter and shall not be less than Union's approved weighted average cost of gas. If the customer has contracted to provide its own deliverability inventory, the zero inventory level shall be deemed to mean twenty percent (20%) of the Annual Firm Storage Space.



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# 2. Injection, Withdrawals and Transportation

# <u>Authorized</u>

The following Overrun rates are applied to any quantities transported, injected or withdrawn in excess of 103% of the Contract parameters. Overrun will be authorized by Union at its sole discretion.

	Union Providing Compressor Fuel		For Customers Providing Their Own Compressor Fuel	
	Commodity Charge	Fuel Ratio	Commodity Charge	_
Storage Injections	\$0.087/GJ	0.881%	\$0.056/GJ	
Storage Withdrawals	\$0.087/GJ	0.881%	\$0.056/GJ	
Transportation	0.7201 ¢/m³	0.412%	0.6631 ¢/m³	I
<u>Cap-and-Trade Charges (in addition to Transportation Charge)</u> Cap-and-Trade Facility-Related Charge	0.0235 ¢/m³		0.0235 ¢/m³	

# **Unauthorized**

For all quantities on any Day in excess of 103% of the customer's contractual rights, for which authorization has not been received, the customer will be charged the identified unauthorized overrun charge, as appropriate.

Unauthorized Overrun Storage Injections and Withdrawals Charge	\$9.243	per GJ
Unauthorized Overrun Transportation Charge	36.0000	¢ per m³
<u>Cap-and-Trade Charges (in addition to Transportation Charge)</u> Cap-and-Trade Facility-Related Charge	0.0235	¢ per m³

# 3. Short Term Storage Services

# Authorized

The following Overrun rates are applied to any quantities stored in excess of the Contract parameters. Overrun will be authorized by Union Gas at its sole discretion.

	Firm Service <u>Rate/GJ</u>
Space	\$6.000
Injection / Withdrawal Maximum	\$6.000



Effective 2018-01-01 **Rate T3** Page 5 of 5

### **OTHER SERVICES & CHARGES**

# 1. Monthly Charge

In addition to the rates and charges described previously for each Point of redelivery a Monthly Charge shall be applied to each specific customer as follows:

Monthly
<u>Charge</u>

 City of Kitchener
 \$ 19,838.78

 NRG
 \$ 3,045.46

 Six Nations
 \$ 1,015.15

If a customer combines Sales Service with Contract Carriage Service, the monthly charge will be prorated such that the customer will under both services pay no more than the above monthly charge.

# 2. Diversion of Gas

The availability of the right to divert gas will be based on Union's ability to accommodate the diversion. The price to be charged for the right to divert shall be determined through negotiation.

3. Unless otherwise authorized by Union, customers who are delivering gas to Union under direct purchase arrangements must obligate to deliver at a point(s) specified by Union and must acquire and maintain firm transportation on all upstream pipeline systems.
Customers initiating direct purchase arrangements must also accept, unless otherwise authorized by Union, an assignment from Union of transportation capacity on upstream pipeline systems.

# 4. Parkway Delivery Commitment Incentive ("PDCI")

For all Parkway Delivery Obligation ("PDO") volumes delivered to Union.

Rate/GJ

PDCI \$(0.159)

# (D) Delayed Payment

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

Effective January 1, 2018

O.E.B. Order # EB-2017-0087

Chatham, Ontario

Supersedes EB-2017-0278 Rate Schedule effective October 1, 2017.



Effective 2018-01-01 Schedule "A"

# **Gas Supply Charges**

# (A) Availability:

Available to customers in Union's Southern Delivery Zone.

# (B) Applicability:

To all sales customers served under Rate M1, Rate M2, Rate M4, Rate M5A, Rate M7, Rate M9, Rate M10 and storage and transportation customers taking supplemental services under Rate T1, Rate T2 and Rate T3.

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# Notes:

- (1) The Commodity and Fuel rate includes a gas supply administration charge of 0.1893 cents/m³.
- (2) The charge for banked gas purchases shall be the higher of the daily spot gas cost at Dawn in the month of or the month following the month in which gas is sold under this rate and shall not be less than Union's approved weighted average cost of gas.
- (3) Reflects the "back to back" price plus a gas supply administration charge.

Effective January 1, 2018

O.E.B. Order # EB-2017-0087

Chatham, Ontario

Supersedes EB-2017-0278 Rate Schedule effective October 1, 2017.



Effective 2018-01-01 **Rate U2** Page 1 of 3

### STORAGE RATES FOR UNBUNDLED CUSTOMERS

### (A) Availability

Available to customers in Union's Southern Delivery Zone.

# (B) Applicability

To a customer, or an agent, who is authorized to service residential and non-contract commercial and industrial end-users paying for the Monthly Fixed Charge and Delivery charge under Rate M1 or Rate M2:

- a) who enters into an Unbundled Service Contract with Union for the storage of Gas for use at facilities located within Union's gas franchise area;
- b) who contracts for Standard Peaking Service (SPS) with Union unless the customer can demonstrate that it has a replacement to the deliverability available in the SPS physically tied into Union's system and an OEB approved rate to provide the SPS replacement service;
- c) who accepts daily estimates of consumption at Points of Consumption as prepared by Union so that they may nominate an equivalent amount from storage, upstream transportation, or Ontario Producers authorized to sell to third parties;
- d) who nominates injections and withdrawals from storage and deliveries on upstream pipeline systems daily or Ontario Producers authorized to sell to third parties;
- e) for whom Union has determined storage capacity is available; and
- f) who accepts a monthly bill as prepared by Union.

### (C) Rates

The following rates shall be charged for all volumes contracted or handled as appropriate. The identified rates represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated, which may be higher than the identified rates.

# STORAGE SERVICE

i)	Standard Storage Service (SSS)	Demand Charge <u>Rate/GJ/mo</u>	Fuel <u>Ratio</u>	Commodity Charge <u>Rate/GJ</u>
'/	a) Combined Storage Space & Deliverability     Applied to contracted Maximum Storage Space	\$0.023		
	b) Injection Commodity		0.408%	\$0.026
	c) Withdrawal Commodity		0.408%	\$0.026
ii)	Standard Peaking Service (SPS)			
	a) Combined Storage Space & Deliverability     Applied to contracted Maximum Storage Space	\$0.114		
	b) Injection Commodity		0.408%	\$0.026
	c) Withdrawal Commodity		0.881%	\$0.026
iii)	Supplemental Service			
	a) Incremental Firm Injection Right: (5)     Applied to the contracted Maximum     Incremental Firm Injection Right	\$1.028		



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Demand Charge Fuel Rate/GJ/mo Ratio

Commodity Charge Rate/GJ

b) Incremental Firm Withdrawal Right: (5) Applied to the contracted Maximum Incremental Firm Withdrawal Right

\$1.028

c) Short Term Storage / Balancing Service
- Maximum

\$6.000

# Notes:

- 1. Demand charges for Annual Services are paid monthly during the term of the Contract, which shall not be less than one year, unless Union, in its sole discretion, accepts a term of less than one year.
- 2. Daily Firm Injection and Withdrawal Rights shall be pursuant to the Storage Contract.
- 3. Storage Space, Withdrawal Rights, and Injection Rights are not assignable to any other party without the prior written consent of Union and where necessary, approval from the Ontario Energy Board.
- 4. Short Term Storage / Balancing service (less than 2 years) is:
- i) a combined space and interruptible deliverability service for short-term or off-peak storage in Union's storage facilities, OR
- ii) short-term incremental firm deliverability, OR
- iii) a component of an operational balancing service offered.

In negotiating the rate to be charged for service, the matters that are to be considered include:

- i) The minimum amount of storage service to which a customer is willing to commit,
- ii) Whether the customer is contracting for firm or interruptible service during Union's peak or non-peak periods,
- iii) Utilization of facilities,
- iv) Competition, and
- v) Term.
- 5. Union's ability to offer incremental injection and withdrawal rights is subject to annual asset availability.

# **OVERRUN SERVICE**

### 1. Injection and Withdrawal

Authorized	Fuel <u>Ratio</u>	Commodity Charge <u>Rate/GJ</u>
Injection	0.881%	\$0.060
Withdrawal	0.881%	\$0.060

# Unauthorized

If in any month, the customer has gas in storage in excess of the contracted Maximum Storage Space or the gas storage balance for the account of the customer is less than zero or the customer has injected or withdrawn volumes from storage which exceeds their contractual rights, and which has not been authorized by Union or provided for under a short term storage/balancing service, such an event will constitute an occurrence of Unauthorized Overrun. The Unauthorized Overrun rate during the November 1 to April 15 period will be \$60.00 per GJ. The Unauthorized Overrun rate during the April 16 to October 31 period will be \$6.000 per GJ.



Effective 2018-01-01 **Rate U2** Page 3 of 3

# **OTHER SERVICES & CHARGES**

1. Unless otherwise authorized by Union, customers who are delivering gas to Union under direct purchase arrangements must commit to provide a call at Parkway, throughout the winter period, for a specified number of days. Customers initiating direct purchase arrangements, who previously received Gas Supply service, must also accept, unless otherwise authorized by Union, an assignment from Union of transportation capacity on upstream pipeline systems.

# 2. Parkway Delivery Commitment Incentive ("PDCI")

For all Parkway Delivery Obligation ("PDO") volumes delivered to Union.

PDCI

\$(0.159)

# (D) Delayed Payment

The monthly late payment charge equal to 1.5% per month or 18% per annum (for an approximate effective rate of 19.56% per annum) multiplied by the total of all unpaid charges will be added to the bill if full payment is not received by the late payment effective date, which is 20 days after the bill has been issued.

Effective January 1, 2018 O.E.B. Order # EB-2017-0087 Chatham, Ontario



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# **TRANSPORTATION RATES**

# (A) Applicability

The charges under this schedule shall be applicable to a Shipper who enters into a Transportation Service Contract with Union.

# **Applicable Points**

Dawn as a receipt point: Dawn (TCPL), Dawn (Facilities), Dawn (Tecumseh), Dawn (Vector) and Dawn (TSLE). Dawn as a delivery point: Dawn (Facilities).

# (B) Services

Transportation Service under this rate schedule shall be for transportation on Union's Dawn - Parkway facilities.

# (C) Rates

The identified rates represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated, which may be higher than the identified rates.

	Monthly Demand Charges	<u>Fuel</u>	and Commodity Charges	
	(applied to daily	Union Supplied Fuel	Shipper Suppl	ied Fuel
	contract demand)	Fuel and Commodity Charge	Fuel	Commodity Charge
	Rate/GJ	Rate/GJ	Ratio % AND	Rate/GJ
Firm Transportation (1), (5)				
Dawn to Parkway	\$3.716	Monthly fuel and commodity	Monthly fuel ratios shall	
Dawn to Kirkwall	\$3.154	rates shall be in accordance	be in accordance with	
Kirkwall to Parkway	\$0.561	with schedule "C".	schedule "C".	
M12-X Firm Transportation				
Between Dawn, Kirkwall and Parkway	\$4.590	Monthly fuel and commodity	Monthly fuel ratios shall	
•		rates shall be in accordance	be in accordance with	
		with schedule "C".	schedule "C".	
<u>Limited Firm/Interruptible Transportation (1)</u>				
Dawn to Parkway – Maximum	\$8.918	Monthly fuel and commodity	Monthly fuel ratios shall	
Dawn to Kirkwall – Maximum	\$8.918	rates shall be in accordance	be in accordance with	
		with schedule "C".	schedule "C".	
Parkway (TCPL / EGT) to Parkway (Cons) /				
Lisgar (2)	n/a	n/a	0.158%	
Cap-and-Trade Facility-Related Charges (app	lied to all quantities tr	ransported)		
Dawn to Kirkwall / Parkway (Cons) / Lisgar	•	\$0.006		\$0.006
Dawn to Parkway (TCPL / EGT)		\$0.009		\$0.009
Kirkwall to Parkway (Cons) / Lisgar		\$0.002		\$0.002
Kirkwall to Parkway (TCPL / EGT)		\$0.005		\$0.005
Parkway to Dawn / Kirkwall		\$0.003		\$0.003
Kirkwall to Dawn		\$0.002		\$0.002
Parkway (TCPL / EGT) to Parkway (Cons) /	Lisgar (2)	\$0.002		\$0.002



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\$0.002

# (C) Rates (Cont'd)

### **Authorized Overrun (3)**

Authorized overrun rates will be payable on all quantities in excess of Union's obligation on any day. The overrun charges payable will be calculated at the following rates. Overrun will be authorized at Union's sole discretion.

### Fuel and Commodity Charges

	Union Supplied Fuel	Shipper Supp	olied Fuel
	Fuel and Commodity Charge	Fuel	Commodity Charge
	Rate/GJ	Ratio % AND	Rate/GJ
<u>Transportation Overrun</u>			
Dawn to Parkway	Monthly fuel and commodity	Monthly fuel ratios shall	\$0.122
Dawn to Kirkwall	rates shall be in accordance	be in accordance with	\$0.104
Kirkwall to Parkway	with schedule "C".	schedule "C".	\$0.018
Parkway (TCPL) Overrun (4)	n/a	0.721%	n/a
M12-X Firm Transportation			
Between Dawn, Kirkwall and Parkway	Monthly fuel and commodity	Monthly fuel ratios shall	\$0.151
	rates shall be in accordance with schedule "C".	be in accordance with schedule "C".	
Cap-and-Trade Facility-Related Charges (applied to all qu	uantities transported)		
Dawn to Kirkwall / Parkway (Cons) / Lisgar	\$0.006		\$0.006
Dawn to Parkway (TCPL / EGT)	\$0.009		\$0.009
Kirkwall to Parkway (Cons) / Lisgar	\$0.002		\$0.002
Kirkwall to Parkway (TCPL / EGT)	\$0.005		\$0.005
Parkway to Dawn / Kirkwall	\$0.003		\$0.003
Kirkwall to Dawn	\$0.002		\$0.002

\$0.002

# <u>Unauthorized Overrun</u>

Parkway (TCPL / EGT) to Parkway (Cons) / Lisgar (2)

Authorized Overrun rates will be payable on all quantities up to 2% in excess of Union's contractual obligation.

The Unauthorized Overrun shall be the higher of the reported daily spot price of gas at either Dawn, Parkway, Niagara or Iroquois in the month of or the month following the month in which the overrun occurred plus 25% for all usage on any day in excess of 102% of Union's contractual obligation.

# **Nomination Variances**

Where Union and the shipper have entered into a Limited Balancing Agreement ("LBA"), the rate for unauthorized parking or drafting which results from nomination variances shall equal the "Balancing Fee" rate as described under Article XXII of TransCanada PipeLines Transportation Tariff.

Notes for Section (C) Rates:

- (1) The annual transportation commodity charge is calculated by application of the YCRR Formula, as per Section (D). The annual transportation fuel required is calculated by application of the YCR Formula, as per Section (D).
- (2) This rate is for westerly transportation within the Parkway yard, from Parkway (TCPL) or Parkway (EGT) to Parkway (Cons) or Lisgar.
- (3) For purposes of applying the YCRR Formula or YCR Formula (Section (D)) to transportation overrun quantities, the transportation commodity revenue will be deemed to be equal to the commodity charge of the applicable service as detailed in Section (B).
- (4) This ratio will be applied to all gas quantities for which Union is obligated to deliver to Parkway (Cons) or Lisgar and has agreed to deliver to Parkway (TCPL) or Parkway (EGT) on an interruptible basis. This will be in addition to any rate or ratio paid for transportation easterly to Parkway (Cons) or Lisgar.
- (5) A demand charge of \$0.070/GJ/day/month will be applicable for customers contracting for firm all day transportation service in addition to the demand charges appearing on this schedule for firm transportation service to either Kirkwall or Parkway.

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# (D) Transportation Commodity

The annual fuel charge in kind or in dollars for transportation service in any contract year shall be equal to the sum of the application of the following equation applied monthly for the 12 months April through March (The "YCRR" or "YCR" Formula). An appropriate adjustment in the fuel charges will be made in May for the previous 12 months ending March 31st to obtain the annual fuel charges as calculated using the applicable "YCRR" or "YCR" Formula. At Union's sole discretion Union may make more frequent adjustments than once per year. The YCRR and YCR adjustments must be paid/remitted to/from Shippers at Dawn within one billing cycle after invoicing.

YCR = 
$$\sum_{1}^{4} [(0.001580 \text{ X (QT1 + QT3)}) + (DSFx(QT1 + QT3)) + F_{ST}]$$
 For June 1 to Sept. 30

plus

12 
$$\Sigma$$
 [0.001580 x (QT1 + Q3)) + (DWFxQT1) + F<sub>WT</sub>] For Oct. 1 to May 31

YCRR = 
$$\sum_{1}^{4}$$
 [(0.001580 x (QT1 + QT3)) + (DSFx(QT1 + QT3)) + F<sub>ST</sub>]xR For June 1 to Sept. 30

plus

12 
$$\sum$$
 [(0.001580 x (QT1 + QT3)) + (DWFxQT1)+ F<sub>WT</sub>]xR For Oct. 1 to May 31

where:

DSF = 0.00000 for Dawn summer fuel requirements DWF = 0.0020 for Dawn winter fuel requirements

in which:

YC Yearly Commodity Required

The sum of 12 separate monthly calculations of Commodity Quantities required for the period from April through March.

YCRR Yearly Commodity Revenue Required

The sum of 12 separate monthly calculations of Commodity Revenue required for the period April through March.

Monthly quantities in GJ transported easterly hereunder received at Dawn at not less than 4 850 kPa but less than 5 860 kPa (compression required at Dawn).

QT3 Monthly quantities in GJ transported westerly hereunder received at the Parkway Delivery Point.

F<sub>WT</sub> The individual Shipper's monthly share of compressor fuel used in GJ which was required at Union's Lobo, Bright, Trafalgar and Parkway Compressor Stations ("Lobo", "Bright", "Trafalgar" and "Parkway") to transport the same Shipper's QT1 monthly quantities easterly.

Lobo, Bright, Trafalgar and Parkway compressor fuel required by each Shipper will be calculated each month.

The monthly Lobo and Bright compressor fuel will be allocated to each Shipper in the same proportion as the Shipper's monthly quantities transported is to the monthly transported quantity for all users including Union.

The monthly Parkway and Trafalgar compressor fuel used will be allocated to each Shipper in the same proportion as the monthly quantity transported to Parkway (TCPL) for each user is to the total monthly quantity transported for all users including Union.



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# (D) Transportation Commodity (Cont'd)

F<sub>ST</sub> The individual Shipper's monthly share of compressor fuel used in GJ which was required at Union's Lobo, Bright, Trafalgar and Parkway compressor stations to transport the same Shipper's quantity on the Trafalgar system.

Lobo, Bright, Trafalgar and Parkway compressor fuel required by each Shipper will be calculated each month.

R Union's weighted average cost of gas in \$/GJ.

#### Notes

(i) In the case of Easterly flow, direct deliveries by TCPL at Parkway to Union or on behalf of Union to Union's Transportation Shippers will be allocated to supply Union's markets on the Dawn-Parkway facilities starting at Parkway and proceeding westerly to successive laterals until exhausted.

# (E) Provision for Compressor Fuel

For a Shipper that has elected to provide its own compressor fuel.

# **Transportation Fuel**

On a daily basis, the Shipper will provide Union at the delivery point and delivery pressure as specified in the contract, a quantity (the "Transportation Fuel Quantity") representing the Shipper's share of compressor fuel and unaccounted for gas for transportation service on Union's system.

The Transportation Fuel Quantity will be determined on a daily basis, as follows:

Transportation Fuel Quantity = Transportation Quantity x Transportation Fuel Ratio.

In the event that the actual quantity of fuel supplied by the Shipper was different from the actual fuel quantity as calculated using the YCR formula, an adjustment will be made in May for the previous 12 months ending March 31<sup>st</sup>.

Nominations

The Shipper will be required to nominate its Transportation Fuel Quantity in addition to its normal nominations for transportation services.

# (F) Terms of Service

The General Terms & Conditions applicable to this rate schedule shall be in accordance with the attached Schedule "A" for contracts in effect before October 1, 2010. The General Terms & Conditions applicable to this rate schedule shall be in accordance with the attached Schedule "A 2010" for contracts in effect on or after October 1, 2010.

### (G) Nominations

Nominations under this rate schedule shall be in accordance with the attached Schedule "B" for contracts in effect before October 1, 2010. Nominations under this rate schedule shall be in accordance with the attached Schedule "B 2010" for contracts in effect on or after October 1, 2010.

# (H) Monthly Fuel Rates and Ratios

Monthly fuel rates and ratios under this rate schedule shall be in accordance with Schedule "C".

# (I) Receipt and Delivery Points and Pressures

Receipt and Delivery Points and Pressures under this rate schedule shall be in accordance with Schedule "D 2010" for contracts in effect on or after October 1, 2010.

January 1, 2018 O.E.B. Order # EB-2017-0087 Chatham, Ontario

# RATE M12 GENERAL TERMS & CONDITIONS

#### I. <u>DEFINITIONS</u>

Except where the context expressly requires or states another meaning, the following terms, when used in these General Terms & Conditions and in any contract into which these General Terms & Conditions are incorporated, shall be construed to have the following meanings:

- 1. "Contract" shall refer to the Contract to which these General Terms & Conditions shall apply, and into which they are incorporated;
- 2. "cubic metre" shall mean the volume of gas which occupies one cubic metre when such gas is at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute;
- 3. "day" shall mean a period of twenty-four (24) consecutive hours beginning at 9:00 a.m. Central Standard time. The reference date for any day shall be the calendar date upon which the twenty-four (24) hour period shall commence;
- 4. "delivery" shall mean any gas that is delivered by Union into Shipper's possession, or to the possession of Shipper's agent;
- 5. "firm" shall mean service not subject to curtailment or interruption except under Articles XI and XII of this Schedule "A";
- 6. "gas" shall mean gas as defined in the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Sch. B, as amended, supplemented or re-enacted from time to time;
- 7. "gross heating value" shall mean the total heat expressed in megajoules per cubic metre (MJ/m³) produced by the complete combustion at constant pressure of one (1) cubic metre of gas with air, with the gas free of water vapour and the temperature of the gas, air and products of combustion at standard temperature and all water formed by the combustion reaction condensed to the liquid state;
- 8. "interruptible service" shall mean service subject to curtailment or interruption, after notice, at any time;
- 9. "Interconnecting Pipeline" shall mean a pipeline that directly connects to the Union pipeline system;
- 10. "joule" (J) shall mean the work done when the point of application of a force of one (1) newton is displaced a distance of one (1) metre in the direction of the force. The term "megajoule" (MJ) shall mean 1,000,000 joules. The term "gigajoule" (GJ) shall mean 1,000,000,000 joules;
- 11. "limited interruptible service" shall mean gas service subject to interruption or curtailment on a limited number of days as specified in the Contract;
- 12. "m³" shall mean cubic metre of gas and "10³m³" shall mean 1,000 cubic metres of gas;
- 13. "month" shall mean the period beginning at 9:00 a.m. Central Standard time on the first day of a calendar month and ending at 9:00 a.m. Central Standard time on the first day of the following calendar month;
- 14. "OEB" means the Ontario Energy Board;
- 15. "pascal" (Pa) shall mean the pressure produced when a force of one (1) newton is applied to an area of one (1) square metre. The term "kilopascal" (kPa) shall mean 1,000 pascals;
- 16. "receipt" shall mean any gas that is delivered into Union's possession, or the possession of Union's agent;
- 17. "Shipper" shall have the meaning as defined in the Contract and shall also include Shipper's agent(s);

- 18. "TCPL" means TransCanada PipeLines Limited;
- 19. "cricondentherm hydrocarbon dewpoint" shall mean the highest hydrocarbon dewpoint temperature on the phase envelope;
- 20. "hydrocarbon dewpoint" shall mean temperature at a specific pressure where hydrocarbon vapour condensation begins;
- 21. "specific gravity" shall mean density of the gas divided by density of air, with both at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute;
- 22. "Wobbe Number" shall mean gross heating value of the gas divided by the square root of its specific gravity.

#### II. GAS QUALITY

- Natural Gas: The minimum gross heating value of the gas delivered to/by Union hereunder, shall be thirty-six (36) megajoules per cubic metre. The maximum gross heating value of the gas delivered to/by Union hereunder shall be forty point two (40.2) megajoules per cubic metre. The gas to be delivered hereunder to Union may be a commingled supply from Shipper's gas sources of supply. The gas to be delivered by Union may be a commingled supply from Union's sources of gas supply; provided, however, that helium, natural gasoline, butane, propane and other hydrocarbons, except methane, may be removed prior to delivery to Shipper. Further, Union may subject, or permit the subjection of, the gas to compression, dehydration, cooling, cleaning and other processes.
- 2. Freedom from objectionable matter: The gas to be delivered to/by Union hereunder,
  - a. shall be commercially free from bacteria, sand, dust, gums, crude oils, lubricating oils, liquids, chemicals or compounds used in the production, treatment, compression or dehydration of the gas or any other objectionable substance in sufficient quantity so as to render the gas toxic, unmerchantable or cause injury to or interference with the proper operation of the lines, regulators, meters or other appliances through which it flows.
  - b. shall not contain more than seven (7) milligrams of hydrogen sulphide per cubic metre of gas nor more than four hundred and sixty (460) milligrams of total sulphur per cubic metre of gas,
  - c. shall not contain more than five (5) milligrams of mercaptan sulphur per cubic metre of gas,
  - d. shall not contain more than two point zero (2.0) molar percent by volume of carbon dioxide in the gas,
  - e. shall not contain more than zero point four (0.4) molar percent by volume of oxygen in the gas,
  - f. shall not contain more than zero point five (0.5) molar percent by volume of carbon monoxide in the gas,
  - g. shall not contain more than four point zero (4.0) molar percent by volume of hydrogen in the gas,
  - h. shall not contain more than sixty-five (65) milligrams of water vapour per cubic metre of gas,
  - i. shall not have a cricondentherm hydrocarbon dewpoint exceeding minus eight (-8) degrees Celsius,
  - j. shall have Wobbe Number from forty seven point fifty (47.50) megajoules per cubic metre of gas to fifty one point forty six (51.46) megajoules per cubic metre of gas, maximum of one point five (1.5) mole percent by volume of butane plus (C4+) in the gas, and maximum of four point zero (4.0) mole percent by volume of total inerts in the gas in order to be interchangeable with other Interconnecting Pipeline gas.

- 3. <u>Non-conforming Gas</u>: In addition to any other right or remedy of a party, each party shall be entitled to refuse to accept delivery of any gas which does not conform to any of the specifications set out in this Article II.
- 4. Quality of Gas Received: The quality of the gas to be received by Union hereunder is to be of a merchantable quality and in accordance with the quality standards as set out by Union in this Article II, but, Union will also accept gas of a quality as set out in any other Interconnecting Pipeline's general terms and conditions, provided that all Interconnecting Pipelines accept such quality of gas. In addition to any other right or remedy of a party, each party shall be entitled to refuse to accept delivery of any gas which does not conform to any of the specifications set out in Union's M12 Rate Schedule.

#### III. MEASUREMENTS

1. <u>Storage, Transportation, and/or Sales Unit</u>: The unit of the gas delivered to Union shall be a megajoule or a gigajoule. The unit of gas transported or stored by Union shall be a megajoule or a gigajoule. The unit of gas delivered by Union shall be a megajoule, a gigajoule, a cubic metre (m³) or one thousand cubic metres (10³m³) at Union's discretion.

#### 2. <u>Determination of Volume and Energy:</u>

- a. The volume and energy amounts determined under the Contract shall be determined in accordance with the <u>Electricity and Gas Inspection Act (Canada)</u>, RSC 1985, c E-4- (the "**Act**") and the <u>Electricity and Gas Inspection Regulations</u>, SOR 86/131 (the "**Regulations**"), and any documents issued under the authority of the Act and Regulations and any amendments thereto.
- b. The supercompressibility factor shall be determined in accordance with either the "Manual for Determination of Supercompressibility Factors for Natural Gas" (PAR Project NX-19) published in 1962 or with American Gas Association Transmission Measurement Committee Report No. 8, Nov. 1992, at Union's discretion, all as amended from time to time.
- c. The volume and/or energy of the gas delivered to/by Union hereunder shall be determined by the measurement equipment designated in Article VII herein.
- d. Upon request by Union, Shipper shall obtain measurement of the total quantity of gas received by Union hereunder from the Interconnecting Pipeline. Such measurement shall be done in accordance with established practices between Union and the Interconnecting Pipeline.

#### IV. RECEIPT POINT AND DELIVERY POINT

- 1. Unless otherwise specified in the Contract, the point or points of receipt for all gas to be covered hereunder shall be on the outlet side of the measuring stations located at or near the point or points of connection specified in the Contract, where Union takes possession of the gas.
- 2. Unless otherwise specified in the Contract, the point or points of delivery for all gas to be covered hereunder shall be on the outlet side of the measuring stations located at or near the point or points of connection as specified in the Contract where Shipper takes possession of the gas.

#### V. POSSESSION OF AND RESPONSIBILITY FOR GAS

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#### VI. FACILITIES ON SHIPPER'S PROPERTY

Except under those conditions where Union is delivering to TCPL for TCPL or Shipper at Union's Parkway Point of Delivery, or to an Interconnecting Pipeline, or where otherwise specified in the Contract, the following will apply:

- 1. <u>Construction and Maintenance:</u> Union, at its own expense may construct, maintain and operate on Shipper's property at the delivery point a measuring station properly equipped with a meter or meters and any other necessary measuring equipment for properly measuring the gas redelivered under the Contract. Shipper will grant to Union a lease and/or rights-of-way over property of Shipper as required by Union to install such facilities and to connect same to Union's pipeline.
- 2. <u>Entry:</u> Union, its servants, agents and each of them may at any reasonable time on notice (except in cases of emergency) to Shipper or his duly authorized representative enter Shipper's property for the purpose of constructing, maintaining, removing, operating and/or repairing station equipment.
- 3. <u>Property:</u> The said station and equipment will be and remain the property of Union notwithstanding it is constructed on and attached to the realty of Shipper, and Union may at its own expense remove it upon termination of the Contract and will do so if so requested by Shipper.

#### VII. MEASURING EQUIPMENT

- 1. <u>Metering by Union:</u> Union will install and operate meters and related equipment as required and in accordance with the Act and Regulations referenced in Article III herein.
- Metering by Others: In the event that all or any gas delivered to/by Union hereunder is measured by a meter that is owned and operated by an Interconnecting Pipeline, then Union and Shipper agree to accept that metering for the purpose of determining the volume and energy of gas delivered to/by Union on behalf of the Shipper. The standard of measurement and tests for the gas delivered to/by Union hereunder shall be in accordance with the general terms and conditions as incorporated in that Interconnecting Pipeline company's gas tariff as approved by their regulatory body.
- 3. <u>Check Measuring Equipment:</u> Shipper may install, maintain and operate, at the redelivery point, at its own expense, such check measuring equipment as desired, provided that such equipment shall be so installed as not to interfere with the operation of Union's measuring equipment at or near the delivery point, and shall be installed, maintained and operated in conformity with the same standards and specifications applicable to Union's metering facilities.
- 4. <u>Rights of Parties:</u> The measuring equipment installed by either party, together with any building erected by it for such equipment, shall be and remain its property. However, Union and Shipper shall have the right to have representatives present at the time of any installing, reading, cleaning, changing, repairing, inspecting, testing, calibrating, or adjusting done in connection with the other's measuring equipment used in measuring or checking the measurement of deliveries of gas to/by Union under the Contract. Either party will give the other party reasonable notice of its intention to carry out the acts herein specified. The records from such measuring equipment shall remain the property of their owner, but upon request each will submit to the other its records and charts, together with calculations therefrom, for inspection and verification, subject to return within ten (10) days after receipt thereof.
- 5. <u>Calibration and Test of Measuring Equipment:</u> The accuracy of Union's measuring equipment shall be verified by Union at reasonable intervals, and if requested, in the presence of representatives of Shipper, but Union shall not be required to verify the accuracy of such equipment more frequently than once in any thirty (30) day period. In the event either party notifies the other that it desires a special test of any measuring equipment, the parties shall co-operate to secure a prompt verification of the accuracy of such equipment. The expense of any such special test, if called for by Shipper, shall be borne by Shipper if the measuring equipment tested is found to be in error by not more than two per cent (2%). If, upon test, any measuring equipment is found to be in error by not more than two per cent (2%), previous recordings of such equipment shall be considered accurate in computing redeliveries of gas, but such equipment shall be adjusted at once to record as near to absolute accuracy as possible. If the test conducted shows a percentage of inaccuracy greater than two percent (2%), the financial adjustment, if any, shall be calculated in accordance with the Act and Regulations, as may be amended from time to time and in accordance with any successor statutes and regulations.

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- 6. <u>Preservation of Metering Records:</u> Union and Shipper shall each preserve for a period of at least six (6) years all test data, and other relevant records.
- 7. <u>Error in Metering or Meter Failure</u>: In the event of an error in metering or a meter failure, (such error or failure being determined through check measurement by Union or any other available method), then Shipper shall enforce its rights as Shipper with the Interconnecting Pipeline(s) to remedy such error or failure including enforcing any inspection and/or verification rights and procedures.

#### VIII. BILLING

- 1. Monthly Billing Date: Union shall render bills on or before the 10th day of each month for all services furnished during the preceding month. Such charges may be based on estimated quantities, if actual quantities are unavailable in time to prepare the billing. Union shall provide, in a succeeding month's billing, an adjustment based on any difference between actual quantities and estimated quantities, without any interest charge. If presentation of a bill to Shipper is delayed after the 10th day of the month, then the time of payment shall be extended accordingly, unless Shipper is responsible for such delay.
- 2. <u>Right of Examination:</u> Both Union and Shipper shall have the right to examine at any reasonable time the books, records and charts of the other to the extent necessary to verify the accuracy of any statement, chart or computation made under or pursuant to the provisions of the Contract.

#### IX. PAYMENTS

- 1. <u>Monthly Payments</u>: Shipper shall pay the invoiced amount directly into Union's bank account as directed on the invoice on or before the twentieth (20th) day of each month. If the payment date is not a business day, then payment must be received in Union's account on the first business day preceding the twentieth (20th) day of the month.
- 2. <u>Remedies for Non-payment:</u> Should Shipper fail to pay all of the amount of any bill as herein provided when such amount is due,
  - a. Shipper shall pay to Union interest on the unpaid portion of the bill accruing at a rate per annum equal to the minimum commercial lending rate of Union's principal banker in effect from time to time from the due date until the date of payment.
  - b. If such failure to pay continues for thirty (30) days after payment is due, Union, in addition to any other remedy it may have under the Contract, may suspend service(s) until such amount is paid. Notwithstanding such suspension, all demand charges shall continue to accrue hereunder as if such suspension were not in place.

If Shipper in good faith disputes the amount of any such bill or part thereof Shipper shall pay to Union such amounts as it concedes to be correct. At any time thereafter, within twenty (20) days of a demand made by Union, Shipper shall furnish financial assurances satisfactory to Union, guaranteeing payment to Union of the amount ultimately found due upon such bill after a final determination. Such a final determination may be reached either by agreement, arbitration decision or judgement of the courts, as may be the case. Union shall not be entitled to suspend service(s) because of such non-payment unless and until default occurs in the conditions of such financial assurances or default occurs in payment of any other amount due to Union hereunder.

Notwithstanding the foregoing paragraph(s), Shipper is not relieved from the obligation to continue its deliveries of gas to Union under the terms of any agreement, where Shipper has contracted to deliver specified quantities of gas to Union.

3. <u>Billing Adjustments:</u> If it shall be found that at any time or times Shipper has been overcharged or undercharged in any form whatsoever under the provisions of the Contract and Shipper shall have actually paid the bills containing such

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overcharge or undercharge, Union shall refund the amount of any such overcharge and interest shall accrue from and including the first day of such overcharge as paid to the date of refund and shall be calculated but not compounded at a rate per annum determined each day during the calculation period to be equal to the minimum commercial lending rate of Union's principal banker, and the Shipper shall pay the amount of any such undercharge, but without interest. In the event Union renders a bill to Shipper based upon measurement estimates, the required adjustment to reflect actual measurement shall be made on the bill next following the determination of such actual measurement, without any charge of interest. In the event an error is discovered in the amount billed in any statement rendered by Union, such error shall be adjusted by Union. Such overcharge, undercharge or error shall be adjusted by Union on the bill next following its determination (where the term "bill" next following shall mean a bill rendered at least fourteen (14) days after the day of its determination), provided that claim therefore shall have been made within six (6) years from the date of the incorrect billing. In the event any refund is issued with Shipper's gas bill, the aforesaid date of refund shall be deemed to be the date of the issue of bill.

#### X. ARBITRATION

If and when any dispute, difference or question shall arise between the parties hereto touching the Contract or anything herein contained, or the construction hereof, or the rights, duties or liabilities of the parties in relation to any matter hereunder, the matter in dispute shall be submitted and referred to arbitration within ten (10) days after written request of either party. Upon such request each party shall appoint an arbitrator, and the two so appointed shall appoint a third. A majority decision of the arbitrators shall be final and binding upon both parties. In all other respects the provisions of the Arbitration Act of the Province of Ontario, or any act passed in amendment thereof or substitution therefore, shall apply to each such submission. Operations under the Contract shall continue, without prejudice, during any such arbitration and the costs attributable to such arbitration shall be shared equally by the parties hereto.

#### XI. FORCE MAJEURE

- 1. The term "force majeure" as used herein shall mean acts of God, strikes, lockouts or any other industrial disturbance, acts of the public enemy, sabotage, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests and restraints of governments and people, civil disturbances, explosions, breakage or accident to machinery or lines of pipe, freezing of wells or lines of pipe, inability to obtain materials, supplies, permits or labour, any laws, orders, rules, regulations, acts or restraints of any governmental body or authority (civil or military), any act or omission that is excused by any event or occurrence of the character herein defined as constituting force majeure, any act or omission by parties not controlled by the party having the difficulty and any other similar cases not within the control of the party claiming suspension and which by the exercise of due diligence such party is unable to prevent or overcome.
- 2. In the event that either the Shipper or Union is rendered unable, in whole or in part, by force majeure, to perform or comply with any obligation or condition of the Contract, such party shall give notice and full particulars of such force majeure in writing delivered by hand, fax or other direct written electronic means to the other party as soon as possible after the occurrence of the cause relied on and subject to the provision of this Article.
- 3. Neither party shall be entitled to the benefit of the provisions of force majeure hereunder if any or all of the following circumstances prevail: the failure resulting in a condition of force majeure was caused by the negligence of the party claiming suspension; the failure was caused by the party claiming suspension where such party failed to remedy the condition by making all reasonable efforts (short of litigation, if such remedy would require litigation); the party claiming suspension failed to resume the performance of such condition obligations with reasonable dispatch; the failure was caused by lack of funds; the party claiming suspension did not, as soon as possible after determining, or within a period within which it should acting reasonably have determined, that the occurrence was in the nature of force majeure and would affect its ability to observe or perform any of its conditions or obligations under the Contract, give to the other party the notice required hereunder.
- 4. The party claiming suspension shall likewise give notice as soon as possible after the force majeure condition is remedied, to the extent that the same has been remedied, and that such party has resumed or is then in a position to resume the performance of the obligations and conditions of the Contract.

- 5. An event of force majeure on Union's system will excuse the failure to deliver gas by Union or the failure to accept gas by Union hereunder, and both parties shall be excused from performance of their obligations hereunder, except for payment obligations, to the extent of and for the duration of the force majeure.
- 6. Upstream or Downstream Force Majeure: An event of force majeure upstream or downstream of Union's system shall not relieve Shipper of any payment obligations.
- 7. Delay of Firm Transportation Services: Despite Article XI herein, if Union is prevented, by reason of an event of force majeure on Union's system from delivering gas on the Day or Days upon which Union has accepted gas from Shipper, Union shall thereafter make all reasonable efforts to deliver such quantities as soon as practicable and on such Day or Days as are agreed to by Shipper and Union. If Union accepts such gas on this basis, Shipper shall not receive any demand charge relief as contemplated under Article XI herein.
- 8. Demand Charge Relief for Firm Transportation Services: Despite Article XI herein, if on any Day Union fails to accept gas from Shipper by reason of an event of force majeure on Union's system and fails to deliver the quantity of gas nominated hereunder by Shipper up to the firm Contract Demand for that Contract, then for that Day the Monthly demand charge shall be reduced by an amount equal to the applicable Daily Demand Rate, as defined in this paragraph, multiplied by the difference between the quantity of gas actually delivered by Union during such Day and the quantity of gas which Shipper in good faith nominated on such Day. The term "Daily Demand Rate" shall mean the Monthly demand charge or equivalent pursuant to the M12 Rate Schedule divided by the number of days in the month for which such rate is being calculated.
- 9. If, due to the occurrence of an event of force majeure as outlined above, the capacity for gas deliveries by Union is impaired, it will be necessary for Union to curtail Shipper's gas receipts to Union hereunder, via proration based on utilization of such facilities for the Day. This prorating shall be determined by multiplying the capability of such facilities as available downstream of the impairment on the Day, by a fraction where the numerator is Shipper's nominated firm quantity and the denominator is the total of all such nominated firm quantities for nominated services and planned consumption for in-franchise customers on the Day. For the purposes of this Article XI, firm services shall mean all firm services provided by Union to in-franchise customers and ex-franchise shippers.

#### XII. DEFAULT AND TERMINATION

In case of the breach or non-observance or non-performance on the part of either party hereto of any covenant, proviso, condition, restriction or stipulation contained in the Contract (but not including herein failure to take or make delivery in whole or in part of the gas delivered to/by Union hereunder occasioned by any of the reasons provided for in Article XI hereof) which has not been waived by the other party, then and in every such case and as often as the same may happen, the Non-defaulting party may give written notice to the Defaulting party requiring it to remedy such default and in the event of the Defaulting party failing to remedy the same within a period of thirty (30) days from receipt of such notice, the Non-defaulting party may at its sole option declare the Contract to be terminated and thereupon the Contract shall be terminated and be null and void for all purposes other than and except as to any liability of the parties under the same incurred before and subsisting as of termination. The right hereby conferred upon each party shall be in addition to, and not in derogation of or in substitution for, any other right or remedy which the parties respectively at law or in equity shall or may possess.

#### XIII. MODIFICATION

Subject to Union's M12 Rate Schedule, Schedule A, Article XV and the ability of Union to amend the M12 Rate Schedule with the approval of the OEB, no amendment or modification of the Contract shall be effective unless the same shall be in writing and signed by each of the Shipper and Union.

#### XIV. NON-WAIVER AND FUTURE DEFAULT

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### XV. LAWS, REGULATIONS AND ORDERS

The Contract and the respective rights and obligations of the parties hereto are subject to all present and future valid laws, orders, rules and regulations of any competent legislative body, or duly constituted authority now or hereafter having jurisdiction and the Contract shall be varied and amended to comply with or conform to any valid order or direction of any board, tribunal or administrative agency which affects any of the provisions of the Contract.

# RATE M12 GENERAL TERMS & CONDITIONS

#### I. DEFINITIONS

Except where the context expressly requires or states another meaning, the following terms, when used in these General Terms & Conditions and in any contract into which these General Terms & Conditions are incorporated, shall be construed to have the following meanings:

"Authorized Overrun" shall mean the amount by which Shipper's Authorized Quantity exceeds the Contract Demand;

"Available Capacity" shall mean at any time, Union's remaining available capacity to provide Transportation Services;

"Business Day" shall mean any day, other than Saturday, Sunday or any days on which national banks in the Province of Ontario are authorized to close;

"Contract" shall refer to the Contract to which these General Terms & Conditions shall apply, and into which they are incorporated;

"Contract Year" shall mean a period of three hundred and sixty-five (365) consecutive days; provided however, that any such period which contains a date of February 29 shall consist of three hundred and sixty-six (366) consecutive days, commencing on November 1 of each year; except for the first Contract Year which shall commence on the Commencement Date and end on the first October 31 that follows such date:

"cricondentherm hydrocarbon dewpoint" shall mean the highest hydrocarbon dewpoint temperature on the phase envelope;

"cubic metre" shall mean the volume of gas which occupies one cubic metre when such gas is at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute;

"Day" shall mean a period of twenty-four (24) consecutive hours beginning at 10:00 a.m. Eastern Clock Time. The reference date for any Day shall be the calendar date upon which the twenty-four (24) hour period shall commence;

"delivery" shall mean any gas that is delivered by Union into Shipper's possession, or to the possession of Shipper's agent;

"Eastern Clock Time" shall mean the local clock time in the Eastern Time Zone on any Day;

**"Expansion Facilities**" shall mean any new facilities to be constructed by Union in order to provide Transportation Services;

"firm" shall mean service not subject to curtailment or interruption except under Articles XI, XII and XVIII herein;

"gas" shall mean gas as defined in the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Sch. B, as amended, supplemented or re-enacted from time to time;

"gross heating value" shall mean the total heat expressed in megajoules per cubic metre (MJ/m³) produced by the complete combustion at constant pressure of one (1) cubic metre of gas with air, with the gas free of water vapour and the temperature of the gas, air and products of combustion at standard temperature and all water formed by the combustion reaction condensed to the liquid state;

"hydrocarbon dewpoint" shall mean temperature at a specific pressure where hydrocarbon vapour condensation begins;

"Interruptible Service HUB Contract" shall mean a contract between Shipper and Union under which Union provides interruptible HUB service;

"interruptible service" or "Interruptible" shall mean service subject to curtailment or interruption, after notice, at any time:

"Interconnecting Pipeline" shall mean a pipeline that directly connects to the Union pipeline system;

"joule" (J) shall mean the work done when the point of application of a force of one (1) newton is displaced a distance of one (1) metre in the direction of the force. The term "megajoule" (MJ) shall mean 1,000,000 joules. The term "gigajoule" (GJ) shall mean 1,000,000,000 joules;

"Loaned Quantities" shall mean those quantities of gas loaned to Shipper under the Facilitating Agreement;

"m³" shall mean cubic metre of gas and "10³m³" shall mean 1,000 cubic metres of gas;

"Month" shall mean the period beginning at 10:00 a.m. Eastern Clock Time on the first day of a calendar month and ending at 10:00 a.m. Eastern Clock Time on the first day of the following calendar month;

"NAESB" shall mean North American Energy Standards Board;

"OEB" means the Ontario Energy Board;

"Open Season" or "open season" shall mean an open access auction or bidding process held by Union as a method of allocating capacity;

"pascal" (Pa) shall mean the pressure produced when a force of one (1) newton is applied to an area of one (1) square metre. The term "kilopascal" (kPa) shall mean 1,000 pascals;

"receipt" shall mean any gas that is delivered into Union's possession, or the possession of Union's agent;

"Shipper" shall have the meaning as defined in the Contract, and shall also include Shipper's agent(s);

"specific gravity" shall mean density of the gas divided by density of air, with both at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute;

"Taxes" shall mean any tax (other than tax on income or tax on property), duty, royalty, levy, license, fee or charge not included in the charges and rates as per the applicable rate schedule (including but not limited to charges under any form of cap and trade, carbon tax, or similar system) and that is levied, assessed or made by any governmental authority on the gas itself, or the act, right, or privilege of producing, severing, gathering, storing, transporting, handling, selling or delivering gas under the Contract;

"TCPL" means TransCanada PipeLines Limited;

"Wobbe Number" shall mean gross heating value of the gas divided by the square root of its specific gravity.

#### II. GAS QUALITY

- 1. <u>Natural Gas:</u> The minimum gross heating value of the gas delivered to/by Union hereunder, shall be thirty-six (36) megajoules per cubic metre. The maximum gross heating value of the gas delivered to/by Union hereunder shall be forty point two (40.2) megajoules per cubic metre. The gas to be delivered hereunder to Union may be a commingled supply from Shipper's gas sources of supply. The gas to be delivered by Union may be a commingled supply from Union's sources of gas supply; provided, however, that helium, natural gasoline, butane, propane and other hydrocarbons, except methane, may be removed prior to delivery to Shipper. Further, Union may subject, or permit the subjection of, the gas to compression, dehydration, cooling, cleaning and other processes.
- 2. <u>Freedom from objectionable matter:</u> The gas to be delivered to/by Union hereunder,
  - a. shall be commercially free from bacteria, sand, dust, gums, crude oils, lubricating oils, liquids, chemicals or compounds used in the production, treatment, compression or dehydration of the gas or any other objectionable substance in sufficient quantity so as to render the gas toxic, unmerchantable or cause injury to, or interference with, the proper operation of the lines, regulators, meters or other appliances through which it flows,

- b. shall not contain more than seven (7) milligrams of hydrogen sulphide per cubic metre of gas, nor more than four hundred and sixty (460) milligrams of total sulphur per cubic metre of gas,
- c. shall not contain more than five (5) milligrams of mercaptan sulphur per cubic metre of gas,
- d. shall not contain more than two point zero (2.0) molar percent by volume of carbon dioxide in the gas,
- e. shall not contain more than zero point four (0.4) molar percent by volume of oxygen in the gas,
- f. shall not contain more than zero point five (0.5) molar percent by volume of carbon monoxide in the gas,
- g. shall not contain more than four point zero (4.0) molar percent by volume of hydrogen in the gas,
- h. shall not contain more than sixty-five (65) milligrams of water vapour per cubic metre of gas,
- i. shall not have a cricondentherm hydrocarbon dewpoint exceeding minus eight (-8) degrees Celsius,
- j. shall have Wobbe Number from forty seven point fifty (47.50) megajoules per cubic metre of gas to fifty one point forty six (51.46) megajoules per cubic metre of gas, maximum of one point five (1.5) mole percent by volume of butane plus (C4+) in the gas, and maximum of four point zero (4.0) mole percent by volume of total inerts in the gas in order to be interchangeable with other Interconnecting Pipeline gas.
- 3. <u>Non-conforming Gas:</u> In addition to any other right or remedy of a party, each party shall be entitled to refuse to accept delivery of any gas which does not conform to any of the specifications set out in this Article II.
- 4. Quality of Gas Received: The quality of the gas to be received by Union hereunder is to be of a merchantable quality and in accordance with the quality standards as set out by Union in this Article II, but, Union will also accept gas of a quality as set out in any other Interconnecting Pipeline's general terms and conditions, provided that all Interconnecting Pipelines accept such quality of gas. In addition to any other right or remedy of a party, each party shall be entitled to refuse to accept delivery of any gas which does not conform to any of the specifications set out in Union's M12 Rate Schedule.

#### III. MEASUREMENTS

1. <u>Storage, Transportation, and/or Sales Unit:</u> The unit of the gas delivered to Union shall be a megajoule or a gigajoule. The unit of gas transported or stored by Union shall be a megajoule or a gigajoule. The unit of gas delivered by Union shall be a megajoule, a gigajoule, a cubic metre (m³) or one thousand cubic metres (10³m³) at Union's discretion.

#### 2. Determination of Volume and Energy:

- a. The volume and energy amounts determined under the Contract shall be determined in accordance with the Electricity and Gas Inspection Act (Canada), RSC 1985, c E-4- (the "Act") and the Electricity and Gas Inspection Regulations, SOR 86/131 (the "Regulations"), and any documents issued under the authority of the Act and Regulations and any amendments thereto.
- b. The supercompressibility factor shall be determined in accordance with either the "Manual for Determination of Supercompressibility Factors for Natural Gas" (PAR Project NX-19) published in 1962 or with American Gas Association Transmission Measurement Committee Report No. 8, Nov. 1992, at Union's discretion, all as amended from time to time.
- c. The volume and/or energy of the gas delivered to/by Union hereunder shall be determined by the measurement equipment designated in Article VII herein.
- d. Upon request by Union, Shipper shall obtain measurement of the total quantity of gas received by Union hereunder from the Interconnecting Pipeline. Such measurement shall be done in accordance with established practices between Union and the Interconnecting Pipeline.

### IV. RECEIPT POINT AND DELIVERY POINT

 Unless otherwise specified in the Contract, the point or points of receipt and point or points of delivery for all gas to be covered hereunder shall be on the outlet side of the measuring stations located at or near the point or points of connection specified in the Contract, where possession of the gas changes from one party to the other, and as per Schedule "D 2010".

### V. POSSESSION OF AND RESPONSIBILITY FOR GAS

- 1. <u>Possession of Gas:</u> Union accepts no responsibility for any gas prior to such gas being delivered to Union at the Receipt Point or after its delivery by Union at the Delivery Point. As between the parties hereto, Union shall be deemed to be in control and possession of and responsible for all such gas from the time that such gas enters Union's system until such gas is delivered to Shipper.
- 2. <u>Liability:</u> Shipper agrees that Union is not a common carrier and is not an insurer of Shipper's gas, and that Union shall not be liable to Shipper or any third party for loss of gas in Union's possession, except to the extent such loss is caused entirely by Union's negligence or wilful misconduct.

# VI. FACILITIES ON SHIPPER'S PROPERTY

Except under those conditions where Union is delivering to TCPL for TCPL or Shipper at Parkway (TCPL), or to an Interconnecting Pipeline, or where otherwise specified in the Contract, the following will apply:

- 1. <u>Construction and Maintenance:</u> Union, at its own expense may construct, maintain and operate on Shipper's property at the delivery point a measuring station properly equipped with a meter or meters and any other necessary measuring equipment for properly measuring the gas redelivered under the Contract. Shipper will grant to Union a lease and/or rights-of-way over property of Shipper as required by Union to install such facilities and to connect same to Union's pipeline.
- 2. <u>Entry:</u> Union, its servants, agents and each of them may at any reasonable time on notice (except in cases of emergency) to Shipper or his duly authorized representative enter Shipper's property for the purpose of constructing, maintaining, removing, operating and/or repairing station equipment.
- 3. <u>Property:</u> The said station and equipment will be and remain the property of Union notwithstanding it is constructed on and attached to the realty of Shipper, and Union may at its own expense remove it upon termination of the Contract and will do so if so requested by Shipper.

### VII. MEASURING EQUIPMENT

- 1. <u>Metering by Union:</u> Union will install and operate meters and related equipment as required and in accordance with the Act and Regulations referenced in Article III herein.
- 2. <u>Metering by Others:</u> In the event that all or any gas delivered to/by Union hereunder is measured by a meter that is owned and operated by an Interconnecting Pipeline, then Union and Shipper agree to accept that metering for the purpose of determining the volume and energy of gas delivered to/by Union on behalf of the Shipper. The standard of measurement and tests for the gas delivered to/by Union hereunder shall be in accordance with the general terms and conditions as incorporated in that Interconnecting Pipeline company's gas tariff as approved by its regulatory body.
- 3. <u>Check Measuring Equipment:</u> Shipper may install, maintain and operate, at the redelivery point, at its own expense, such check measuring equipment as desired, provided that such equipment shall be so installed as not to interfere with the operation of Union's measuring equipment at or near the delivery point, and shall be installed, maintained and operated in conformity with the same standards and specifications applicable to Union's metering facilities.

- 4. Rights of Parties: The measuring equipment installed by either party, together with any building erected by it for such equipment, shall be and remain its property. However, Union and Shipper shall have the right to have representatives present at the time of any installing, reading, cleaning, changing, repairing, inspecting, testing, calibrating, or adjusting done in connection with the other's measuring equipment used in measuring or checking the measurement of deliveries of gas to/by Union under the Contract. Either party will give the other party reasonable notice of its intention to carry out the acts herein specified. The records from such measuring equipment shall remain the property of their owner, but upon request each will submit to the other its records and charts, together with calculations therefrom, for inspection and verification, subject to return within ten (10) days after receipt thereof.
- 5. <u>Calibration and Test of Measuring Equipment:</u> The accuracy of Union's measuring equipment shall be verified by Union at reasonable intervals, and if requested, in the presence of representatives of Shipper, but Union shall not be required to verify the accuracy of such equipment more frequently than once in any thirty (30) day period. In the event either party notifies the other that it desires a special test of any measuring equipment, the parties shall co-operate to secure a prompt verification of the accuracy of such equipment. The expense of any such special test, if called for by Shipper, shall be borne by Shipper if the measuring equipment tested is found to be in error by not more than two per cent (2%). If, upon test, any measuring equipment is found to be in error by not more than two per cent (2%), previous recordings of such equipment shall be considered accurate in computing receipts and deliveries of gas, but such equipment shall be adjusted at once to record as near to absolute accuracy as possible. If the test conducted shows a percentage of inaccuracy greater than two percent (2%), the financial adjustment, if any, shall be calculated in accordance with the Act and Regulations, as may be amended from time to time and in accordance with any successor statutes and regulations.
- 6. <u>Preservation of Metering Records:</u> Union and Shipper shall each preserve for a period of at least six (6) years all test data, and other relevant records.
- 7. <u>Error in Metering or Meter Failure:</u> In the event of an error in metering or a meter failure, (such error or failure being determined through check measurement by Union or any other available method), then Shipper shall enforce its rights as Shipper with the Interconnecting Pipeline(s) to remedy such error or failure including enforcing any inspection and/or verification rights and procedures.

### VIII. BILLING

- 1. <u>Monthly Billing Date:</u> Union shall render bills on or before the tenth (10<sup>th</sup>) day of each month for all Transportation Services furnished during the preceding Month. Such charges may be based on estimated quantities, if actual quantities are unavailable in time to prepare the billing. Union shall provide, in a succeeding Month's billing, an adjustment based on any difference between actual quantities and estimated quantities, without any interest charge. If presentation of a bill to Shipper is delayed after the tenth (10<sup>th</sup>) day of the month, then the time of payment shall be extended accordingly, unless Shipper is responsible for such delay.
- 2. <u>Right of Examination:</u> Both Union and Shipper shall have the right to examine at any reasonable time the books, records and charts of the other to the extent necessary to verify the accuracy of any statement, chart or computation made under or pursuant to the provisions of the Contract.
- 3. <u>Amendment of Statements:</u> For the purpose of completing a final determination of the actual quantities of gas handled in any of the Transportation Services to Shipper, the parties shall have the right to amend their statement for a period equal to the time during which the Interconnecting Pipeline retains the right to amend their statements, which period shall not exceed three (3) years from the date of termination of the Contract.

### IX. PAYMENTS

- 1. <u>Monthly Payments:</u> Shipper shall pay the invoiced amount directly into Union's bank account as directed on the invoice on or before the twentieth (20<sup>th</sup>) day of each month. If the payment date is not a Business Day, then payment must be received in Union's account on the first Business Day preceding the twentieth (20th) day of the month.
- 2. <u>Remedies for Non-payment:</u> Should Shipper fail to pay all of the amount of any bill as herein provided when such amount is due.

- Shipper shall pay to Union interest on the unpaid portion of the bill accruing at a rate per annum equal to the minimum commercial lending rate of Union's principal banker in effect from time to time from the due date until the date of payment; and,
- b. If such failure to pay continues for thirty (30) days after payment is due, Union, in addition to any other remedy it may have under the Contract, may suspend Services until such amount is paid. Notwithstanding such suspension, all demand charges shall continue to accrue hereunder as if such suspension were not in place.

If Shipper in good faith disputes the amount of any such bill or part thereof Shipper shall pay to Union such amounts as it concedes to be correct. At any time thereafter, within twenty (20) days of a demand made by Union, Shipper shall furnish financial assurances satisfactory to Union, guaranteeing payment to Union of the amount ultimately found due upon such bill after a final determination. Such a final determination may be reached either by agreement, arbitration decision or judgement of the courts, as may be the case. Union shall not be entitled to suspend Services because of such non-payment unless and until default occurs in the conditions of such financial assurances or default occurs in payment of any other amount due to Union hereunder.

Notwithstanding the foregoing, Shipper is not relieved from the obligation to continue its deliveries of gas to Union under the terms of any agreement, where Shipper has contracted to deliver specified quantities of gas to Union.

- 3. <u>Billing Adjustments:</u> If it shall be found that at any time or times Shipper has been overcharged or undercharged in any form whatsoever under the provisions of the Contract and Shipper shall have actually paid the bills containing such overcharge or undercharge, Union shall refund the amount of any such overcharge and interest shall accrue from and including the first day of such overcharge as paid to the date of refund and shall be calculated but not compounded at a rate per annum determined each day during the calculation period to be equal to the minimum commercial lending rate of Union's principal banker, and the Shipper shall pay the amount of any such undercharge, but without interest. In the event Union renders a bill to Shipper based upon measurement estimates, the required adjustment to reflect actual measurement shall be made on the bill next following the determination of such actual measurement, without any charge of interest. In the event an error is discovered in the amount billed in any statement rendered by Union, such error shall be adjusted by Union. Such overcharge, undercharge or error shall be adjusted by Union on the bill next following its determination (where the term "bill next following" shall mean a bill rendered at least fourteen (14) days after the day of its determination), provided that claim therefore shall have been made within three (3) years from the date of the incorrect billing. In the event any refund is issued with Shipper's bill, the aforesaid date of refund shall be deemed to be the date of the issue of bill.
- 4. <u>Taxes:</u> In addition to the charges and rates as per the applicable rate schedules and price schedules, Shipper shall pay all Taxes which are imposed currently or subsequent to the execution of the Contract by any legal authority having jurisdiction and any amount in lieu of such Taxes paid or payable by Union.
- 5. <u>Set Off:</u> If either party shall, at any time, be in arrears under any of its payment obligations to the other party under the Contract, then the party not in arrears shall be entitled to reduce the amount payable by it to the other party in arrears under the Contract, or any other contract, by an amount equal to the amount of such arrears or other indebtedness to the other party. In addition to the foregoing remedy, Union may, upon forty-eight (48) hours verbal notice, to be followed by written notice, take possession of any or all of Shipper's gas under the Contract or any enhancement to the Contract, which shall be deemed to have been assigned to Union, to reduce such arrears or other indebtedness to Union.

### X. ARBITRATION

If and when any dispute, difference or question shall arise between the parties hereto touching the Contract or anything herein contained, or the construction hereof, or the rights, duties or liabilities of the parties in relation to any matter hereunder, the matter in dispute shall be submitted and referred to arbitration within ten (10) days after written request of either party. Upon such request each party shall appoint an arbitrator, and the two so appointed shall appoint a third. A majority decision of the arbitrators shall be final and binding upon both parties. In all other respects the provisions of the Arbitration Act, 1991, or any act passed in amendment thereof or substitution therefore, shall apply to each such submission. Operations under the Contract shall continue, without prejudice, during any such arbitration and the costs attributable to such arbitration shall be shared equally by the parties hereto.

#### XI. FORCE MAJEURE

- 1. <u>Definition:</u> The term **"force majeure"** as used herein shall mean acts of God, strikes, lockouts or any other industrial disturbance, acts of the public enemy, sabotage, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests and restraints of governments and people, civil disturbances, explosions, breakage or accident to machinery or lines of pipe, freezing of wells or lines of pipe, inability to obtain materials, supplies, permits or labour, any laws, orders, rules, regulations, acts or restraints of any governmental body or authority (civil or military), any act or omission that is excused by any event or occurrence of the character herein defined as constituting force majeure, any act or omission by parties not controlled by the party having the difficulty and any other similar cases not within the control of the party claiming suspension and which by the exercise of due diligence such party is unable to prevent or overcome.
- 2. <u>Notice:</u> In the event that either the Shipper or Union is rendered unable, in whole or in part, by force majeure, to perform or comply with any obligation or condition of the Contract, such party shall give notice and full particulars of such force majeure in writing delivered by hand, fax or other direct written electronic means to the other party as soon as possible after the occurrence of the cause relied on and subject to the provision of this Article.
- 3. Exclusions: Neither party shall be entitled to the benefit of the provisions of force majeure hereunder if any or all of the following circumstances prevail: the failure resulting in a condition of force majeure was caused by the negligence of the party claiming suspension; the failure was caused by the party claiming suspension where such party failed to remedy the condition by making all reasonable efforts (short of litigation, if such remedy would require litigation); the party claiming suspension failed to resume the performance of such condition obligations with reasonable dispatch; the failure was caused by lack of funds; the party claiming suspension did not, as soon as possible after determining, or within a period within which it should acting reasonably have determined, that the occurrence was in the nature of force majeure and would affect its ability to observe or perform any of its conditions or obligations under the Contract, give to the other party the notice required hereunder.
- 4. <u>Notice of Remedy:</u> The party claiming suspension shall likewise give notice as soon as possible after the force majeure condition is remedied, to the extent that the same has been remedied, and that such party has resumed or is then in a position to resume the performance of the obligations and conditions of the Contract.
- 5. <u>Obligation to Perform:</u> An event of force majeure on Union's system will excuse the failure to deliver gas by Union or the failure to accept gas by Union hereunder, and both parties shall be excused from performance of their obligations hereunder, except for payment obligations, to the extent of and for the duration of the force majeure.
- 6. <u>Upstream or Downstream Force Majeure:</u> An event of force majeure upstream or downstream of Union's system shall not relieve Shipper of any payment obligations.
- 7. <u>Delay of Firm Transportation Services:</u> Despite Article XI herein, if Union is prevented, by reason of an event of force majeure on Union's system from delivering gas on the Day or Days upon which Union has accepted gas from Shipper, Union shall thereafter make all reasonable efforts to deliver such quantities as soon as practicable and on such Day or Days as are agreed to by Shipper and Union. If Union accepts such gas on this basis, Shipper shall not receive any demand charge relief as contemplated under Article XI herein.
- 8. <u>Demand Charge Relief for Firm Transportation Services:</u> Despite Article XI herein, if on any Day Union fails to accept gas from Shipper by reason of an event of force majeure on Union's system and fails to deliver the quantity of gas nominated hereunder by Shipper up to the firm Contract Demand for that Contract, then for that Day the Monthly demand charge shall be reduced by an amount equal to the applicable Daily Demand Rate, as defined in this paragraph, multiplied by the difference between the quantity of gas actually delivered by Union during such Day and the quantity of gas which Shipper in good faith nominated on such Day. The term "Daily Demand Rate" shall mean the Monthly demand charge or equivalent pursuant to the M12 Rate Schedule divided by the number of days in the month for which such rate is being calculated.
- 9. <u>Proration of Firm Transportation Service:</u> If, due to the occurrence of an event of force majeure as outlined above, the capacity for gas deliveries by Union is impaired, it will be necessary for Union to curtail Shipper's gas receipts to Union hereunder, via proration based on utilization of such facilities for the Day. This prorating shall be determined by

multiplying the capability of such facilities as available downstream of the impairment on the Day, by a fraction where the numerator is Shipper's nominated firm quantity and the denominator is the total of all such nominated firm quantities for nominated services and planned consumption for in-franchise customers on the Day. For the purposes of this Article XI, firm services shall mean all firm services provided by Union to in-franchise customers and ex-franchise shippers.

#### XII. DEFAULT AND TERMINATION

In case of the breach or non-observance or non-performance on the part of either party hereto of any covenant, proviso, condition, restriction or stipulation contained in the Contract (but not including herein failure to take or make delivery in whole or in part of the gas delivered to/by Union hereunder occasioned by any of the reasons provided for in Article XI herein) which has not been waived by the other party, then and in every such case and as often as the same may happen, the non-defaulting party may give written notice to the defaulting party requiring it to remedy such default and in the event of the defaulting party failing to remedy the same within a period of thirty (30) days from receipt of such notice, the non-defaulting party may at its sole option declare the Contract to be terminated and thereupon the Contract shall be terminated and be null and void for all purposes other than and except as to any liability of the parties under the same incurred before and subsisting as of termination. The right hereby conferred upon each party shall be in addition to, and not in derogation of or in substitution for, any other right or remedy which the parties respectively at law or in equity shall or may possess.

### XIII. <u>AMENDMENT</u>

Subject to Article XV herein and the ability of Union to amend the applicable rate schedules and price schedules, with the approval of the OEB (if required), no amendment or modification of the Contract shall be effective unless the same shall be in writing and signed by each of the Shipper and Union.

### XIV. NON-WAIVER AND FUTURE DEFAULT

No waiver of any provision of the Contract shall be effective unless the same shall be in writing and signed by the party entitled to the benefit of such provision and then such waiver shall be effective only in the specific instance and for the specified purpose for which it was given. No failure on the part of Shipper or Union to exercise, and no course of dealing with respect to, and no delay in exercising, any right, power or remedy under the Contract shall operate as a waiver thereof.

### XV. LAWS, REGULATIONS AND ORDERS

The Contract and the respective rights and obligations of the parties hereto are subject to all present and future valid laws, orders, rules and regulations of any competent legislative body, or duly constituted authority now or hereafter having jurisdiction and the Contract shall be varied and amended to comply with or conform to any valid order or direction of any board, tribunal or administrative agency which affects any of the provisions of the Contract.

### XVI ALLOCATION OF CAPACITY

- 1. Requests for Transportation Service: A potential shipper may request firm transportation service on Union's system at any time. Any request for firm M12 transportation service must include: potential shipper's legal name, Receipt Point(s), Delivery Point(s), Commencement Date, Initial Term, Contract Demand and proposed payment. This is applicable for M12 service requests for firm transportation service with minimum terms of ten (10) years where Expansion Facilities are required or a minimum term of five (5) years for use of existing capacity.
- 2. <u>Expansion Facilities:</u> If requests for firm transportation services cannot be met through existing capacity such that the only way to satisfy the requests for transportation service would require the construction of Expansion Facilities which create new capacity, Union shall allocate any such new capacity by open season, subject to the terms of the open season, and these General Terms and Conditions.

- 3. <u>Open Seasons:</u> If requests for long-term firm transportation service can be met through existing facilities upon which long-term capacity is becoming available, Union shall allocate such long-term capacity by open season, subject to the terms of the open season, and these General Terms and Conditions. "**Long-term**", for the purposes of this Article XVI, means, in the case of a transportation service. a service that has a term of one year or greater.
- 4. <u>Awarding Open Season Capacity:</u> Capacity requests received during an open season shall be awarded starting with those bids with the highest economic value. If the economic values of two or more independent bids are equal, then service shall be allocated on a pro-rata basis. The economic value shall be based on the net present value which shall be calculated based on the proposed per- unit rate and the proposed term of the contract and without regard to the proposed Contract Demand ("NPV").
- 5. <u>Available Capacity Previously Offered in Open Season:</u> Union may at any time allocate capacity to respond to any M12 transportation service request through an open season. If a potential shipper requests M12 transportation service that can be provided through Available Capacity that was previously offered by Union in an open season but was not awarded, then:
  - a. Any such request must conform to the requirements of Section 1 of this Article XVI;
  - b. Union shall allocate capacity to serve such request pursuant to this Section 5, and subject to these General Terms and Conditions and Union's standard form M12 transportation contract;
  - c. Union may reject a request for M12 transportation service for any of the following reasons:
    - i) if there is insufficient Available Capacity to fully meet the request, but if that is the only reason for rejecting the request for service, Union must offer to supply the Available Capacity to the potential shipper;
    - ii) if the proposed monthly payment is less than Union's Monthly demand charge plus fuel requirements for the applicable service;
    - iii) if prior to Union accepting the request for transportation service Union receives a request for transportation service from one or more other potential shippers and there is, as a result, insufficient Available Capacity to service all the requests for service, in which case Union shall follow the procedure in Section 5 d hereof; -
    - iv) if Union does not provide the type of transportation service requested; or
    - v) if all of the conditions precedent specified in Article XXI Sections 1 and 2 herein have not been satisfied or waived.
  - d. Union will advise the potential shipper in writing whether Union accepts or rejects the request for service, subject to Article XVI 5 c, within 5 calendar days of receiving a request for M12 transportation service. If Union rejects a request for service, Union shall inform the potential shipper of the reasons why its request is being rejected; and
  - e. If Union has insufficient Available Capacity to service all pending requests for transportation service Union may:
    - i) Reject all the pending requests for transportation service and conduct an open season; or
    - ii) Union shall inform all the potential shippers who have submitted a pending request for transportation service that it does not have sufficient capacity to service all pending requests for service, and Union shall provide all such potential shippers with an equal opportunity to submit a revised request for service. Union shall then allocate the Available Capacity to the request for transportation service with the highest economic value to Union. If the economic values of two or more requests are equal, then service shall be allocated on a pro-rata basis. The economic value of any request shall be based on the NPV.

### XVII. RENEWALS

Contracts with an Initial Term of five (5) years or greater will continue in full force and effect beyond the Initial Term, automatically renewing for a period of one (1) year, and every one (1) year thereafter. Shipper may reduce the Contract Demand or terminate the Contract with notice in writing by Shipper at least two (2) years prior to the expiration thereof.

#### XVIII. SERVICE CURTAILMENT

1. Right to Curtail: Union shall have the right to curtail or not to schedule part or all of Transportation Services, in whole or in part, on all or a portion of its pipeline system at any time for reasons of Force Majeure or when, in Union sole discretion, acting reasonably, capacity or operating conditions so require or it is desirable or necessary to make modifications, repairs or operating changes to its pipeline system. Union shall provide Shipper such notice of such curtailment as is reasonable under the circumstances. If due to any cause whatsoever Union is unable to receive or deliver the quantities of Gas which Shipper has requested, then Union shall order curtailment by all Shippers affected and to the extent necessary to remove the effect of the disability. Union has a priority of service policy to determine the order of service curtailment. In order to place services on the priority of service list, Union considers the following business principles: appropriate level of access to core services, customer commitment, encouraging appropriate contracting, materiality, price and term, and promoting and enabling in-franchise consumption.

The Priority ranking for all services utilizing Union Gas' storage, transmission and distribution system as applied to both infranchise and ex-franchise services are as follows; with number 1 having the highest priority and the last interrupted.

- 1. Firm In-franchise Transportation and Distribution services and firm Ex-franchise services (Note 1)
- 2. In-franchise Interruptible Distribution services
- 3. C1/M12 IT Transport and IT Exchanges with Take or Pay rates
- 4. Balancing (Hub Activity) < = 100 GJ/d; Balancing (Direct Purchase) < = 500 GJ/d; In-franchise distribution authorized overrun (Note 3)
- 5. C1/M12 IT Transport and IT Exchanges at premium rates
- 6. C1/M12 Overrun < = 20% of CD (Note 4)
- 7. Balancing (Direct Purchase) > 500 GJ/d
- 8. Balancing (Hub Activity) > 100 GJ/d; C1/M12 IT Transport and IT Exchanges
- 9. C1/M12 Overrun > 20% of CD
- 10. C1/M12 IT Transport and IT Exchanges at a discount
- 11. Late Nominations

#### Notes:

- 1. Nominated services must be nominated on the NAESB Timely Nomination Cycle otherwise they are considered to be late nomination and are therefore interruptible.
- Higher value or more reliable IT is contemplated in the service and contract, when purchase at market competitive prices.
- 3. Captures the majority of customers that use Direct Purchase balancing transactions.
- 4. Captures the majority of customers that use overrun.
- 2. <u>Capacity Procedures:</u> Union reserves the right to change its procedures for sharing interruptible capacity and will provide Shipper with two (2) months prior notice of any such change.
- 3. Maintenance: Union's facilities from time to time may require maintenance or construction. If such maintenance or construction is required, and in Union's sole opinion, acting reasonably, such maintenance or construction may impact Union's ability to meet Shipper's requirements, Union shall provide at least ten (10) days notice to Shipper, except in the case of an emergency. In the event the maintenance impacts Union's ability to meet Shipper's requirements, Union shall not be liable for any damages and shall not be deemed in breach of the Contract. To the extent that Union's ability to accept and/or deliver Shipper's gas is impaired, the Monthly demand charge shall be reduced in accordance with Article XI Section 8 and available capacity allocated in accordance with Article XI Section 9 herein.

Union shall use reasonable efforts to determine a mutually acceptable period during which such maintenance or construction will occur and also to limit the extent and duration of any impairments. Union will endeavour to schedule and complete the maintenance and construction, which would normally be expected to impact on Union's ability to meet Shipper's requirements, during the period from April 1 through to November 1.

#### XIX. SHIPPER'S REPRESENTATIONS AND WARRANTIES

- 1. <u>Shipper's Warranty:</u> Shipper warrants that it will, if required, maintain, or have maintained on its behalf, all external approvals including the governmental, regulatory, import/export permits and other approvals or authorizations that are required from any federal, state or provincial authorities for the gas quantities to be handled under the Contract. Shipper further warrants that it shall maintain in effect the Facilitating Agreements.
- 2. <u>Financial Representations:</u> Shipper represents and warrants that the financial assurances (including the Initial Financial Assurances and Security) (if any) shall remain in place throughout the term hereof, unless Shipper and Union agree otherwise. Shipper shall notify Union in the event of any change to the financial assurances throughout the term hereof. Should Union have reasonable grounds to believe that Shipper will not be able to perform or continue to perform any of its obligations under the Contract as a result of one of the following events ("**Material Event**"):
  - a. Shipper is in default, which default has not been remedied, of the Contract or is in default of any other material contract with Union or another party; or,
  - b. Shipper's corporate or debt rating falls below investment grade according to at least one nationally recognized rating agency; or,
  - c. Shipper ceases to be rated by a nationally recognized agency; or,
  - d. Shipper has exceeded credit available as determined by Union from time to time,

then Shipper shall within fourteen (14) days of receipt of written notice by Union, obtain and provide to Union a letter of credit or other security in the form and amount reasonably required by Union (the "Security"). The Security plus the Initial Financial Assurances shall not exceed twelve (12) months of Monthly demand charges (in accordance with Article IX herein) multiplied by Contract Demand. In the event that Shipper does not provide to Union such Security within such fourteen (14) day period, Union may deem a default under the Default and Termination provisions of Article XII herein.

In the event that Shipper in good faith, reasonably believes that it should be entitled to reduce the amount of or value of the Security previously provided, it may request such a reduction from Union and to the extent that the Material Event has been mitigated or eliminated, Union shall return all or a portion of the Security to Shipper within fourteen (14) Business Days after receipt of the request.

#### XX. MISCELLANEOUS PROVISIONS

- 1. Permanent Assignment: Shipper may assign the Contract to a third party ("Assignee"), up to the Contract Demand, (the "Capacity Assigned"). Such assignment shall require the prior written consent of Union and release of obligations by Union for the Capacity Assigned from the date of assignment. Such consent and release shall not be unreasonably withheld and shall be conditional upon the Assignee providing, amongst other things, financial assurances as per Article XXI herein. Any such assignment will be for the full rights, obligations and remaining term of the Contract as relates to the Capacity Assigned.
- 2. <u>Temporary Assignment:</u> Shipper may, upon notice to Union, assign all or a part of its service entitlement under the Contract (the "Assigned Quantity") and the corresponding rights and obligations to an Assignee on a temporary basis for not less than one calendar month. Such assignment shall not be unreasonably withheld and shall be conditional upon the Assignee executing the Facilitating Agreement as per Article XXI herein. Notwithstanding such assignment, Shipper shall remain obligated to Union to perform and observe the covenants and obligations contained herein in regard to the Assigned Quantity to the extent that Assignee fails to do so.
- 3. <u>Title to Gas:</u> Shipper represents and warrants to Union that Shipper shall have good and marketable title to, or legal authority to deliver to Union, all gas delivered to Union hereunder. Furthermore, Shipper hereby agrees to indemnify and save Union harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising from or out of claims of any or all third parties to such gas or on account of Taxes, or other charges thereon.

### XXI. PRECONDITIONS TO TRANSPORTATION SERVICES

- 1. <u>Union Conditions:</u> The obligations of Union to provide Transportation Services hereunder are subject to the following conditions precedent, which are for the sole benefit of Union and which may be waived or extended in whole or in part in the manner provided in the Contract:
  - a. Union shall have obtained, in form and substance satisfactory to Union, and all conditions shall have been satisfied under, all governmental, regulatory and other third party approvals, consents, orders and authorizations, that are required to provide the Transportation Services; and,
  - b. Union shall have obtained all internal approvals that are necessary or appropriate to provide the transportation Services; and,
  - c. Union shall have received from Shipper the requisite financial assurances reasonably necessary to ensure Shipper's ability to honour the provisions of the Contract (the "**Initial Financial Assurances**"). The Initial Financial Assurances, if required, will be as determined solely by Union; and,
  - d. Shipper and Union shall have entered into the Interruptible Service HUB Contract or equivalent (the "Facilitating Agreement") with Union.
- 2. <u>Shipper Conditions:</u> The obligations of Shipper hereunder are subject to the following conditions precedent, which are for the sole benefit of Shipper and which may be waived or extended in whole or in part in the manner provided in the Contract:
  - a. Shipper shall, as required, have entered into the necessary contracts with Union and/or others to facilitate the Transportation Services contemplated herein, including contracts for upstream and downstream transportation, and shall specifically have an executed and valid Facilitating Agreement; and shall, as required, have entered into the necessary contracts to purchase the gas quantities handled under the Contract; and,
  - b. Shipper shall have obtained, in form and substance satisfactory to Shipper, and all conditions shall have been satisfied under, all governmental, regulatory and other third party approvals, consents, orders and authorizations, that are required from federal, state, or provincial authorities for the gas quantities handled under the Contract; and,
  - Shipper shall have obtained all internal approvals that are necessary or appropriate for the Shipper to execute the Contract.
- 3. <u>Satisfaction of Conditions:</u> Union and Shipper shall each use due diligence and reasonable efforts to satisfy and fulfil the conditions precedent specified in this Article XXI Section 1 a, c, and d and Section 2 a and b. Each party shall notify the other forthwith in writing of the satisfaction or waiver of each condition precedent for such party's benefit. If a party concludes that it will not be able to satisfy a condition precedent that is for its benefit, such party may, upon written notice to the other party, terminate the Contract and upon the giving of such notice, the Contract shall be of no further force and effect and each of the parties shall be released from all further obligations thereunder.
- 4. <u>Non-Satisfaction of Conditions</u>: If any of the conditions precedent in this Article XXI Section 1 c or Section 2 are not satisfied or waived by the party entitled to the benefit of that condition by the Conditions Date as such term is defined in the Contract, then either party may, upon written notice to the other party, terminate the Contract and upon the giving of such notice, the Contract shall be of no further force and effect and each of the parties shall be released from all further obligations hereunder, provided that any rights or remedies that a party may have for breaches of the Contract prior to such termination and any liability a party may have incurred before such termination shall not thereby be released.

### RATE M12 NOMINATIONS

- a) For Services provided either under this rate schedule or referenced to this rate schedule:
  - i) For Services required on any day Shipper shall provide Union with details regarding the quantity it desires to be handled at the applicable Receipt Point(s) and/or Delivery Point(s), and such additional information as Union determines to be necessary (a "Nomination").
  - ii) All Nominations shall be submitted by electronic means via *Unionline*. Union, in its sole discretion, may amend or modify the nominating procedures or *Unionline* at any time. Nominations shall be submitted so as to be received by Union in accordance with timelines established by Union, which reflect the NAESB standard nomination cycles. Union will accept all Nominations on each of the nomination cycles. Nominations made after the applicable deadline shall not be accepted except at the sole discretion of Union. The nomination cycle timelines are posted on Union's website and the nomination deadlines are provided in *Unionline*.
  - iii) For customers electing firm all day transportation service, nominations shall be provided to Union's Gas Management Services as outlined in the F24 –T Agreement.
- b) Union shall determine whether or not all or any portion of the Nomination will be accepted. In the event Union determines that it will not accept such Nomination, Union shall advise Shipper of the reduced quantity (the "Quantity Available") for Services at the applicable points as outlined in each nomination cycle. After receiving such advice from Union but no later than one half hour after the Quantities Available deadline as outlined in each nomination cycle, Shipper shall provide a "Revised Nomination" to Union which shall be no greater than the Quantity Available. If such Revised Nomination is not provided within the time allowed as required above or such Revised Nomination is greater than the Quantity Available, then the Revised Nomination shall be deemed to be the Quantity Available. If the Revised Nomination (delivered within the time allowed as required above) is less than the Quantity Available, then such lesser amount shall be the Revised Nomination.
- c) That portion of a Shipper's Nomination or Revised Nomination, as set out in (a) and (b), above, which Union shall accept for Services hereunder, shall be known as Shipper's "Authorized Quantity".
- d) If on any day the actual quantities handled by Union, for each of the Services authorized, exceed Shipper's Authorized Quantity, and such excess was caused by either Shipper's incorrect nomination or by its delivering or receiving too much gas, then the amount by which the actual quantities handled for each of the Services exceed Shipper's Authorized Quantity, such excess shall be deemed "Unauthorized Overrun".
- e) The daily quantity of gas nominated by Shipper will be delivered by Shipper at rates of flow that are as nearly constant as possible, however, Union shall use reasonable efforts to take receipt of gas on any day at an hourly rate of flow up to one twentieth (1/20) of the quantity received for that day. Union shall have the right to limit Services when on any day the cumulative hourly imbalance between receipts and deliveries exceeds one twentieth (1/20) of the quantity handled for that day, for each applicable Service.
- f) A nomination for a daily quantity of gas on any day shall remain in effect and apply to subsequent days unless and until Union receives a new nomination from Shipper or unless Union gives Shipper written notice that it is not acceptable in accordance with either (a) or (b) of this schedule.
- g) Except for periods of gas or quantity balancing as provided in the Contract, nominations by Shipper for deliveries to Union and redeliveries by Union shall be the same delivery of gas by Union either to Shipper or a Shipper's Account with Union.

#### RATE M12 NOMINATIONS

- 1. For Transportation Services required on any Day under the Contract, Shipper shall provide Union with details regarding the quantity of Gas it desires to be handled at the applicable Receipt Point(s) and/or Delivery Point(s), and such additional information as Union determines to be necessary (a "Nomination").
- 2. All Nominations shall be submitted by electronic means via *Unionline*. Union, in its sole discretion, may amend or modify the nominating procedures or *Unionline* at any time. Nominations shall be submitted so as to be received by Union in accordance with timelines established by Union, which reflect the NAESB standard nomination cycles. Union will accept all Nominations on each of the nomination cycles. Nominations made after the applicable deadline shall not be accepted except at the sole discretion of Union. The nomination cycle timelines are posted on Union's website and the nomination deadlines are provided in *Unionline*.
- 3. Union shall determine whether or not all or any portion of the Nomination will be scheduled at each nomination cycle. With respect to each nomination cycle, in the event Union determines that it will not schedule such Nomination, Union shall advise Shipper of the reduced quantity (the "Quantities Available") for Transportation Services at the applicable points as outlined in each nomination cycle. After receiving such advice from Union, but no later than one half hour after the Quantities Available deadline as outlined in each nomination cycle, Shipper shall provide a revised nomination ("Revised Nomination") to Union which shall be no greater than the Quantity Available. If such Revised Nomination is not provided within the time allowed as required above or such Revised Nomination is greater than the Quantities Available, then the Revised Nomination shall be deemed to be the Quantity Available. If the Revised Nomination (delivered with the time allowed as required above) is less than the Quantity Available, then such lessor amount shall be the Revised Nomination.
- 4. For Shippers electing firm all day transportation service, nominations shall be provided to Union's Gas Management Services as outlined in the F24 –T Agreement.
- 5. For Transportation Services requiring Shipper to provide compressor fuel in kind, the nominated fuel requirements will be calculated by rounding to the nearest whole GJ.
- 6. All Timely Nominations shall have rollover options. Specifically, Shippers shall have the ability to nominate for several days, months or years, provided the Nomination start date and end date are both within the term of the Transportation Agreement.
- 7. Nominations received after the nomination deadline shall, if accepted by Union, be scheduled after Nominations received before the nomination deadline.
- 8. All Services are required to be nominated in whole Gigajoules (GJ).
- 9. To the extent Union is unable to complete a Nomination confirmation due to inaccurate, untimely or incomplete data involving an Interconnecting Pipeline entity, Union shall undertake reasonable efforts to confirm the transaction on a non-discriminatory basis until such time that the transaction is adequately verified by the parties, or until such time that Union determines that the Nomination is invalid at which time the Union shall reject the Nomination.
- 10. That portion of a Shipper's Nomination or Revised Nomination, as set out in paragraphs 1 and 3 above, which Union shall schedule for Transportation Services hereunder, shall be known as Shipper's "Authorized Quantity".
- 11. If on any day the actual quantities handled by Union, for each of the Transportation Services authorized, exceed Shipper's Authorized Quantity, and such excess was caused by either Shipper's incorrect nomination or by its delivering or receiving too much gas, then the amount by which the actual quantities handled for each of the Transportation

Services exceed Shipper's Authorized Quantity shall be deemed "Unauthorized Overrun".

- 12. The daily quantity of gas nominated by Shipper will be delivered by Shipper at rates of flow that are as nearly constant as possible, however, Union shall use reasonable efforts to take receipt of gas on any day at an hourly rate of flow up to one twentieth (1/20<sup>th</sup>) of the quantity received for that day. Union shall have the right to limit Transportation Services when on any day the cumulative hourly imbalance between receipts and deliveries exceeds one twentieth (1/20<sup>th</sup>) of the quantity handled for that day, for each applicable Transportation Service.
- 13. The parties hereto recognize that with respect to Transportation Services, on any day, receipts of gas by Union and deliveries of gas by Union may not always be exactly equal, but each party shall cooperate with the other in order to balance as nearly as possible the quantities transacted on a daily basis, and any imbalances arising shall be allocated to the Facilitating Agreement and shall be subject to the respective terms and charges contained therein, and shall be resolved in a timely manner.
- 14. Shipper may designate via *Unionline* access request form, a third party as agent for purposes of providing a Nomination, and for giving and receiving notices related to Nominations, and Union shall only accept nominations from the agent. Any such designation, if acceptable to Union, shall be effective following the receipt and processing of the written notice and will remain in effect until revoked in writing by Shipper.

# **UNION GAS LIMITED**

# M12 Monthly Transportation Fuel Ratios and Fuel Rates

Firm or Interruptible Transportation Commodity

<u>Effective January 1, 2018</u>

	VT1 Ea	asterly	VT1 Easterly				
	Dawn to Park	way (TCPL),	Dawn to Kirkwall, Lisgar,				
	Parkway	y (EGT)	Parkway (0	Consumers)	M12-X V	Vesterly	
	With Dawn C	Compression	With Dawn	With Dawn Compression		kwall to Dawn	
	Fuel Ratio	Fuel Rate	Fuel Ratio	Fuel Rate	Fuel Ratio	Fuel Rate	
Month	(%)	(\$/GJ)	(%)	(\$/GJ)	(%)	(\$/GJ)	
April	0.879	0.031	0.546	0.019	0.158	0.006	
May	0.626	0.022	0.373	0.013	0.158	0.006	
June	0.523	0.019	0.275	0.010	0.158	0.006	
July	0.508	0.018	0.262	0.009	0.158	0.006	
August	0.405	0.014	0.159	0.006	0.158	0.006	
September	0.401	0.014	0.159	0.006	0.158	0.006	
October	0.750	0.027	0.461	0.016	0.158	0.006	
November	0.894	0.032	0.624	0.022	0.158	0.006	
December	1.012	0.036	0.743	0.026	0.158	0.006	
January	1.166	0.041	0.882	0.031	0.158	0.006	
February	1.107	0.039	0.831	0.029	0.158	0.006	
March	1.033	0.037	0.742	0.026	0.158	0.006	

	M12-X Easterly M12-X Easterly						
	Kirkwall to Par	kway (TCPL),	Kirkwall to Lisgar,		M12-X Westerly		
	Parkway	y (EGT)	Parkway (	Consumers)	Parkway to Kirkwall, Dawn		
	Fuel Ratio	Fuel Rate	Fuel Ratio	Fuel Rate	Fuel Ratio	Fuel Rate	
Month	(%)	(\$/GJ)	(%)	(\$/GJ)	(%)	(\$/GJ)	
April	0.491	0.017	0.158	0.006	0.301	0.011	
May	0.411	0.015	0.158	0.006	0.301	0.011	
June	0.406	0.014	0.158	0.006	0.301	0.011	
July	0.404	0.014	0.158	0.006	0.301	0.011	
August	0.404	0.014	0.158	0.006	0.301	0.011	
September	0.400	0.014	0.158	0.006	0.301	0.011	
October	0.448	0.016	0.158	0.006	0.301	0.011	
November	0.427	0.015	0.158	0.006	0.158	0.006	
December	0.428	0.015	0.158	0.006	0.158	0.006	
January	0.442	0.016	0.158	0.006	0.158	0.006	
February	0.434	0.015	0.158	0.006	0.158	0.006	
March	0.449	0.016	0.158	0.006	0.158	0.006	

# **UNION GAS LIMITED**

# M12 Monthly Transportation Authorized Overrun Fuel Ratios and Fuel Rates

Firm or Interruptible Transportation Commodity

<u>Effective January 1, 2018</u>

	VT1 Ea	asterly	VT1 Easterly			
	Dawn to Park	way (TCPL),	Dawn to Kirkwall, Lisgar,			
	Parkway	/ (EGT)	Parkway (0	Consumers)	M12-X V	Vesterly
	With Dawn C	Compression	With Dawn	With Dawn Compression		to Dawn
	Fuel Ratio	Fuel Rate	Fuel Ratio	Fuel Rate	Fuel Ratio	Fuel Rate
Month	(%)	(\$/GJ)	(%)	(\$/GJ)	(%)	(\$/GJ)
April	1.499	0.175	1.166	0.164	0.778	0.179
May	1.246	0.166	0.993	0.157	0.778	0.179
June	1.143	0.163	0.895	0.154	0.778	0.179
July	1.128	0.162	0.882	0.153	0.778	0.179
August	1.025	0.159	0.779	0.150	0.778	0.179
September	1.021	0.158	0.779	0.150	0.778	0.179
October	1.371	0.171	1.081	0.161	0.778	0.179
November	1.514	0.176	1.244	0.166	0.778	0.179
December	1.632	0.180	1.363	0.171	0.778	0.179
January	1.786	0.186	1.502	0.175	0.778	0.179
February	1.727	0.183	1.451	0.174	0.778	0.179
March	1.653	0.181	1.362	0.171	0.778	0.179

	M12-X E Kirkwall to Par Parkway Fuel Ratio	kway (TCPL),	M12-X Easterly Kirkwall to Lisgar, Parkway (Consumers) Fuel Ratio Fuel Rate		M12-X V Parkway to K Fuel Ratio	•
Month	(%)	(\$/GJ)	(%)	(\$/GJ)	(%)	(\$/GJ)
April	1.111	0.190	0.778	0.179	0.921	0.184
May	1.031	0.188	0.778	0.179	0.921	0.184
June	1.026	0.187	0.778	0.179	0.921	0.184
July	1.024	0.187	0.778	0.179	0.921	0.184
August	1.024	0.187	0.778	0.179	0.921	0.184
September	1.020	0.187	0.778	0.179	0.921	0.184
October	1.068	0.189	0.778	0.179	0.921	0.184
November	1.047	0.188	0.778	0.179	0.778	0.179
December	1.048	0.188	0.778	0.179	0.778	0.179
January	1.062	0.189	0.778	0.179	0.778	0.179
February	1.054	0.188	0.778	0.179	0.778	0.179
March	1.069	0.189	0.778	0.179	0.778	0.179

# RATE M12 RECEIPT AND DELIVERY POINTS AND PRESSURES

# 1. Receipt and Delivery Points:

D

LISGAR:

The following defines each Receipt Point and/or Delivery Point, as indicated (R= Receipt Point; D= Delivery Point)

	The following defines each Re	ceipt Point and/or Delivery Point, as indicated (R= Receipt Point; D= Delivery Point)
R,D	DAWN (FACILITIES):	Union's Compressor Station site situated in the northwest corner of Lot Twenty-Five (25), Concession II, in the Township of Dawn-Euphemia, in the County of Lambton. This point is applicable for quantities of gas that have been previously transported or stored under other contracts that Shipper may have in place with Union.
R	DAWN (TCPL):	At the junction of Union's and TCPL's facilities, at or adjacent to Dawn (Facilities).
R	DAWN (TECUMSEH):	At the junction of Union's and Enbridge Gas Distribution Inc.'s (Enbridge) Tecumseh Gas Storage's facilities, at or adjacent to Dawn (Facilities).
R	DAWN (TSLE):	At the junction of Union's and Enbridge Gas Distribution Inc.'s (" <b>Enbridge</b> ") NPS 16 Tecumseh Sombra Line Extension facilities; at or adjacent to Dawn (Facilities).
R	DAWN (VECTOR):	At the junction of Union's and Vector Pipeline Limited Partnership (" <b>Vector</b> ") facilities, at or adjacent to Dawn (Facilities).
R,D	PARKWAY (TCPL):	At the junction of Union's and TCPL's facilities, at or adjacent to Union's facilities situated in the Part Lot 9 and Part Lot 10, Concession IX, New Survey, Town of Milton, Regional Municipality of Halton (now part of City of Mississauga).
R,D	KIRKWALL:	At the junction of Union's and TCPL's facilities at or adjacent to Union's facilities situated in Part Lot Twenty-Five (25), Concession 7, Town of Flamborough.
D	PARKWAY (CONSUMERS):	At the junction of Union's and Enbridge's facilities, at or adjacent to Union's facilities situated in Part Lot 9 and Part Lot 10, Concession IX, New Survey, Town of Milton, Regional Municipality of Halton (now part of City of Mississauga).
D	PARKWAY (EGT):	At the junction of Union's and Enbridge's facilities, at or adjacent to Union's facilities situated in Part Lot 9 and Part Lot 10, Concession IX, New Survey, Town of Milton,

Churchill Boulevard, City of Mississauga.

Regional Municipality of Halton (now part of City of Mississauga).

At the junction of the facilities of Union and Enbridge situated at 6620 Winston

### 2. Receipt and Delivery Pressures:

- (a) All Gas tendered by or on behalf of Shipper to Union shall be tendered at the Receipt Point(s) at Union's prevailing pressure at that Receipt Point, or at such pressure as per operating agreements between Union and the applicable Interconnecting Pipeline as amended or restated from time to time.
- (b) All Gas tendered by or on behalf of Union to Shipper shall be tendered at the Delivery Point(s) at Union's prevailing pressure at that Delivery Point or at such pressure as per agreements between Union and the applicable Interconnecting Pipeline as amended or restated from time to time.
- (c) Under no circumstances shall Union be obligated to receive or deliver gas hereunder at pressures exceeding the maximum allowable operating pressures prescribed under any applicable governmental regulations; nor shall Union be required to make any physical deliveries or to accept any physical receipts which its existing facilities cannot accommodate.



Effective 2018-01-01 **Rate M13** Page 1 of 1

# TRANSPORTATION OF LOCALLY PRODUCED GAS

# (A) Applicability

The charges under this rate schedule shall be applicable to a customer who enters into a contract with Union for gas received at a local production point to be transported to Dawn.

# **Applicable Points**

Dawn as a delivery point: Dawn (Facilities).

# (B) Rates

The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated, which may be higher than the identified rates.

## **Demand Commodity**

			Union Supplied Fuel	Shipper Supplied Fuel		
	Demand Charge <u>Rate/Month</u>	Commodity Charge <u>Rate/GJ</u>	Fuel and Commodity Charge Rate/GJ	Fuel <u>Ratio %</u>	<u>AND</u>	Commodity Charge <u>Rate/GJ</u>
<ol> <li>Monthly fixed charge per Customer Station</li> <li>Transmission Commodity Charge</li> <li>Delivery Commodity Charge</li> <li>Cap-and-Trade Facility-Related Charge (applied</li> </ol>	\$957.58 to all quantities trans	\$0.035 sported)	\$0.006 \$0.002	0.158%		\$0.002

These charges are in addition to the transportation, storage and/or balancing charges which shall be paid for under Rate M12 or Rate C1, or other services that may be negotiated.

# 5. Overrun Services

# **Authorized Overrun**

Authorized overrun will be payable on all quantities transported in excess of Union's obligation on any day. The overrun charges payable will be calculated at the identified authorized overrun charge. Overrun will be authorized at Union's sole discretion.

	Union Supplied Fuel	Shipper Supplied Fuel		
	Fuel and Commodity Charge <u>Rate/GJ</u>	Fuel <u>Ratio %</u>	<u>AND</u>	Commodity Charge <u>Rate/GJ</u>
Authorized Overrun Charge Cap-and-Trade Facility-Related Charge (applied to all quantities transported)	\$0.144 \$0.002	0.158%		\$0.139 \$0.002

# **Unauthorized Overrun**

Authorized Overrun rates payable on all volumes up to 2% in excess of Union's contractual obligation.

The Unauthorized Overrun rate during the November 1 to April 15 period will be \$50 per GJ for all usage on any day in excess of 102% of Union's contractual obligation. The Unauthorized Overrun rate during the April 16 to October 31 period will be \$9.373 per GJ for all usage on any day in excess of 102% of Union's contractual obligation.

# (C) Terms of Service

The General Terms & Conditions applicable to this rate schedule shall be in accordance with the attached Schedule "A 2013" for contracts in effect on or after January 1, 2013.

Effective January 1, 2018 Chatham, Ontario O.E.B. Order # EB-2017-0087

Supersedes EB-2017-0278 Rate Schedule effective October 1, 2017.

# RATE M13 GENERAL TERMS & CONDITIONS

#### I. DEFINITIONS

Except where the context expressly requires or states another meaning, the following terms, when used in these General Terms & Conditions and in any contract into which these General Terms & Conditions are incorporated, shall be construed to have the following meanings:

"Aid to Construction" shall include any and all costs, expenses, amounts, damages, obligations, or other liabilities (whether of a capital or operating nature, and whether incurred before or after the date of the Contract) actually paid by Union (including amounts paid to affiliates for services rendered in accordance with the Affiliate Relationships Code as established by the OEB) in connection with or in respect of satisfying the conditions precedent set out in Article XXI herein (including without limitation the cost of construction, installation and connection of any required meter station as described in Article IX, Section 6, the obtaining of all governmental, regulatory and other third party approvals, and the obtaining of rights of way) whether resulting from Union's negligence or not, except for any costs that have arisen from the gross negligence, fraud, or wilful misconduct of Union;

"Average Local Producer Heat" ("ALPH") shall mean the heat content value as set by Union, and shall be determined by volumetrically averaging the gross heat content of all produced gas delivered to the Union system by Ontario Local Producers. The ALPH shall be expressed in GJ/10³m³ and may be adjusted from time to time by Union;

"Business Day" shall mean any day, other than Saturday, Sunday or any days on which national banks in the Province of Ontario are authorized to close;

"Contract" shall refer to the Contract to which these General Terms & Conditions shall apply, and into which they are incorporated;

"Contract Year" shall mean a period of three hundred and sixty-five (365) consecutive days; provided however, that any such period which contains a date of February 29 shall consist of three hundred and sixty-six (366) consecutive days, commencing on November 1 of each year; except for the first Contract Year which shall commence on the Commencement Date and end on the first October 31 that follows such date;

"cricondentherm hydrocarbon dewpoint" shall mean the highest hydrocarbon dewpoint temperature on the phase envelope;

"cubic metre" shall mean the volume of gas which occupies one cubic metre when such gas is at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute;

"Dawn Quantity" shall mean the total daily quantity of gas in GJ delivered at Dawn (Facilities), which is equal to the total energy of all gas supplied daily to Union at the Receipt Point(s). The Dawn Quantity shall be calculated utilizing the following factor equation: Dawn Quantity = Produced Volume x ALPH;

"Day" shall mean a period of twenty-four (24) consecutive hours beginning at 10:00 a.m. Eastern Clock Time. The reference date for any Day shall be the calendar date upon which the twenty-four (24) hour period shall commence;

"Delivery Point" shall mean the point where Union shall deliver the Dawn Quantity and/or Market Quantity to Shipper and as further defined in Schedule 1 of the Contract;

"Distribution Demand" shall mean the varying demand for the supply of gas, as determined by Union, on Union's pipeline and distribution system for users of gas who are supplied or delivered gas by Union's pipeline and distribution system;

"Eastern Clock Time" shall mean the local clock time in the Eastern Time Zone on any Day;

"firm" shall mean service not subject to curtailment or interruption except under Articles XI, XII and XVIII herein;

"Firm Daily Variability Demand" shall mean the established quantity set forth in Schedule 2 of the Contract, which is the

permitted difference between the Dawn Quantity and the Market Quantity;

"gas" shall mean gas as defined in the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Sch. B, as amended, supplemented or re-enacted from time to time;

"gross heating value" shall mean the total heat expressed in megajoules per cubic metre (MJ/m³) produced by the complete combustion at constant pressure of one (1) cubic metre of gas with air, with the gas free of water vapour and the temperature of the gas, air and products of combustion at standard temperature and all water formed by the combustion reaction condensed to the liquid state;

"hydrocarbon dewpoint" shall mean temperature at a specific pressure where hydrocarbon vapour condensation begins;

"Interruptible Service HUB Contract" shall mean a contract between Shipper and Union under which Union provides interruptible HUB service;

"Interconnecting Pipeline" shall mean a pipeline that directly connects to the Union pipeline and distribution system;

"joule" (J) shall mean the work done when the point of application of a force of one (1) newton is displaced a distance of one (1) metre in the direction of the force. The term "megajoule" (MJ) shall mean 1,000,000 joules. The term "gigajoule" (GJ) shall mean 1,000,000,000 joules;

"m³" shall mean cubic metre of gas and "103m3" shall mean 1,000 cubic metres of gas;

"MAOP" shall mean the maximum allowable operating pressure of Union's pipeline and distribution system and as further defined in Schedule 1 of the Contract;

"Market Quantity" shall mean the daily quantity in GJ nominated for Name Change Service that Day by Shipper at Dawn (Facilities);

"Maximum Daily Quantity" shall mean the maximum quantity of gas Shipper may deliver to Union at a Receipt Point on any Day, as further defined in Schedule 1;

"Month" shall mean the period beginning at 10:00 a.m. Eastern Clock Time on the first day of a calendar month and ending at 10:00 a.m. Eastern Clock Time on the first day of the following calendar month;

"Name Change Service" shall mean an interruptible administrative service whereby Union acknowledges for Shipper a change in title of a gas quantity from Shipper to a third party at the Delivery Point;

"OEB" means the Ontario Energy Board;

"pascal" "(Pa)" shall mean the pressure produced when a force of one (1) newton is applied to an area of one (1) square metre. The term "kilopascal" "(kPa)" shall mean 1,000 pascals;

"Produced Volume" shall mean the aggregate of all actual volumes of gas in 10<sup>3</sup>m<sup>3</sup>, delivered by Shipper to Union at all Receipt Points on any Day;

"Producer Balancing Account" shall mean the gas balance held by Union for Shipper, or owed by Shipper to Union, at the Delivery Point. Where the Producer Balancing Account is zero or a positive number, the account is in a credit position, and where the Producer Balancing Account is less than zero, the account is in a debit position;

"Producer Balancing Service" shall mean a Service whereby Union either calculates a credit or debit to the Producer Balancing Account by subtracting the Market Quantity from the Dawn Quantity. Where such amount is greater than zero, Union will credit the Producer Balancing Account, or where such amount is less than zero, Union will debit the Producer Balancing Account. This Service shall be performed on a retroactive basis on the terms and conditions contained in Schedule 2 of the Contract, as may be revised from time to time by Union;

"Receipt Point" shall mean the point(s) where Union shall receive gas from Shipper;

"Sales Agreement" shall mean the Ontario Gas Purchase Agreement(s) entered into between Shipper and Union;

"Shipper" shall have the meaning as defined in the Contract, and shall also include Shipper's agent(s);

"specific gravity" shall mean density of the gas divided by density of air, with both at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute;

"System Capacity" shall mean the volumetric capacity that exists from time to time within Union's pipeline and distribution system which determines Union's ability to accept volumes of gas into Union's pipeline and distribution system hereunder. System Capacity shall be determined by Union and such determination, in addition to the physical characteristics of Union's pipeline and distribution system Distribution Demand, shall also include consideration of Union's local Distribution Demand, Union's total system Distribution Demand, availability of Union's gas storage capacity, and other gas being purchased and/or delivered into Union's pipeline and distribution system;

"Taxes" shall mean any tax (other than tax on income or tax on property), duty, royalty, levy, license, fee or charge not included in the charges and rates as per the applicable rate schedule (including but not limited to charges under any form of cap and trade, carbon tax, or similar system) and that is levied, assessed or made by any governmental authority on the gas itself, or the act, right, or privilege of producing, severing, gathering, storing, transporting, handling, selling or delivering gas under the Contract;

"Wobbe Number" shall mean gross heating value of the gas divided by the square root of its specific gravity.

#### II. GAS QUALITY

- 1. <u>Natural Gas:</u> The minimum gross heating value of the gas delivered to/by Union hereunder, shall be thirty-six (36) megajoules per cubic metre. The maximum gross heating value of the gas delivered to/by Union hereunder shall be forty point two (40.2) megajoules per cubic metre. The gas to be delivered hereunder to Union may be a commingled supply from Shipper's gas sources of supply. The gas to be delivered by Union may be a commingled supply from Union's sources of gas supply; provided, however, that helium, natural gasoline, butane, propane and other hydrocarbons, except methane, may be removed prior to delivery to Shipper. Further, Union may subject, or permit the subjection of, the gas to compression, dehydration, cooling, cleaning and other processes.
- 2. <u>Freedom from objectionable matter:</u> The gas to be delivered to Union at the Receipt Point(s) hereunder,
  - a. shall be commercially free from bacteria, sand, dust, gums, crude oils, lubricating oils, liquids, chemicals or compounds used in the production, treatment, compression or dehydration of the gas or any other objectionable substance in sufficient quantity so as to render the gas toxic, unmerchantable or cause injury to, or interference with, the proper operation of the lines, regulators, meters or other appliances through which it flows,
  - b. shall not contain more than seven (7) milligrams of hydrogen sulphide per cubic metre of gas, nor more than one hundred (100) milligrams of total sulphur per cubic metre of gas,
  - c. shall not contain more than five (5) milligrams of mercaptan sulphur per cubic metre of gas,
  - d. shall not contain more than two point zero (2.0) molar percent by volume of carbon dioxide in the gas,
  - e. shall not contain more than zero point four (0.4) molar percent by volume of oxygen in the gas,
  - f. shall not contain more than zero point five (0.5) molar percent by volume of carbon monoxide in the gas,
  - g. shall not contain more than four point zero (4.0) molar percent by volume of hydrogen in the gas,
  - h. shall not contain more than sixty-five (65) milligrams of water vapour per cubic metre of gas,
  - i. shall not have a cricondentherm hydrocarbon dewpoint exceeding minus eight (-8) degrees Celsius,
  - j. shall have Wobbe Number from forty seven point fifty (47.50) megajoules per cubic metre of gas to fifty one point

forty six (51.46) megajoules per cubic metre of gas, maximum of one point five (1.5) mole percent by volume of butane plus (C4+) in the gas, and maximum of four point zero (4.0) mole percent by volume of total inerts in the gas in order to be interchangeable with other Interconnecting Pipeline gas,

- k. shall not exceed forty-three degrees Celsius (43°C), and,
- I. shall not be odourized by Shipper.

#### 3. Non-conforming Gas:

- a. In the event that the quality of the gas does not conform or if Union, acting reasonably, suspects the quality of the gas may not conform to the specifications herein, then Shipper shall, if so directed by Union acting reasonably, forthwith carry out, at Shipper's cost, whatever field testing of the gas quality as may be required to ensure that the quality requirements set out herein are met, and to provide Union with a certified copy of such tests. If Shipper does not carry out such tests forthwith, Union may conduct such test and Shipper shall reimburse Union for all costs incurred by Union for such testing.
- b. If Shipper's gas fails at any time to conform to the requirements of this Article II, Union, in addition to its other remedies, may refuse to accept delivery of gas at the Receipt Points hereunder until such deficiency has been remedied by Shipper. Each Party agrees to notify the other verbally, followed by written notification, of any such deficiency of quality.
- 4. Quality of Gas Received: The quality of the gas to be received by Union at the Receipt Point(s) hereunder is to be of a merchantable quality and in accordance with the quality standards as set out by Union in this Article II, but, Union will use reasonable efforts to accept gas of a quality that may deviate from the quality standards set out therein.
- 5. Quality of Gas at Dawn: The quality of the gas to be delivered to Union at Dawn (Facilities) or the gas to be delivered by Union to Shipper at Dawn (Facilities) hereunder is to be of a merchantable quality and in accordance with the quality standards and measurement standards as set out by Union in this Article II, except that total sulphur limit shall be not more than four hundred and sixty (460) milligrams per cubic metre of gas. In addition to any other right or remedy of a party, each party shall be entitled to refuse to accept delivery of any gas which does not conform to any of the specifications set out in this Article II.

#### III. MEASUREMENTS

1. <u>Service Unit:</u> The unit of the gas delivered to Union shall be a quantity of 10<sup>3</sup>m<sup>3</sup>. The unit of gas delivered by Union shall be a megajoule, a gigajoule, a cubic metre (m<sup>3</sup>) or one thousand cubic metres (10<sup>3</sup>m<sup>3</sup>) at Union's discretion.

### 2. Determination of Volume and Energy:

- a. The volume and energy amounts determined under the Contract shall be determined in accordance with the Electricity and Gas Inspection Act (Canada), RSC 1985, c E-4- (the "Act") and the Electricity and Gas Inspection Regulations, SOR 86/131 (the "Regulations"), and any documents issued under the authority of the Act and Regulations and any amendments thereto.
- b. The supercompressibility factor shall be determined in accordance with either the "Manual for Determination of Supercompressibility Factors for Natural Gas" (PAR Project NX-19) published in 1962 or with American Gas Association Transmission Measurement Committee Report No. 8, Nov. 1992, at Union's discretion, all as amended from time to time.
- c. The volume and/or energy of the gas delivered to/by Union hereunder shall be determined by the measurement equipment designated in Article VII herein.

#### IV. RECEIPT POINT AND DELIVERY POINT

The point(s) of receipt and point of delivery for all gas to be covered hereunder shall be on the outlet side of the measuring stations located at or near the point or points of connection specified in Schedule 1 of the Contract, where possession of the gas changes from one party to the other.

#### V. POSSESSION OF AND RESPONSIBILITY FOR GAS

- 1. <u>Possession of Gas:</u> Union accepts no responsibility for any gas prior to such gas being delivered to Union at the Receipt Point or after its delivery by Union at the Delivery Point. As between the parties hereto, Union shall be deemed to be in control and possession of and responsible for all such gas from the time that such gas enters Union's system until such gas is delivered to Shipper.
- 2. <u>Liability:</u> Shipper agrees that Union is not a common carrier and is not an insurer of Shipper's gas, and that Union shall not be liable to Shipper or any third party for loss of gas in Union's possession, except to the extent such loss is caused entirely by Union's negligence or wilful misconduct.

#### VI. <u>FACILITIES ON SHIPPER'S PROPERTY</u>

- Meter Station: Union shall provide, at the Receipt Point(s), according to the terms hereunder, the meter station required
  to receive and measure the Produced Volume of gas received by Union from Shipper. Shipper agrees, if requested by
  Union, to provide Union with sufficient detailed information regarding Shipper's current and expected operations in order
  to aid Union in Union's design of the meter station.
- 2. <u>Union Obligations:</u> Pursuant to Article VI. Section 1 herein, Union shall purchase, install and maintain, at the Receipt Point(s):
  - a. a meter and any associated recording gauges as are necessary; and,
  - a suitable gas odourizing injection facility where Union deems such facility to be necessary.
- 3. <u>Union Equipment:</u> All equipment installed by Union at the Receipt Point(s) shall remain the property of Union at all times, notwithstanding the fact that it may be affixed to Shipper's property. Union shall be entitled to remove said equipment at any time within a period of sixty (60) days from any termination or expiry of the Contract. Shipper shall take all necessary steps to ensure Union may enter onto the Receipt Point(s) to remove such equipment for a period of sixty (60) days after termination or expiry of the Contract or the Sales Agreement.
- 4. <u>Shipper Obligations:</u> Upon Union's request Shipper shall, at Shipper's own cost and expense:
  - a. obtain a registered lease or freehold ownership at the Receipt Point(s) sufficient to provide Union with free uninterrupted access to, from, under and above the Receipt Point(s), for a term (and extended terms) identical to the Contract, plus sixty (60) days, and shall provide Union with a bona fide copy of such lease agreement prior to Union commencing the construction of the meter station;
  - b. furnish, install, set, and maintain suitable pressure and volume control equipment and such additional equipment as required on Shipper's delivery system, to protect against the overpressuring of Union's facilities, and to limit the daily flow of gas to the corresponding Maximum Daily Quantity applicable to the Receipt Point(s);
  - c. supply, install and maintain a gravel or cut stone covering on each Receipt Point and shall maintain such Receipt Point(s) in a safe and workmanlike manner; and,
  - d. install and maintain a fence satisfactory to Union around the perimeter of each Receipt Point which will adequately secure and protect Union's equipment therein.
- 5. <u>Maintenance Costs:</u> Shipper shall within thirty (30) days of the delivery of an invoice by Union, reimburse Union for any actual costs reasonably incurred by Union for any repair, replacement, relocation, or upgrading of any meter station

requested by Shipper, or as required by law, or by duly constituted regulatory body, or through good engineering practice. Union shall be responsible for any costs incurred by Union to correct an error made by Union.

### VII. MEASURING EQUIPMENT

- 1. <u>Metering by Union:</u> Union will install and operate meters and related equipment as required and in accordance with the Act and Regulations referenced in Article III herein.
- 2. Metering by Others: In the event that all or any gas received or delivered hereunder is measured by a meter that is owned and operated by an upstream or downstream transporter (the "Transporter") whose facilities may or may not interconnect with Union's, then Union and Shipper agree to accept that metering for the purpose of determining the volume and energy of gas received or delivered on behalf of the Shipper. The standard of measurement and tests for the gas delivered to/by Union pursuant to this Article VII, Section 2 shall be in accordance with the general terms and conditions as incorporated in that Transporter's gas tariff as approved by Transporter's regulatory body.
- 3. <u>Check Measuring Equipment:</u> Shipper may install, maintain and operate, at the Receipt Point, at its own expense, such check measuring equipment as desired, provided that such equipment shall be so installed as not to interfere with the operation of Union's measuring equipment at or near the Receipt Point, and shall be installed, maintained and operated in conformity with the same standards and specifications applicable to Union's metering facilities.
- 4. <u>Calibration and Test of Measuring Equipment:</u> The accuracy of Union's measuring equipment shall be verified by Union at reasonable intervals, and if requested, in the presence of representatives of Shipper, but Union shall not be required to verify the accuracy of such equipment more frequently than once in any thirty (30) day period. In the event either party notifies the other that it desires a special test of any measuring equipment, the parties shall co-operate to secure a prompt verification of the accuracy of such equipment. The expense of any such special test, if called for by Shipper, shall be borne by Shipper if the measuring equipment tested is found to be in error by not more than two per cent (2%). If, upon test, any measuring equipment is found to be in error by not more than two per cent (2%), previous recordings of such equipment shall be considered accurate in computing receipts of gas, but such equipment shall be adjusted at once to record as near to absolute accuracy as possible. If the test conducted shows a percentage of inaccuracy greater than two percent (2%), the financial adjustment, if any, shall be calculated in accordance with the Act and Regulations, as may be amended from time to time and in accordance with any successor statutes and regulations.
- 5. <u>Preservation of Metering Records:</u> Union and Shipper shall each preserve for a period of at least six (6) years all test data, and other relevant records.

### VIII. BILLING

- 1. Monthly Billing Date: Union shall render bills on or before the tenth (10th) day of each month for all Services furnished during the preceding Month. Such charges may be based on estimated quantities, if actual quantities are unavailable in time to prepare the billing. Union shall provide, in a succeeding Month's billing, an adjustment based on any difference between actual quantities and estimated quantities, without any interest charge. If presentation of a bill to Shipper is delayed after the tenth (10th) day of the month, then the time of payment shall be extended accordingly, unless Shipper is responsible for such delay.
- 2. <u>Right of Examination:</u> Both Union and Shipper shall have the right to examine at any reasonable time the books, records and charts of the other to the extent necessary to verify the accuracy of any statement, chart or computation made under or pursuant to the provisions of the Contract.
- 3. <u>Amendment of Statements:</u> For the purpose of completing a final determination of the actual quantities of gas handled in any of the Services to Shipper, the parties shall have the right to amend their statement for a period equal to the time during which the companies, that transport the gas contemplated herein for Union and Shipper, retain the right to amend their statements, which period shall not exceed three (3) years from the date of termination of the Contract.

#### IX. PAYMENTS

- 1. <u>Monthly Payments:</u> Shipper shall pay the invoiced amount directly into Union's bank account as directed on the invoice on or before the twentieth (20<sup>th</sup>) day of each month. If the payment date is not a Business Day, then payment must be received in Union's account on the first Business Day preceding the twentieth (20<sup>th</sup>) day of the month.
- 2. Remedies for Non-payment: Should Shipper fail to pay all of the amount of any bill as herein provided when such amount is due,
  - Shipper shall pay to Union interest on the unpaid portion of the bill accruing at a rate per annum equal to the
    minimum commercial lending rate of Union's principal banker in effect from time to time from the due date until
    the date of payment; and,
  - b. If such failure to pay continues for thirty (30) days after payment is due, Union, in addition to any other remedy it may have under the Contract, may suspend Services until such amount is paid. Notwithstanding such suspension, all demand charges shall continue to accrue hereunder as if such suspension were not in place.

If Shipper in good faith disputes the amount of any such bill or part thereof Shipper shall pay to Union such amounts as it concedes to be correct. At any time thereafter, within twenty (20) days of a demand made by Union, Shipper shall furnish financial assurances satisfactory to Union, guaranteeing payment to Union of the amount ultimately found due upon such bill after a final determination. Such a final determination may be reached either by agreement, arbitration decision or judgement of the courts, as may be the case. Union shall not be entitled to suspend Services because of such non-payment unless and until default occurs in the conditions of such financial assurances or default occurs in payment of any other amount due to Union hereunder.

Notwithstanding the foregoing, Shipper is not relieved from the obligation to continue its deliveries of gas to Union under the terms of any agreement, where Shipper has contracted to deliver specified quantities of gas to Union.

- 3. <u>Billing Adjustments:</u> If it shall be found that at any time or times Shipper has been overcharged or undercharged in any form whatsoever under the provisions of the Contract and Shipper shall have actually paid the bills containing such overcharge or undercharge, Union shall refund the amount of any such overcharge and interest shall accrue from and including the first day of such overcharge as paid to the date of refund and shall be calculated but not compounded at a rate per annum determined each day during the calculation period to be equal to the minimum commercial lending rate of Union's principal banker, and the Shipper shall pay the amount of any such undercharge, but without interest. In the event Union renders a bill to Shipper based upon measurement estimates, the required adjustment to reflect actual measurement shall be made on the bill next following the determination of such actual measurement, without any charge of interest. In the event an error is discovered in the amount billed in any statement rendered by Union, such error shall be adjusted by Union. Such overcharge, undercharge or error shall be adjusted by Union on the bill next following its determination (where the term "bill next following" shall mean a bill rendered at least fourteen (14) days after the day of its determination), provided that claim therefore shall have been made within three (3) years from the date of the incorrect billing. In the event any refund is issued with Shipper's bill, the aforesaid date of refund shall be deemed to be the date of the issue of bill.
- 4. <u>Taxes:</u> In addition to the charges and rates as per the applicable rate schedules and price schedules, Shipper shall pay all Taxes which are imposed currently or subsequent to the execution of the Contract by any legal authority having jurisdiction and any amount in lieu of such Taxes paid or payable by Union.
- 5. <u>Set Off:</u> If either party shall, at any time, be in arrears under any of its payment obligations to the other party under the Contract, then the party not in arrears shall be entitled to reduce the amount payable by it to the other party in arrears under the Contract, or any other contract, by an amount equal to the amount of such arrears or other indebtedness to the other party. In addition to the foregoing remedy, Union may, upon forty-eight (48) hours verbal notice, to be followed by written notice, take possession of any or all of Shipper's gas under the Contract, which shall be deemed to have been assigned to Union, to reduce such arrears or other indebtedness to Union.
- 6. <u>Station and Connection Costs:</u> In the event that a meter station must be constructed and/or installed in order to give effect to the Contract, Shipper agrees to pay Union for a portion, as determined by Union, of Union's actual cost, as hereinafter defined, for constructing and installing such station. Shipper also agrees to pay the actual costs to connect such station to Union's pipeline and distribution system. Union shall advise Shipper as to the need for a meter station and shall provide Shipper with an estimate of the Aid to Construction. Such Aid to Construction shall include the costs of all pipe, fittings and materials, third party labour costs and Union's direct labour, labour saving devices, vehicles and

mobile equipment, but shall exclude the purchase costs of gas pressure control equipment and gas meters installed by Union.

### X. ARBITRATION

If and when any dispute, difference or question shall arise between the parties hereto touching the Contract or anything herein contained, or the construction hereof, or the rights, duties or liabilities of the parties in relation to any matter hereunder, the matter in dispute shall be submitted and referred to arbitration within ten (10) days after written request of either party. Upon such request each party shall appoint an arbitrator, and the two so appointed shall appoint a third. A majority decision of the arbitrators shall be final and binding upon both parties. In all other respects the provisions of the <u>Arbitration Act</u>, 1991, or any act passed in amendment thereof or substitution therefore, shall apply to each such submission. Operations under the Contract shall continue, without prejudice, during any such arbitration and the costs attributable to such arbitration shall be shared equally by the parties hereto.

### XI. FORCE MAJEURE

- 1. <u>Definition:</u> The term "force majeure" as used herein shall mean acts of God, strikes, lockouts or any other industrial disturbance, acts of the public enemy, sabotage, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests and restraints of governments and people, civil disturbances, explosions, breakage or accident to machinery or lines of pipe, freezing of wells or lines of pipe, inability to obtain materials, supplies, permits or labour, any laws, orders, rules, regulations, acts or restraints of any governmental body or authority (civil or military), any act or omission that is excused by any event or occurrence of the character herein defined as constituting force majeure, any act or omission by parties not controlled by the party having the difficulty and any other similar cases not within the control of the party claiming suspension and which by the exercise of due diligence such party is unable to prevent or overcome.
- 2. <u>Notice:</u> In the event that either the Shipper or Union is rendered unable, in whole or in part, by force majeure, to perform or comply with any obligation or condition of the Contract, such party shall give notice and full particulars of such force majeure in writing delivered by hand, fax or other direct written electronic means to the other party as soon as possible after the occurrence of the cause relied on and subject to the provision of this Article.
- Exclusions: Neither party shall be entitled to the benefit of the provisions of force majeure hereunder if any or all of the following circumstances prevail: the failure resulting in a condition of force majeure was caused by the negligence of the party claiming suspension; the failure was caused by the party claiming suspension where such party failed to remedy the condition by making all reasonable efforts (short of litigation, if such remedy would require litigation); the party claiming suspension failed to resume the performance of such condition obligations with reasonable dispatch; the failure was caused by lack of funds; the party claiming suspension did not, as soon as possible after determining, or within a period within which it should acting reasonably have determined, that the occurrence was in the nature of force majeure and would affect its ability to observe or perform any of its conditions or obligations under the Contract, give to the other party the notice required hereunder.
- 4. <u>Notice of Remedy:</u> The party claiming suspension shall likewise give notice as soon as possible after the force majeure condition is remedied, to the extent that the same has been remedied, and that such party has resumed or is then in a position to resume the performance of the obligations and conditions of the Contract.
- 5. <u>Obligation to Perform:</u> An event of force majeure on Union's system will excuse the failure to deliver gas by Union or the failure to accept gas by Union hereunder, and both parties shall be excused from performance of their obligations hereunder, except for payment obligations, to the extent of and for the duration of the force majeure.
- 6. <u>Upstream or Downstream Force Majeure:</u> An event of force majeure upstream or downstream of Union's system shall not relieve Shipper of any payment obligations.
- 7. <u>Delay of Services:</u> Despite Article XI herein, if Union is prevented, by reason of an event of force majeure on Union's system from delivering gas on the Day or Days upon which Union has accepted gas from Shipper, Union shall thereafter make all reasonable efforts to deliver such quantities as soon as practicable and on such Day or Days as are agreed to

by Shipper and Union. If Union accepts such gas on this basis, Shipper shall not receive any demand charge relief as contemplated under Article XI herein.

8. <u>Firm Daily Variability Demand Charge Relief:</u> Despite Article XI herein, if on any Day Union fails to accept gas from Shipper by reason of an event of force majeure on Union's system and fails to deliver the quantity of gas nominated hereunder by Shipper up to the Firm Daily Variability Demand for that Contract, then for that Day the Monthly charge shall be reduced by an amount equal to the applicable Firm Daily Variability Demand Rate, as defined in this paragraph, multiplied by the difference between the quantity of gas actually delivered by Union during such Day and the quantity of gas which Shipper in good faith nominated on such Day. The term "Firm Daily Variability Demand Rate" shall mean the monthly Firm Daily Variability Demand charge as provided in Schedule 2 of the Contract, divided by the number of days in the month for which such rate is being calculated.

#### XII. DEFAULT AND TERMINATION

In case of the breach or non-observance or non-performance on the part of either party hereto of any covenant, proviso, condition, restriction or stipulation contained in the Contract (but not including herein failure to take or make delivery in whole or in part of the gas delivered to/by Union hereunder occasioned by any of the reasons provided for in Article XI herein) which has not been waived by the other party, then and in every such case and as often as the same may happen, the non-defaulting party may give written notice to the defaulting party requiring it to remedy such default and in the event of the defaulting party failing to remedy the same within a period of thirty (30) days from receipt of such notice, the non-defaulting party may at its sole option declare the Contract to be terminated and thereupon the Contract shall be terminated and be null and void for all purposes other than and except as to any liability of the parties under the same incurred before and subsisting as of termination. The right hereby conferred upon each party shall be in addition to, and not in derogation of or in substitution for, any other right or remedy which the parties respectively at law or in equity shall or may possess.

In the event that the Contract is terminated pursuant to this Article XII, the parties hereto agree that they shall continue to be bound only by the terms and conditions set forth in the Contract but only for the purpose of determining the actual quantities in Shipper's Producer Balancing Account with such determination being subject to Article X. Such extended period of time shall not exceed one (1) year from the date of termination of the Contract.

#### XIII. AMENDMENT

Subject to Article XV herein and the ability of Union to amend the applicable rate schedules and price schedules, with the approval of the OEB (if required), no amendment or modification of the Contract shall be effective unless the same shall be in writing and signed by each of the Shipper and Union.

#### XIV. NON-WAIVER AND FUTURE DEFAULT

No waiver of any provision of the Contract shall be effective unless the same shall be in writing and signed by the party entitled to the benefit of such provision and then such waiver shall be effective only in the specific instance and for the specified purpose for which it was given. No failure on the part of Shipper or Union to exercise, and no course of dealing with respect to, and no delay in exercising, any right, power or remedy under the Contract shall operate as a waiver thereof.

### XV. LAWS, REGULATIONS AND ORDERS

The Contract and the respective rights and obligations of the parties hereto are subject to all present and future valid laws, orders, rules and regulations of any competent legislative body, or duly constituted authority now or hereafter having jurisdiction and the Contract shall be varied and amended to comply with or conform to any valid order or direction of any board, tribunal or administrative agency which affects any of the provisions of the Contract.

#### XVI. RESERVED FOR FUTURE USE

N/A

#### XVII. RENEWALS

The Contract will continue in full force and effect beyond the Initial Term, automatically renewing for a period of one (1) year, and every one (1) year thereafter, subject to notice in writing by either party of termination at least three (3) months prior to the expiration thereof.

#### XVIII. SERVICE CURTAILMENT

- 1. <u>Verbal Notice:</u> Excepting instances of emergency, Shipper and Union agree to give at least twenty-four (24) hours verbal notice before a planned curtailment of receipt or delivery, shut-down or start-up.
- 2. <u>Emergency:</u> Shipper shall complete and maintain a plan which depicts all of the Shipper's gas production facilities including all emergency shut off valves and emergency equipment and provide a copy to Union upon Union's request. Shipper shall provide to Union the names and telephone numbers of those persons whom Union may contact in the event of an emergency situation arising within the Shipper's facilities.
- 3. <u>Emergency Notice:</u> In the event that Union is notified by a third party or if Union becomes aware of an emergency situation in which Shipper's gas production site, pipeline or associated equipment is involved, Union shall immediately notify Shipper or Shipper's representative of such emergency condition.
- 4. <u>Right to Modify:</u> Union shall have the right, at all times, to reconstruct or modify Union's pipeline and distribution system and the pressure carried therein, notwithstanding that such reconstruction or modification may reduce the System Capacity available to receive Shipper's gas, or Shipper's ability to deliver gas to Union. Should Union expect any such reconstruction or modification to reduce the delivery or receipt of gas by either party, Union will, where able, provide Shipper with six (6) months' notice or as much notice as is reasonably practical in the circumstances. Union shall use reasonable efforts to assist the Shipper in meeting its Market Quantity in these circumstances.

#### XIX. SHIPPER'S REPRESENTATIONS AND WARRANTIES

- 1. <u>Shipper's Warranty:</u> Shipper warrants that it will, if required, maintain, or have maintained on its behalf, all external approvals including the governmental, regulatory, import/export permits and other approvals or authorizations that are required from any federal, state or provincial authorities for the gas quantities to be handled under the Contract. Shipper further warrants that it shall maintain in effect the Facilitating Agreements.
- 2. <u>Financial Representations:</u> Shipper represents and warrants that the financial assurances (including the Initial Financial Assurances and Security), if any, shall remain in place throughout the term hereof unless Shipper and Union agree otherwise. Shipper shall notify Union in the event of any change to the financial assurances (including the Initial Financial Assurances and Security), if any, throughout the term hereof. Should Union have reasonable grounds to believe that Shipper will not be able to perform or continue to perform any of its obligations under the Contract for any reason (a "Material Event"), then Shipper shall within fourteen (14) days of receipt of written notice by Union, obtain and provide to Union a letter of credit or other security in the form and amount reasonably required by Union (the "Security"). In the event that Shipper does not provide to Union such Security, Union may deem a default in accordance with the provisions of Article XII herein.

In the event that Shipper in good faith, reasonably believes that it should be entitled to reduce the amount of or value of the Security previously provided, it may request such a reduction from Union and to the extent that the Material Event has been mitigated or eliminated, Union shall return all or a portion of the Security to Shipper within fourteen (14) Business Days after receipt of the request.

3. <u>Licence:</u> Shipper represents and warrants to Union that Shipper possesses a licence to produce gas in the Province of Ontario.

### XX. MISCELLANEOUS PROVISIONS

- 1. <u>Assignment:</u> Shipper may assign the Contract to a third party ("Assignee"), up to the Maximum Daily Quantity, (the "Capacity Assigned"). Such assignment shall require the prior written consent of Union and release of obligations by Union for the Capacity Assigned from the date of assignment. Such consent and release shall not be unreasonably withheld and shall be conditional upon the Assignee providing, amongst other things, financial assurances as per Article XXI herein. Any such assignment will be for the full rights, obligations and remaining term of the Contract as relates to the Capacity Assigned.
- 2. <u>Title to Gas:</u> Shipper represents and warrants to Union that Shipper shall have good and marketable title to, or legal authority to deliver to Union, all gas delivered to Union hereunder. Furthermore, Shipper hereby agrees to indemnify and save Union harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising from or out of claims of any or all third parties to such gas or on account of Taxes, or other charges thereon.

#### XXI. PRECONDITIONS TO SERVICES

- 1. <u>Union Conditions:</u> The obligations of Union to provide Services hereunder are subject to the following conditions precedent, which are for the sole benefit of Union and which may be waived or extended in whole or in part in the manner provided in the Contract:
  - a. Union shall have obtained, in form and substance satisfactory to Union, and all conditions shall have been satisfied under, all governmental, regulatory and other third party approvals, consents, orders and authorizations, that are required to provide the Services; and,
  - b. Union shall have obtained all internal approvals that are necessary or appropriate to provide the Services; and,
  - c. Union shall have received from Shipper the requisite financial assurances reasonably necessary to ensure Shipper's ability to honour the provisions of the Contract (the "Initial Financial Assurances"). The Initial Financial Assurances, if required, will be as determined solely by Union; and,
  - d. Shipper and Union shall have entered into the Interruptible Service HUB Contract or equivalent (the "Facilitating Agreement") with Union; and,
  - e. Union shall, where applicable, have obtained all internal and external approvals including the governmental, regulatory and other approvals or authorizations required to construct any facilities necessary to provide the Services hereunder, which approvals and authorizations, if granted upon conditions, shall be conditions satisfactory to Union; and,
  - f. Union shall, where applicable, have completed and placed into service those facilities necessary to provide the Services hereunder; and,
  - g. Further to Article IX Section 6 herein, Shipper shall pay to Union a payment ("First Prepayment") towards the Aid to Construction at the time of the execution of this Agreement. Shipper shall pay a payment prior to installation of the meter station ("Second Prepayment"). The foregoing payments are specified in the attached Schedule 1 for the first meter station ("Receipt Point #1") to be installed under the Contract. Payments for additional meter stations will be handled by written mutual agreement between the parties. Shipper shall pay Union the difference if the actual Aid to Construction is more than the Prepayments, within thirty (30) days of the delivery of an invoice from Union on which the actual costs for construction and installation of facilities are stated. Union shall pay Shipper the difference if the actual Aid to Construction is less than the Prepayments. In the event Shipper terminates this Agreement prior to Union incurring any costs related to the construction, installation or connection of the meter station, Shipper's Prepayments shall be returned to Seller, without interest, within fifteen (15) days notice to Union of such termination by Shipper. In the event Union has incurred costs, as set out herein, relative to the construction, installation or connection of the meter station prior to being notified by Shipper of Shipper's intention to terminate the Agreement, Union shall deduct such actual costs from Union's return of Shipper's Prepayments. "Prepayments" shall mean the sum of the First Prepayment and the Second

Prepayment.

- 2. <u>Shipper Conditions:</u> The obligations of Shipper hereunder are subject to the following conditions precedent, which are for the sole benefit of Shipper and which may be waived or extended in whole or in part in the manner provided in the Contract:
  - Shipper shall, as required, have entered into the necessary contracts with Union and/or others to facilitate the Services contemplated herein, including contracts for upstream and downstream transportation, and shall specifically have an executed and valid Facilitating Agreement; and,
  - b. Shipper shall have obtained, in form and substance satisfactory to Shipper, and all conditions shall have been satisfied under, all governmental, regulatory and other third party approvals, consents, orders and authorizations, that are required from federal, state, or provincial authorities for the gas quantities handled under the Contract; and,
  - Shipper shall have obtained all internal approvals that are necessary or appropriate for the Shipper to execute
    the Contract; and,
  - d. Shipper shall have cancelled or renegotiated its Sales Agreement, on terms satisfactory to Union, as applicable.
- 3. <u>Satisfaction of Conditions:</u> Union and Shipper shall each use due diligence and reasonable efforts to satisfy and fulfil the conditions precedent specified in this Article XXI Section 1 a, c, d, e, f, g, and Section 2 a, b, and d. Each party shall notify the other forthwith in writing of the satisfaction or waiver of each condition precedent for such party's benefit. If a party concludes that it will not be able to satisfy a condition precedent that is for its benefit, such party may, upon written notice to the other party, terminate the Contract and upon the giving of such notice, the Contract shall be of no further force and effect and each of the parties shall be released from all further obligations thereunder.
- 4. Non-Satisfaction of Conditions: If any of the conditions precedent in this Article XXI Section 1 c or Section 2 are not satisfied or waived by the party entitled to the benefit of that condition by the Conditions Date as such term is defined in the Contract, or if any of the Shipper payments required under the condition precedent in this Article XXI Section 1 g have not been paid as required in such section, then either party may, upon written notice to the other party, terminate the Contract and upon the giving of such notice, the Contract shall be of no further force and effect and each of the parties shall be released from all further obligations hereunder, provided that any rights or remedies that a party may have for breaches of the Contract prior to such termination and any liability a party may have incurred before such termination shall not thereby be released.



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# STORAGE AND TRANSPORTATION SERVICES TRANSPORTATION CHARGES

# (A) Availability

The charges under this rate schedule shall be applicable for transportation service rendered by Union for all quantities transported to and from embedded storage pools located within Union's franchise area and served using Union's distribution and transmission assets.

# **Applicable Points**

Dawn as a receipt point: Dawn (Facilities). Dawn as a delivery point: Dawn (Facilities).

# (B) Rates

The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated, which may be higher than the identified rates.

a) Charges Applicable to both Firm and/or Interruptible Transportation Services:

Monthly Fixed Charge per customer station (\$ per month) (1)

\$1,523.40

Transmission Commodity Charge to Dawn (\$ per GJ)

\$0.035

	Transportation Fuel: Fuel Charges to Dawn	Customers located East of Dawn	Customers located West of Dawn
	Commodity Rate - Union supplied fuel (\$ per GJ) Fuel Ratio - Shipper supplied fuel (%)	\$0.006 0.158%	\$0.006 0.158%
	Fuel Charges to the Pool		
	Commodity Rate - Union supplied fuel (\$ per GJ)	\$0.006	\$0.016
	Fuel Ratio - Shipper supplied fuel (%)	0.185%	0.449%
b)	Firm Transportation Demand Charges: (2)		
	Monthly Demand Charge applied to contract demand (\$ per GJ)	\$0.774	\$3.155
c)	Cap-and-Trade Facility-Related Charges (applied to all quantities transported):		
	Cap-and-Trade Facility-Related Charges - To Dawn (\$ per GJ)	\$0.002	\$0.002
	Cap-and-Trade Facility-Related Charges - To the Pool (\$ per GJ)	\$0.002	\$0.005



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# (B) Rates (Cont'd)

# **Authorized Overrun:**

The authorized overrun rate payable on all quantities transported in excess of Union's obligation any day shall be:

	Customers located East	Customers located West	
Firm Transportation	<u>of Dawn</u>	<u>of Dawn</u>	
Firm Transportation:			
Charges to Dawn			
Commodity Rate - Union supplied fuel (\$ per GJ)	\$0.066	\$0.144	
Commodity Rate - Shipper supplied fuel (\$ per GJ)	\$0.060	\$0.139	
Fuel Ratio - Shipper supplied fuel (%)	0.158%	0.158%	
Charges to the Pool			
Commodity Rate - Union supplied fuel (\$ per GJ)	\$0.032	\$0.120	
Commodity Rate - Shipper supplied fuel (\$ per GJ)	\$0.025	\$0.104	
Fuel Ratio - Shipper supplied fuel (%)	0.185%	0.449%	
Cap-and-Trade Facility-Related Charges (applied to all quantities transported	<b>)</b> :		
Cap-and-Trade Facility-Related Charges - To Dawn (\$ per GJ)	\$0.002	\$0.002	
Cap-and-Trade Facility-Related Charges - To the Pool (\$ per GJ)	\$0.002	\$0.005	

Overrun will be authorized at Union's sole discretion.

# **Unauthorized Overrun**

Authorized Overrun rates payable on all transported quantities up to 2% in excess of Union's contractual obligation.

The Unauthorized Overrun rate during the November 1 to April 15 period will be \$50 per GJ for all usage on any day in excess of 102% of Union's contractual obligation. The Unauthorized Overrun rate during the April 16 to October 31 period will be \$9.373 per GJ for all usage on any day in excess of 102% of Union's contractual obligation.

Charges aforesaid in respect of any given month in accordance with General Terms & Conditions shall be payable no later than the twenty-fifth day of the succeeding month.

Notes for Section (B) Rates:

- (1) The monthly fixed charge will be applied once per month per customer station regardless of service being firm, interruptible or a combination thereof.
- (2) Demand charges will be applicable to customers firm daily contracted demand or the firm portion of a combined firm and interruptible service.

# (C) Terms of Service

The General Terms & Conditions applicable to this rate schedule shall be in accordance with the attached Schedule "A" for contracts in effect before October 1, 2010. The General Terms & Conditions applicable to this rate schedule shall be in accordance with the attached Schedule "A 2013" for contracts in effect on or after January 1, 2013.

Effective January 1, 2018 Chatham, Ontario O.E.B. Order # EB-2017-0087

Supersedes EB-2017-0278 Rate Schedule effective October 1, 2017.

# GENERAL TERMS & CONDITIONS M16 TRANSPORTATION AGREEMENT

#### I. DEFINITIONS

Except where the context expressly requires or states another meaning, the following terms, when used in these General Terms & Conditions and in any contract into which these General Terms & Conditions are incorporated, shall be construed to have the following meanings:

- 1. "Banking Day" shall mean a day on which the general offices of the Canadian Imperial Bank of Commerce, 99 King St. W., Chatham, Ontario are open for business;
- 2. "business day" shall mean a day on which the general offices of Union in Chatham, Ontario are open for business;
- 3. "Contract" shall refer to the Contract to which these General Terms & Conditions shall apply, and into which they are incorporated;
- 4. "contract year" shall mean a period of three hundred and sixty-five (365) consecutive days, beginning on the day agreed upon by Union and Shipper as set forth in the Contract, or on any anniversary of such date; provided, however, that any such period which contains a date of February 29 shall consist of three hundred and sixty-six (366) consecutive days;
- 5. "day" shall mean a period of twenty-four (24) consecutive hours beginning at 9:00 a.m. Central Standard time. The reference date for any day shall be the calendar date upon which the twenty-four (24) hour period shall commence;
- 6. "month" shall mean the period beginning at 9:00 a.m. Central Standard time on the first day of a calendar month and ending at 9:00 a.m. Central Standard time on the first day of the following calendar month;
- 7. "firm" shall mean service not subject to curtailment or interruption except under Articles XI and XII of this Schedule "B";
- 8. "interruptible service" shall mean service subject to curtailment or interruption, after notice, at any time;
- 9. "gas" shall mean gas as defined in the Ontario Energy Board Act, R.S.O. 1980, c. 332, as amended, supplemented or reenacted from time to time;
- 10. "cubic metre" shall mean the volume of gas which occupies one cubic metre when such gas is at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute;
- 11. "m³" shall mean cubic metre of gas and "10³m³" shall mean 1,000 cubic metres of gas;
- 12. "pascal" (Pa) shall mean the pressure produced when a force of one (1) newton is applied to an area of one (1) square metre. The term "kilopascal" (kPa) shall mean 1,000 pascals;
- 13. "joule" (J) shall mean the work done when the point of application of a force of one (1) newton is displaced a distance of one (1) metre in the direction of the force. The term "megajoule" (MJ) shall mean 1,000,000 joules. The term "gigajoule" (GJ) shall mean 1,000,000,000 joules;
- 14. "gross heating value" shall mean the total heat expressed in megajoules per cubic metre (MJ/m³) produced by the complete combustion at constant pressure of one (1) cubic metre of gas with air, with the gas free of water vapour and the temperature of the gas, air and products of combustion at standard temperature and all water formed by the combustion reaction condensed to the liquid state;
- 15. "Shipper" shall have the meaning as defined in the Contract, and shall also include Shipper's agent(s);
- 16. "subsidiary" means a company in which more than fifty (50) per cent of the issued share capital (having full voting

#### **SCHEDULE "A"**

rights under all circumstances) is owned or controlled directly or indirectly by another company, by one or more subsidiaries of such other company, or by such other company and one or more of its subsidiaries;

- 17. "TCPL" means TransCanada PipeLines Limited;
- 18. "NOVA" means Gas Transmission Ltd.;
- 19. "Panhandle" means CMS Panhandle Eastern Pipeline Company;
- 20. "MichCon" means Michigan Consolidated Gas Company;
- 21. "SCPL" means St. Clair Pipelines (1996) Ltd.;
- 22. "OEB" means the Ontario Energy Board;
- 23. "NEB" means the National Energy Board (Canada);
- 24. "GLGT" means Great Lakes Gas Transmission Company;
- 25. "CMS" means CMS Gas Transmission and Storage Company;
- 26. "Consumers" means The Consumers' Gas Company, Limited;
- 27. "cricondentherm hydrocarbon dewpoint" shall mean the highest hydrocarbon dewpoint temperature on the phase envelope;
- 28. "hydrocarbon dewpoint" shall mean temperature at a specific pressure where hydrocarbon vapour condensation begins;
- 29. "specific gravity" shall mean density of the gas divided by density of air, with both at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute; and,
- 30. "Wobbe Number" shall mean gross heating value of the gas divided by the square root of its specific gravity.

#### II. GAS QUALITY

- Natural Gas: The minimum gross heating value of the gas delivered to/by Union hereunder, shall be thirty-six (36) megajoules per cubic metre. The maximum gross heating value of the gas delivered to/by Union hereunder shall be forty point two (40.2) megajoules per cubic metre. The gas to be delivered hereunder to Union may be a commingled supply from Shipper's gas sources of supply. The gas to be delivered by Union may be a commingled supply from Union's sources of gas supply; provided, however, that helium, natural gasoline, butane, propane and other hydrocarbons, except methane, may be removed prior to delivery to Shipper. Further, Union may subject, or permit the subjection of, the gas to compression, dehydration, cooling, cleaning and other processes.
- 2. <u>Freedom from objectionable matter</u>: The gas to be delivered to Union at the Receipt Point(s) hereunder,
  - a. shall be commercially free from bacteria, sand, dust, gums, crude oils, lubricating oils, liquids, chemicals or compounds used in the production, treatment, compression or dehydration of the gas or any other objectionable substance in sufficient quantity so as to render the gas toxic, unmerchantable or cause injury to, or interference with, the proper operation of the lines, regulators, meters or other appliances through which it flows.
  - b. shall not contain more than seven (7) milligrams of hydrogen sulphide per cubic metre of gas, nor more than one hundred (100) milligrams of total sulphur per cubic metre of gas,
  - c. shall not contain more than five (5) milligrams of mercaptan sulphur per cubic metre of gas,

#### **SCHEDULE "A"**

- d. shall not contain more than two point zero (2.0) molar percent by volume of carbon dioxide in the gas,
- e. shall not contain more than zero point four (0.4) molar percent by volume of oxygen in the gas,
- f. shall not contain more than zero point five (0.5) molar percent by volume of carbon monoxide in the gas,
- g. shall not contain more than four point zero (4.0) molar percent by volume of hydrogen in the gas,
- h. shall not contain more than sixty-five (65) milligrams of water vapour per cubic metre of gas,
- i. shall not have a cricondentherm hydrocarbon dewpoint exceeding minus eight (-8) degrees Celsius,
- j. shall have Wobbe Number from forty seven point fifty (47.50) megajoules per cubic metre of gas to fifty one point forty six (51.46) megajoules per cubic metre of gas, maximum of one point five (1.5) mole percent by volume of butane plus (C4+) in the gas, and maximum of four point zero (4.0) mole percent by volume of total inerts in the gas in order to be interchangeable with other Interconnecting Pipeline gas,
- k. shall not exceed forty-three degrees Celsius (43°C), and,
- I. shall not be odourized by Shipper.

#### 3. Non-conforming Gas:

- a. In the event that the quality of the gas does not conform or if Union, acting reasonably, suspects the quality of the gas may not conform to the specifications herein, then Shipper shall, if so directed by Union acting reasonably, forthwith carry out, at Shipper's cost, whatever field testing of the gas quality as may be required to ensure that the quality requirements set out herein are met, and to provide Union with a certified copy of such tests. If Shipper does not carry out such tests forthwith, Union may conduct such test and Shipper shall reimburse Union for all costs incurred by Union for such testing.
- b. If Shipper's gas fails at any time to conform to the requirements of this Article II, Union, in addition to its other remedies, may refuse to accept delivery of gas at the Receipt Points hereunder until such deficiency has been remedied by Shipper. Each Party agrees to notify the other verbally, followed by written notification, of any such deficiency of guality.
- c. With respect to Article II 2. h. herein, Union may accept the gas subject to Shipper's obligations under the Dehydration Contract, if applicable.
- 4. Quality of Gas Received: The quality of the gas to be received by Union at the Receipt Point(s) hereunder is to be of a merchantable quality and in accordance with the quality standards as set out by Union in this Article II.
- 5. Quality of Gas at Dawn: The quality of the gas to be delivered to Union at Dawn (Facilities) or the gas to be delivered by Union to Shipper at Dawn (Facilities) hereunder is to be of a merchantable quality and in accordance with the quality standards and measurement standards as set out by Union in this Article II, except that total sulphur limit shall be not more than four hundred and sixty (460) milligrams per cubic metre of gas. In addition to any other right or remedy of a party, each party shall be entitled to refuse to accept delivery of any gas which does not conform to any of the specifications set out in this Article II.

### 6. Odourization of Gas:

- a. Union may odourize or deliver odourized gas under the Contract,
- b. Shipper shall if requested by Union monitor the mercaptan sulphur content of the gas delivered to Union under the Contract and shall provide at no cost to Union a continuous signal quantifying the mercaptan sulphur content in milligrams per cubic metre.

#### III. MEASUREMENTS

1. <u>Storage, Transportation, and/or Sales Unit:</u> The unit of the gas delivered to Union shall be a megajoule or a gigajoule. The unit of gas transported or stored by Union shall be a megajoule or a gigajoule. The unit of gas delivered by Union shall be a megajoule, a gigajoule, a cubic metre (m³) or one thousand cubic metres (10³m³) at Union's discretion.

#### 2. Determination of Volume and Energy:

- a. The volume and energy amounts determined under the Contract shall be determined in accordance with the <u>Electricity and Gas Inspection Act (Canada)</u>, RSC 1985, c E-4- (the "**Act**") and the <u>Electricity and Gas Inspection Regulations</u>, SOR 86/131 (the "**Regulations**"), and any documents issued under the authority of the Act and Regulations and any amendments thereto.
- b. The supercompressibility factor shall be determined in accordance with either the "Manual for Determination of Supercompressibility Factors for Natural Gas" (PAR Project NX-19) published in 1962 or with American Gas Association Transmission Measurement Committee Report No. 8, Nov. 1992, at Union's discretion, all as amended from time to time.
- c. The volume and/or energy of the gas delivered to/by Union hereunder shall be determined by the measurement equipment designated in Article VII herein.
- d. Upon request by Union, Shipper shall obtain measurement of the total quantity of gas received by Union hereunder from the Interconnecting Pipeline. Such measurement shall be done in accordance with established practices between Union and the Interconnecting Pipeline.

#### IV. POINT OF RECEIPT AND POINT OF DELIVERY

- 1. Unless otherwise specified in the Contract, the point or points of receipt for all gas to be covered thereunder shall be on the outlet side of the measuring stations located at or near the point or points of connection specified in the Contract, where Union takes possession of the gas. Whenever the phrase "receipt point" appears herein, it shall mean Point of Receipt as defined in this Article IV.
- 2. Unless otherwise specified in the Contract, the point or points of delivery for all gas to be covered hereunder shall be on the outlet side of the measuring stations located at or near the point or points of connection as specified in the Contract, where Shipper takes possession of the gas. Whenever the phrase "delivery point" shall appear hereon, it shall mean Point of Delivery as defined in this Article IV.

#### V. POSSESSION OF AND RESPONSIBILITY FOR GAS

N/A

#### VI. FACILITIES ON SHIPPER'S PROPERTY

N/A

### VII. MEASURING EQUIPMENT

- 1. <u>Metering by Union:</u> Union will install and operate meters and related equipment as required and in accordance with the Act and Regulations referenced in Article III herein.
- 2. <u>Metering by Others</u>: In the event that all or any gas delivered to/by Union hereunder is measured by a meter that is owned and operated by an Interconnecting Pipeline, then Union and Shipper agree to accept that metering for the purpose of determining the volume and energy of gas delivered to/by Union on behalf of the Shipper. The standard of

#### **SCHEDULE "A"**

measurement and tests for the gas delivered to/by Union hereunder shall be in accordance with the general terms and conditions as incorporated in that Interconnecting Pipeline company's gas tariff as approved by its regulatory body.

- 3. <u>Check Measuring Equipment:</u> Shipper may install, maintain and operate, at the Custody Transfer Point, at its own expense, such check measuring equipment as desired, provided that such equipment shall be so installed as not to interfere with the operation of Union's measuring equipment at or near the Custody Transfer Point, and shall be installed, maintained and operated in conformity with the same standards and specifications applicable to Union's metering facilities.
- 4. <u>Rights of Parties:</u> The measuring equipment installed by either party, together with any building erected by it for such equipment, shall be and remain its property. However, Union and Shipper shall have the right to have representatives present at the time of any installing, reading, cleaning, changing, repairing, inspecting, testing, calibrating, or adjusting done in connection with the other's measuring equipment used in measuring or checking the measurement of deliveries of gas to/by Union under the Contract. Either party will give the other party reasonable notice of its intention to carry out the acts herein specified. The records from such measuring equipment shall remain the property of their owner, but upon request each will submit to the other its records and charts, together with calculations therefrom, for inspection and verification, subject to return within ten (10) days after receipt thereof.
- 5. <u>Calibration and Test of Measuring Equipment:</u> The accuracy of Union's measuring equipment shall be verified by Union at reasonable intervals, and if requested, in the presence of representatives of Shipper, but Union shall not be required to verify the accuracy of such equipment more frequently than once in any thirty (30) day period. In the event either party notifies the other that it desires a special test of any measuring equipment, the parties shall co-operate to secure a prompt verification of the accuracy of such equipment. The expense of any such special test, if called for by Shipper, shall be borne by Shipper if the measuring equipment tested is found to be in error by not more than two per cent (2%), If, upon test, any measuring equipment is found to be in error by not more than two per cent (2%), previous recordings of such equipment shall be considered accurate in computing receipts and deliveries of gas, but such equipment shall be adjusted at once to record as near to absolute accuracy as possible. If the test conducted shows a percentage of inaccuracy greater than two percent (2%), the financial adjustment, if any, shall be calculated in accordance with the Act and Regulations, as may be amended from time to time and in accordance with any successor statutes and regulations.
- 6. <u>Preservation of Metering Records:</u> Union and Shipper shall each preserve for a period of at least six (6) years all test data, and other relevant records.
- 7. <u>Error in Metering or Meter Failure</u>: In the event of an error in metering or a meter failure (such error or failure being determined through check measurement by Union or any other available method), then Shipper shall enforce its rights as Shipper with the Interconnecting Pipeline(s) to remedy such error or failure including enforcing any inspection and/or verification rights and procedures.

## VIII. BILLING

- 1. Monthly Billing Date: Union shall render bills on or before the 10th day of each month for all services furnished during the preceding month. Such charges may be based on estimated quantities, if actual quantities are unavailable in time to prepare the billing. Union shall provide, in a succeeding month's billing, an adjustment based on any difference between actual quantities and estimated quantities. If presentation of a bill to Shipper is delayed after the 10th day of the month, then the time of payment shall be extended accordingly, unless Shipper is responsible for such delay.
- 2. <u>Right of Examination:</u> Both Union and Shipper shall have the right to examine at any reasonable time the books, records and charts of the other to the extent necessary to verify the accuracy of any statement, chart or computation made under or pursuant to the provisions of the Contract.

## IX. PAYMENTS

#### **SCHEDULE "A"**

- 1. <u>Monthly Payments:</u> Shipper shall pay the invoiced amount directly into Union's bank account as directed on the invoice on or before the twentieth (20th) day of each month. If the payment date is not a business day, then payment must be received in Union's account on the first business day preceding the twentieth (20th) day of the month.
- Remedies for Non-payment: Should Shipper fail to pay all of the amount of any bill as herein provided when such amount is due, Shipper shall pay to Union interest on the unpaid portion of the bill accruing at a rate per annum equal to the minimum commercial lending rate of Union's principal banker in effect from time to time from the due date until the date of payment. If such failure to pay continues for thirty (30) days after payment is due, Union, in addition to any other remedy it may have under the Contract may suspend service(s) until such amount is paid, provided however, that if Shipper, in good faith shall dispute the amount of any such bill or part thereof and shall pay to Union such amounts as it concedes to be correct and at any time thereafter within twenty (20) days of a demand made by Union shall furnish good and sufficient surety bond satisfactory to Union, guaranteeing payment to Union of the amount ultimately found due upon such bill after a final determination which may be reached either by agreement, arbitration decision or judgement of the courts, as may be the case, then Union shall not be entitled to suspend service(s) because of such non-payment unless and until default be made in the conditions of such bond or in payment for any further service(s) to Shipper hereunder.

Notwithstanding the foregoing paragraph, this does not relieve Shipper from the obligation to continue its deliveries of gas under the terms of any agreement, where Shipper has contracted to deliver specified quantities of gas to Union.

3. <u>Billing Adjustments:</u> If it shall be found that at any time or times Shipper has been overcharged or undercharged in any form whatsoever under the provisions of the Contract and Shipper shall have actually paid the bills containing such overcharge or undercharge, Union shall refund the amount of any such overcharge and interest shall accrue from and including the first day of such overcharge as paid to the date of refund and shall be calculated but not compounded at a rate per annum determined each day during the calculation period to be equal to the minimum commercial lending rate of Union's principal banker, and the Shipper shall pay the amount of any such undercharge, but without interest. In the event Union renders a bill to Shipper based upon measurement estimates, the required adjustment to reflect actual measurement shall be made on the bill next following the determination of such actual measurement, without any charge of interest. In the event an error is discovered in the amount billed in any statement rendered by Union, such error shall be adjusted by Union. Such overcharge, undercharge or error shall be adjusted by Union on the bill next following its determination (where the term "bill" next following shall mean a bill rendered at least fourteen (14) days after the day of its determination), provided that claim therefore shall have been made within six (6) years from the date of the incorrect billing. In the event any refund is issued with Shipper's bill, the aforesaid date of refund shall be deemed to be the date of the issue of invoice.

## X. ARBITRATION

If and when any dispute, difference or question shall arise between the parties hereto touching the Contract or anything herein contained, or the construction hereof, or the rights, duties or liabilities of the parties in relation to any matter hereunder, the matter in dispute shall be submitted and referred to arbitration within ten (10) days after written request of either party. Upon such request each party shall appoint an arbitrator, and the two so appointed shall appoint a third. A majority decision of the arbitrators shall be final and binding upon both parties. In all other respects the provisions of the Arbitration Act of the Province of Ontario, or any act passed in amendment thereof or substitution therefore, shall apply to each such submission. Operations under the Contract shall continue, without prejudice, during any such arbitration and the costs attributable to such arbitration shall be shared equally by the parties hereto.

## XI. FORCE MAJEURE

N/A

## XII. DEFAULT AND TERMINATION

N/A

## XIII. MODIFICATION

N/A

## XIV. NONWAIVER AND FUTURE DEFAULT

N/A

## XV. LAWS, REGULATIONS AND ORDERS

The Contract and the respective rights and obligations of the parties hereto are subject to all present and future valid laws, orders, rules and regulations of any competent legislative body, or duly constituted authority now or hereafter having jurisdiction and the Contract shall be varied and amended to comply with or conform to any valid order or direction of any board, tribunal or administrative agency which affects any of the provisions of the Contract.

# RATE M16 GENERAL TERMS & CONDITIONS

#### I. DEFINITIONS

Except where the context expressly requires or states another meaning, the following terms, when used in these General Terms & Conditions and in any contract into which these General Terms & Conditions are incorporated, shall be construed to have the following meanings:

"Aid to Construction" shall include any and all costs, expenses, amounts, damages, obligations, or other liabilities (whether of a capital or operating nature, and whether incurred before or after the date of the Contract) actually paid by Union (including amounts paid to affiliates for services rendered in accordance with the Affiliate Relationships Code as established by the OEB) in connection with or in respect of satisfying the conditions precedent set out in Article XXI herein (including without limitation the construction and placing into service of the Union Expansion Facilities, the obtaining of all governmental, regulatory and other third party approvals, and the obtaining of rights of way) whether resulting from Union's negligence or not, except for any costs that have arisen from the gross negligence, fraud, or wilful misconduct of Union:

"Authorized Overrun" shall mean the amount by which Shipper's Authorized Quantity exceeds the firm and interruptible contract demands;

"Authorized Quantity" shall have the meaning given thereto in Schedule "B 2010" of the C1 Rate Schedule;

"Business Day" shall mean any day, other than Saturday, Sunday or any days on which national banks in the Province of Ontario are authorized to close:

"Contract" shall refer to the Contract to which these General Terms & Conditions shall apply, and into which they are incorporated;

"Contract Year" shall mean a period of three hundred and sixty-five (365) consecutive days, beginning on the Commencement Date or on any anniversary of such date; provided, however, that any such period which contains a date of February 29 shall consist of three hundred and sixty-six (366) consecutive days;

"cricondentherm hydrocarbon dewpoint" shall mean the highest hydrocarbon dewpoint temperature on the phase envelope;

"cubic metre" shall mean the volume of gas which occupies one cubic metre when such gas is at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute;

"Custody Transfer Point" That point on the piping system at the Pool Station which is at the Shipper side of the insulating flange on the Union Expansion Facilities, and which point shall serve as the point of custody transfer;

"Day" shall mean a period of twenty-four (24) consecutive hours beginning at 10:00 a.m. Eastern Clock Time. The reference date for any Day shall be the calendar date upon which the twenty-four (24) hour period shall commence;

"Dehydration Contract" shall mean the contract for Dehydration Service between Union and the Shipper as detailed in Schedule 1 of the Contract;

"Delivery Point" shall mean the point(s) where Union shall deliver gas to Shipper as defined in Schedule 1 of the Contract:

"Eastern Clock Time" shall mean the local clock time in the Eastern Time Zone on any Day;

"firm" shall mean service not subject to curtailment or interruption except under Articles XI, XII and XVIII herein;

"gas" shall mean gas as defined in the Ontario Energy Board Act, 1998, S.O. 1998, c. 15, Sch. B, as amended, supplemented or re-enacted from time to time;

"gross heating value" shall mean the total heat expressed in megajoules per cubic metre (MJ/m³) produced by the complete combustion at constant pressure of one (1) cubic metre of gas with air, with the gas free of water vapour and the temperature of the gas, air and products of combustion at standard temperature and all water formed by the combustion reaction condensed to the liquid state;

"hydrocarbon dewpoint" shall mean temperature at a specific pressure where hydrocarbon vapour condensation begins;

"Interconnecting Pipeline" shall mean a pipeline that directly connects to the Union pipeline system;

"Interruptible Service HUB Contract" shall mean a contract between Shipper and Union under which Union provides interruptible HUB service;

"interruptible" shall mean service subject to curtailment or interruption, after notice, at any time;

"joule" (J) shall mean the work done when the point of application of a force of one (1) newton is displaced a distance of one (1) metre in the direction of the force. The term "megajoule" (MJ) shall mean 1,000,000 joules. The term "gigajoule" (GJ) shall mean 1,000,000,000 joules;

"m³" shall mean cubic metre of gas and "103m³" shall mean 1,000 cubic metres of gas;

"Month" shall mean the period beginning at 10:00 a.m. Eastern Clock Time on the first day of a calendar month and ending at 10:00 a.m. Eastern Clock Time on the first day of the following calendar month;

"OEB" means the Ontario Energy Board;

"pascal" "(Pa)" shall mean the pressure produced when a force of one (1) newton is applied to an area of one (1) square metre. The term "kilopascal" "(kPa)" shall mean 1,000 pascals;

"Pool Quantity" shall mean the actual daily quantity of gas delivered to or received from Shipper at the Custody Transfer Point;

"Pool Station" shall mean the physical location of Union's measurement and control facilities to the pool; the pool name as detailed in Schedule 1 of the Contract;

"Receipt Point" shall mean any one of the points where Union shall receive gas from Shipper as detailed in Schedule 1 of the Contract;

"Shipper" shall have the meaning as defined in the Contract, and shall also include Shipper's agent(s);

"Shipper Quantity" shall, on any Day, be equal to the greater of: (i) the Authorized Quantity for that Day; and (ii) the nomination duly made by Shipper in good faith prior to the nomination deadline for the first nomination window applicable for that Day; provided that in no event shall the Shipper Quantity exceed the firm contract demand;

"specific gravity" shall mean density of the gas divided by density of air, with both at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute;

"Taxes" shall mean any tax (other than tax on income or tax on property), duty, royalty, levy, license, fee or charge not included in the charges and rates as per the applicable rate schedule (including but not limited to charges under any form of cap and trade, carbon tax, or similar system) and that is levied, assessed or made by any governmental authority on the gas itself, or the act, right, or privilege of producing, severing, gathering, storing, transporting, handling, selling or delivering gas under the Contract;

"TCPL" means TransCanada PipeLines Limited;

"Union Expansion Facilities" shall mean any facilities necessary for Union to provide the Services, including without limiting the generality of the foregoing:

- a. a meter and any associated recording gauges as are necessary;
- b. pressure and/or flow control devices, over pressure protection and telemetry equipment as are necessary;
- c. a suitable gas odourizing injection facility if Union deems such a facility to be necessary
- d. piping, fittings, material, filtration facilities, cathodic protection and insulating flanges;
- e. gas chromatograph, moisture analyzer, piping, fittings, material, filtration facilities, cathodic protection and insulating flanges;

"Wobbe Number" shall mean gross heating value of the gas divided by the square root of its specific gravity.

## II. GAS QUALITY

- 1. Natural Gas: The minimum gross heating value of the gas delivered to/by Union hereunder, shall be thirty-six (36) megajoules per cubic metre. The maximum gross heating value of the gas delivered to/by Union hereunder shall be forty point two (40.2) megajoules per cubic metre. The gas to be delivered hereunder to Union may be a commingled supply from Shipper's gas sources of supply. The gas to be delivered by Union may be a commingled supply from Union's sources of gas supply; provided, however, that helium, natural gasoline, butane, propane and other hydrocarbons, except methane, may be removed prior to delivery to Shipper. Further, Union may subject, or permit the subjection of, the gas to compression, dehydration, cooling, cleaning and other processes.
- 2. Freedom from objectionable matter: The gas to be delivered to Union at the Receipt Point(s) hereunder,
  - a. shall be commercially free from bacteria, sand, dust, gums, crude oils, lubricating oils, liquids, chemicals or compounds used in the production, treatment, compression or dehydration of the gas or any other objectionable substance in sufficient quantity so as to render the gas toxic, unmerchantable or cause injury to, or interference with, the proper operation of the lines, regulators, meters or other appliances through which it flows.
  - b. shall not contain more than seven (7) milligrams of hydrogen sulphide per cubic metre of gas, nor more than one hundred (100) milligrams of total sulphur per cubic metre of gas,
  - c. shall not contain more than five (5) milligrams of mercaptan sulphur per cubic metre of gas,
  - d. shall not contain more than two point zero (2.0) molar percent by volume of carbon dioxide in the gas,
  - e. shall not contain more than zero point four (0.4) molar percent by volume of oxygen in the gas,
  - f. shall not contain more than zero point five (0.5) molar percent by volume of carbon monoxide in the gas,
  - g. shall not contain more than four point zero (4.0) molar percent by volume of hydrogen in the gas,
  - h. shall not contain more than sixty-five (65) milligrams of water vapour per cubic metre of gas,
  - i. shall not have a cricondentherm hydrocarbon dewpoint exceeding minus eight (-8) degrees Celsius,
  - j. shall have Wobbe Number from forty seven point fifty (47.50) megajoules per cubic metre of gas to fifty one

point forty six (51.46) megajoules per cubic metre of gas, maximum of one point five (1.5) mole percent by volume of butane plus (C4+) in the gas, and maximum of four point zero (4.0) mole percent by volume of total inerts in the gas in order to be interchangeable with other Interconnecting Pipeline gas,

- k. shall not exceed forty-three degrees Celsius (43°C), and,
- I. shall not be odourized by Shipper.

## 3. Non-conforming Gas:

- a. In the event that the quality of the gas does not conform or if Union, acting reasonably, suspects the quality of the gas may not conform to the specifications herein, then Shipper shall, if so directed by Union acting reasonably, forthwith carry out, at Shipper's cost, whatever field testing of the gas quality as may be required to ensure that the quality requirements set out herein are met, and to provide Union with a certified copy of such tests. If Shipper does not carry out such tests forthwith, Union may conduct such test and Shipper shall reimburse Union for all costs incurred by Union for such testing.
- b. If Shipper's gas fails at any time to conform to the requirements of this Article II, Union, in addition to its other remedies, may refuse to accept delivery of gas at the Receipt Points hereunder until such deficiency has been remedied by Shipper. Each Party agrees to notify the other verbally, followed by written notification, of any such deficiency of guality.
- c. With respect to Article II 2. h. herein, Union may accept the gas subject to Shipper's obligations under the Dehydration Contract, if applicable.
- 4. Quality of Gas Received: The quality of the gas to be received by Union at the Receipt Point(s) hereunder is to be of a merchantable quality and in accordance with the quality standards as set out by Union in this Article II.
- 5. Quality of Gas at Dawn: The quality of the gas to be delivered to Union at Dawn (Facilities) or the gas to be delivered by Union to Shipper at Dawn (Facilities) hereunder is to be of a merchantable quality and in accordance with the quality standards and measurement standards as set out by Union in this Article II, except that total sulphur limit shall be not more than four hundred and sixty (460) milligrams per cubic metre of gas. In addition to any other right or remedy of a party, each party shall be entitled to refuse to accept delivery of any gas which does not conform to any of the specifications set out in this Article II.

#### 6. Odourization of Gas:

- a. Union may odourize or deliver odourized gas under the Contract,
- b. Shipper shall if requested by Union monitor the mercaptan sulphur content of the gas delivered to Union under the Contract and shall provide at no cost to Union a continuous signal quantifying the mercaptan sulphur content in milligrams per cubic metre.

## III. MEASUREMENTS

- 1. <u>Storage, Transportation, and/or Sales Unit:</u> The unit of the gas delivered to Union shall be a megajoule or a gigajoule. The unit of gas transported or stored by Union shall be a megajoule or a gigajoule. The unit of gas delivered by Union shall be a megajoule, a gigajoule, a cubic metre (m³) or one thousand cubic metres (10³m³) at Union's discretion.
- 2. Determination of Volume and Energy:
  - a. The volume and energy amounts determined under the Contract shall be determined in accordance with the <u>Electricity and Gas Inspection Act (Canada)</u>, RSC 1985, c E-4- (the "Act") and the <u>Electricity and Gas Inspection Regulations</u>, SOR 86/131 (the "Regulations"), and any documents issued under the authority of the Act and Regulations and any amendments thereto.

- b. The supercompressibility factor shall be determined in accordance with either the "Manual for Determination of Supercompressibility Factors for Natural Gas" (PAR Project NX-19) published in 1962 or with American Gas Association Transmission Measurement Committee Report No. 8, Nov. 1992, at Union's discretion, all as amended from time to time.
- c. The volume and/or energy of the gas delivered to/by Union hereunder shall be determined by the measurement equipment designated in Article VII herein.
- d. Upon request by Union, Shipper shall obtain measurement of the total quantity of gas received by Union hereunder from the Interconnecting Pipeline. Such measurement shall be done in accordance with established practices between Union and the Interconnecting Pipeline.

## IV. RECEIPT POINT AND DELIVERY POINT

The point or points of receipt and point or points of delivery for all gas to be covered hereunder shall be on the outlet side of the measuring stations located at or near the point or points of connection specified in Schedule 1 of the Contract, where possession of the gas changes from one party to the other.

## V. POSSESSION OF AND RESPONSIBILITY FOR GAS

- 1. Possession of Gas: Union accepts no responsibility for any gas prior to such gas being delivered to Union at the Receipt Point or after its delivery by Union at the Delivery Point. As between the parties hereto, Union shall be deemed to be in control and possession of and responsible for all such gas from the time that such gas enters Union's system until such gas is delivered to Shipper.
- 2. <u>Liability:</u> Shipper agrees that Union is not a common carrier and is not an insurer of Shipper's gas, and that Union shall not be liable to Shipper or any third party for loss of gas in Union's possession, except to the extent such loss is caused entirely by Union's negligence or wilful misconduct.

## VI. FACILITIES ON SHIPPER'S PROPERTY

- Union Equipment: All of the Union Expansion Facilities shall remain the property of Union. Union shall be entitled to remove said equipment at any time within a period of sixty (60) days from any termination or expiry of the Contract. Shipper shall take all necessary steps to ensure Union may enter the Pool Station to remove such equipment for a period of sixty (60) days after termination or expiry of the Contract.
- 2. Shipper Obligations: Shipper shall, at Shipper's own cost and expense:
  - a. obtain the Pool Station Land Rights; and
  - b. furnish, install, set, and maintain suitable pressure and quantity control equipment and such additional equipment as required on Shipper's delivery system, to protect against the over pressuring of Union's facilities as set out in Article VI of the Contract and Schedule 1 of the Contract, protect Union from receiving gas not meeting the quality specification as set out in Article II herein, and to limit the daily flow of gas to the corresponding parameters as set out in the Article II of the Contract.
- 3. <u>Maintenance Costs:</u> Shipper shall within thirty (30) days of the delivery of an invoice by Union, reimburse Union for any actual costs reasonably incurred by Union for any repair, replacement, relocation, or upgrading of any meter station or any Union Expansion Facilities requested by Shipper, or as required by law or by duly constituted regulatory body, or through good engineering practice. Union shall be responsible for any costs incurred by Union to correct an error made by Union.

- 4. <u>Operation and Maintenance:</u> Subject to this Article VI Section 3, each party shall be fully responsible for the continued operation, maintenance, repair and replacement of its respective facilities. Both parties agree to maintain cathodic protection on their respective facilities.
- 5. <u>Inspection:</u> Each party shall inspect its facilities as required by industry standards or by the appropriate regulatory body.
- 6. Repair or Replacement: Each party shall decide, in its sole discretion, whether its facilities need to be repaired or replaced. In the event that repair or replacement is needed, the party undertaking such work will, to the extent possible, give the other party sixty (60) days' notice and will ensure that the work be done in a manner so as to minimize the amount of time the pipeline has restricted flows.

## VII. MEASURING EQUIPMENT

- 1. <u>Metering by Union:</u> Union will install and operate meters and related equipment as required and in accordance with the Act and Regulations referenced in Article III herein.
- 2. <u>Metering by Others:</u> In the event that all or any gas delivered to/by Union hereunder is measured by a meter that is owned and operated by an Interconnecting Pipeline, then Union and Shipper agree to accept that metering for the purpose of determining the volume and energy of gas delivered to/by Union on behalf of the Shipper. The standard of measurement and tests for the gas delivered to/by Union hereunder shall be in accordance with the general terms and conditions as incorporated in that Interconnecting Pipeline company's gas tariff as approved by its regulatory body.
- 3. <u>Check Measuring Equipment:</u> Shipper may install, maintain and operate, at the Custody Transfer Point, at its own expense, such check measuring equipment as desired, provided that such equipment shall be so installed as not to interfere with the operation of Union's measuring equipment at or near the Custody Transfer Point, and shall be installed, maintained and operated in conformity with the same standards and specifications applicable to Union's metering facilities.
- 4. <u>Rights of Parties:</u> The measuring equipment installed by either party, together with any building erected by it for such equipment, shall be and remain its property. However, Union and Shipper shall have the right to have representatives present at the time of any installing, reading, cleaning, changing, repairing, inspecting, testing, calibrating, or adjusting done in connection with the other's measuring equipment used in measuring or checking the measurement of deliveries of gas to/by Union under the Contract. Either party will give the other party reasonable notice of its intention to carry out the acts herein specified. The records from such measuring equipment shall remain the property of their owner, but upon request each will submit to the other its records and charts, together with calculations therefrom, for inspection and verification, subject to return within ten (10) days after receipt thereof.
- 5. <u>Calibration and Test of Measuring Equipment:</u> The accuracy of Union's measuring equipment shall be verified by Union at reasonable intervals, and if requested, in the presence of representatives of Shipper, but Union shall not be required to verify the accuracy of such equipment more frequently than once in any thirty (30) day period. In the event either party notifies the other that it desires a special test of any measuring equipment, the parties shall co-operate to secure a prompt verification of the accuracy of such equipment. The expense of any such special test, if called for by Shipper, shall be borne by Shipper if the measuring equipment tested is found to be in error by not more than two per cent (2%), If, upon test, any measuring equipment is found to be in error by not more than two per cent (2%), previous recordings of such equipment shall be considered accurate in computing receipts and deliveries of gas, but such equipment shall be adjusted at once to record as near to absolute accuracy as possible. If the test conducted shows a percentage of inaccuracy greater than two percent (2%), the financial adjustment, if any, shall be calculated in accordance with the Act and Regulations, as may be amended from time to time and in accordance with any successor statutes and regulations.
- 6. <u>Preservation of Metering Records:</u> Union and Shipper shall each preserve for a period of at least six (6) years all test data, and other relevant records.

7. <u>Error in Metering or Meter Failure:</u> In the event of an error in metering or a meter failure, (such error or failure being determined through check measurement by Union or any other available method), then Shipper shall enforce its rights as Shipper with the Interconnecting Pipeline(s) to remedy such error or failure including enforcing any inspection and/or verification rights and procedures.

## VIII. BILLING

- 1. <u>Monthly Billing Date:</u> Union shall render bills on or before the tenth (10<sup>th</sup>) day of each month for all Services furnished during the preceding Month. Such charges may be based on estimated quantities, if actual quantities are unavailable in time to prepare the billing. Union shall provide, in a succeeding Month's billing, an adjustment based on any difference between actual quantities and estimated quantities, without any interest charge. If presentation of a bill to Shipper is delayed after the tenth (10<sup>th</sup>) day of the month, then the time of payment shall be extended accordingly, unless Shipper is responsible for such delay.
- 2. <u>Right of Examination:</u> Both Union and Shipper shall have the right to examine at any reasonable time the books, records and charts of the other to the extent necessary to verify the accuracy of any statement, chart or computation made under or pursuant to the provisions of the Contract.
- 3. <u>Amendment of Statements:</u> For the purpose of completing a final determination of the actual quantities of gas handled under the Contract, Union shall have the right to amend its statements for a period equal to the time during which the Interconnecting Pipeline retains the right to amend their statements, which period shall not exceed three (3) years from the date of termination of the Contract.

## IX. PAYMENTS

- 1. <u>Monthly Payments:</u> Shipper shall pay the invoiced amount directly into Union's bank account as directed on the invoice on or before the twentieth (20<sup>th</sup>) day of each month. If the payment date is not a Business Day, then payment must be received in Union's account on the first Business Day preceding the twentieth (20<sup>th</sup>) day of the month.
- 2. <u>Remedies for Non-payment:</u> Should Shipper fail to pay all of the amount of any bill as herein provided when such amount is due.
  - Shipper shall pay to Union interest on the unpaid portion of the bill accruing at a rate per annum equal to the
    minimum commercial lending rate of Union's principal banker in effect from time to time from the due date
    until the date of payment; and,
  - b. If such failure to pay continues for thirty (30) days after payment is due, Union, in addition to any other remedy it may have under the Contract, may suspend Services until such amount is paid. Notwithstanding such suspension, all demand charges shall continue to accrue hereunder as if such suspension were not in place.

If Shipper in good faith disputes the amount of any such bill or part thereof Shipper shall pay to Union such amounts as it concedes to be correct. At any time thereafter, within twenty (20) days of a demand made by Union, Shipper shall furnish financial assurances satisfactory to Union, guaranteeing payment to Union of the amount ultimately found due upon such bill after a final determination. Such a final determination may be reached either by agreement, arbitration decision or judgement of the courts, as may be the case. Union shall not be entitled to suspend Services because of such non-payment unless and until default occurs in the conditions of such financial assurances or default occurs in payment of any other amount due to Union hereunder.

Notwithstanding the foregoing, Shipper is not relieved from the obligation to continue its deliveries of gas to Union under the terms of any agreement, where Shipper has contracted to deliver specified quantities of gas to Union.

3. <u>Billing Adjustments:</u> If it shall be found that at any time or times Shipper has been overcharged or undercharged in any form whatsoever under the provisions of the Contract and Shipper shall have actually paid the bills containing such

overcharge or undercharge, Union shall refund the amount of any such overcharge and interest shall accrue from and including the first day of such overcharge as paid to the date of refund and shall be calculated but not compounded at a rate per annum determined each day during the calculation period to be equal to the minimum commercial lending rate of Union's principal banker, and the Shipper shall pay the amount of any such undercharge, but without interest. In the event Union renders a bill to Shipper based upon measurement estimates, the required adjustment to reflect actual measurement shall be made on the bill next following the determination of such actual measurement, without any charge of interest. In the event an error is discovered in the amount billed in any statement rendered by Union, such error shall be adjusted by Union. Such overcharge, undercharge or error shall be adjusted by Union on the bill next following its determination (where the term "bill next following" shall mean a bill rendered at least fourteen (14) days after the day of its determination), provided that claim therefore shall have been made within three (3) years from the date of the incorrect billing. In the event any refund is issued with Shipper's bill, the aforesaid date of refund shall be deemed to be the date of the issue of bill.

- 4. <u>Taxes:</u> In addition to the charges and rates as per the applicable rate schedules and price schedules, Shipper shall pay all Taxes which are imposed currently or subsequent to the execution of the Contract by any legal authority having jurisdiction and any amount in lieu of such Taxes paid or payable by Union.
- 5. <u>Set Off:</u> If Shipper shall, at any time, be in arrears under any of its payment obligations to Union under the Contract, then Union shall be entitled to reduce the amount payable by Union to Shipper under the Contract or any other contract by an amount equal to the amount of such arrears or other indebtedness to Union. In addition to the foregoing remedy, Union may, upon forty-eight (48) hours verbal notice, to be followed by written notice, take possession of any or all of Shipper's gas under the Contract, which shall be deemed to have been assigned to Union, to reduce such arrears or other indebtedness to Union.
- 6. Aid to Construction: Shipper agrees to reimburse Union for the Aid to Construction.

In the event Union has incurred costs, as set out herein, relative to the construction, installation or connection of the gas metering station prior to being notified by Shipper of Shipper's intention to terminate the Contract, Shipper shall promptly remit to Union such actual costs on presentation to Shipper of an invoice for same from Union.

All applicable Taxes will be applied to all amounts to be paid under this Section. Shipper warrants and represents that no payment to be made by Shipper under the Contract is subject to any withholding tax.

## X. ARBITRATION

If and when any dispute, difference or question shall arise between the parties hereto touching the Contract or anything herein contained, or the construction hereof, or the rights, duties or liabilities of the parties in relation to any matter hereunder, the matter in dispute shall be submitted and referred to arbitration within ten (10) days after written request of either party. Upon such request each party shall appoint an arbitrator, and the two so appointed shall appoint a third. A majority decision of the arbitrators shall be final and binding upon both parties. In all other respects the provisions of the <u>Arbitration Act</u>, 1991, or any act passed in amendment thereof or substitution therefore, shall apply to each such submission. Operations under the Contract shall continue, without prejudice, during any such arbitration and the costs attributable to such arbitration shall be shared equally by the parties hereto.

## XI. FORCE MAJEURE

1. <u>Definition:</u> The term "force majeure" as used herein shall mean acts of God, strikes, lockouts or any other industrial disturbance, acts of the public enemy, sabotage, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests and restraints of governments and people, civil disturbances, explosions, breakage or accident to machinery or lines of pipe, freezing of wells or lines of pipe, inability to obtain materials, supplies, permits or labour, any laws, orders, rules, regulations, acts or restraints of any governmental body or authority (civil or military), any act or omission that is excused by any event or occurrence of the character herein defined as constituting force majeure, any act or omission by parties not controlled by the party having the difficulty and

any other similar cases not within the control of the party claiming suspension and which by the exercise of due diligence such party is unable to prevent or overcome.

- 2. <u>Notice:</u> In the event that either the Shipper or Union is rendered unable, in whole or in part, by force majeure, to perform or comply with any obligation or condition of the Contract, such party shall give notice and full particulars of such force majeure in writing delivered by hand, fax or other direct written electronic means to the other party as soon as possible after the occurrence of the cause relied on and subject to the provision of this Article.
- 3. Exclusions: Neither party shall be entitled to the benefit of the provisions of force majeure hereunder if any or all of the following circumstances prevail: the failure resulting in a condition of force majeure was caused by the negligence of the party claiming suspension; the failure was caused by the party claiming suspension where such party failed to remedy the condition by making all reasonable efforts (short of litigation, if such remedy would require litigation); the party claiming suspension failed to resume the performance of such condition obligations with reasonable dispatch; the failure was caused by lack of funds; the party claiming suspension did not, as soon as possible after determining, or within a period within which it should acting reasonably have determined, that the occurrence was in the nature of force majeure and would affect its ability to observe or perform any of its conditions or obligations under the Contract, give to the other party the notice required hereunder.
- 4. <u>Notice of Remedy:</u> The party claiming suspension shall likewise give notice as soon as possible after the force majeure condition is remedied, to the extent that the same has been remedied, and that such party has resumed or is then in a position to resume the performance of the obligations and conditions of the Contract.
- 5. <u>Obligation to Perform:</u> An event of force majeure on Union's system will excuse the failure to deliver gas by Union or the failure to accept gas by Union hereunder, and both parties shall be excused from performance of their obligations hereunder, except for payment obligations, to the extent of and for the duration of the force majeure.
- 6. <u>Upstream or Downstream Force Majeure:</u> An event of force majeure upstream or downstream of Union's system shall not relieve Shipper of any payment obligations.
- 7. <u>Delay of Firm Transportation Services:</u> Despite Article XI herein, if Union is prevented, by reason of an event of force majeure on Union's system from delivering gas on the Day or Days upon which Union has accepted gas from Shipper, Union shall thereafter make all reasonable efforts to deliver such quantities as soon as practicable and on such Day or Days as are agreed to by Shipper and Union. If Union accepts such gas on this basis, Shipper shall not receive any demand charge relief as contemplated under Article XI herein.
- 8. Demand Charge Relief for Firm Transportation Services: Despite Article XI herein, if on any Day Union fails to accept gas from Shipper by reason of an event of force majeure on Union's system and fails to deliver the quantity of gas nominated hereunder by Shipper up to the firm contract demand for the Contract, then for that Day the Monthly demand charge shall be reduced by an amount equal to the applicable Daily Demand Rate, as defined in this paragraph, multiplied by the difference between the quantity of gas actually delivered by Union during such Day and the quantity of gas which Shipper in good faith nominated on such Day. The term "Daily Demand Rate" shall mean the Monthly demand charge or equivalent pursuant to the C1 Rate Schedule divided by the number of days in the month for which such rate is being calculated.
- 9. <u>Unforeseen Reduction:</u> In addition to the definition of force majeure in Article XI, Section 1 herein, for the purposes of the Contract, it shall also include the unforeseen reduction in natural gas usage and/or capacity of the local transmission system as described in Schedule 1 of the Contract, regardless of the duration of such unforeseen reduction, or any other cause, whether of the kind herein enumerated or otherwise, not within the reasonable control of the party claiming relief hereunder and which, by the exercise of due diligence, such party is unable to prevent or overcome.

## XII. DEFAULT AND TERMINATION

In case of the breach or non-observance or non-performance on the part of either party hereto of any covenant, proviso, condition, restriction or stipulation contained in the Contract (but not including herein failure to take or make

delivery in whole or in part of the gas delivered to/by Union hereunder occasioned by any of the reasons provided for in Article XI herein) which has not been waived by the other party, then and in every such case and as often as the same may happen, the non-defaulting party may give written notice to the defaulting party requiring it to remedy such default and in the event of the defaulting party failing to remedy the same within a period of thirty (30) days from receipt of such notice, the non-defaulting party may at its sole option declare the Contract to be terminated and thereupon the Contract shall be terminated and be null and void for all purposes other than and except as to any liability of the parties under the same incurred before and subsisting as of termination. The right hereby conferred upon each party shall be in addition to, and not in derogation of or in substitution for, any other right or remedy which the parties respectively at law or in equity shall or may possess.

## XIII. AMENDMENT

Subject to Article XV herein and the ability of Union to amend the applicable rate schedules and price schedules, with the approval of the OEB (if required), no amendment or modification of the Contract shall be effective unless the same shall be in writing and signed by each of the Shipper and Union.

## XIV. NON-WAIVER AND FUTURE DEFAULT

No waiver of any provision of the Contract shall be effective unless the same shall be in writing and signed by the party entitled to the benefit of such provision and then such waiver shall be effective only in the specific instance and for the specified purpose for which it was given. No failure on the part of Shipper or Union to exercise, and no course of dealing with respect to, and no delay in exercising, any right, power or remedy under the Contract shall operate as a waiver thereof.

## XV. LAWS, REGULATIONS AND ORDERS

The Contract and the respective rights and obligations of the parties hereto are subject to all present and future valid laws, orders, rules and regulations of any competent legislative body, or duly constituted authority now or hereafter having jurisdiction and the Contract shall be varied and amended to comply with or conform to any valid order or direction of any board, tribunal or administrative agency which affects any of the provisions of the Contract.

## XVI. RESERVED FOR FUTURE USE

N/A

## XVII. RENEWALS

The Contract will continue in full force and effect beyond the Initial Term, automatically renewing for a period of one (1) year, and every one (1) year thereafter. Shipper or Union may reduce the contract demands or terminate the Contract, with notice in writing to the other party, at least two (2) years prior to the expiration thereof.

## XVIII. SERVICE CURTAILMENT

- <u>Capacity Sharing:</u> Where requests for interruptible service hereunder exceed the capacity available for such Service, Union will authorize nominations from shippers and allocate capacity as per Union's procedures and policies and shippers shall be so advised. Any interruptible service provided herein are subordinate to any and all firm service supplied by Union, and subordinate to Union's own operational or system requirements.
- 2. <u>Capacity Procedures:</u> Union reserves the right to change its procedures and policies for sharing interruptible capacity and will provide Shipper with two (2) months' notice of any such change.

- 3. Maintenance: Union's facilities from time to time may require maintenance or construction. In the event that such event occurs and in Union's sole opinion, acting reasonably, may impact its ability to meet Shipper's requirements, Union shall provide at least ten (10) days' notice to the Shipper, except in the case of emergencies. In the event the maintenance impacts Union's ability to meet Shipper's requirements, Union shall not be liable for any damages and shall not be deemed to be in breach of the Contract. To the extent that Union's ability to receive or deliver gas is impaired, Demand Charge Relief shall be calculated and credited to Shipper's invoice in accordance with Article XI, Section 8 herein. Union shall use reasonable efforts to determine a mutually acceptable period during which such maintenance or construction will occur and also to limit the extent and duration of any impairments. Union will endeavour to schedule and complete the maintenance and construction, that can be scheduled and completed, and which would normally be expected to impact on Union's ability to meet its obligations of any Contract Year, during the period from April 1 through to October 31.
- 4. <u>Shipper's Facilities:</u> Shipper shall complete and maintain a plan which depicts all of Shipper's production storage facilities including all emergency shut off valves and emergency equipment and provide a copy to Union upon Union's request. Shipper shall provide to Union the names and telephone numbers of those persons whom Union may contact in the event of an emergency situation arising within the Shipper's facilities.

## XIX. SHIPPER'S REPRESENTATIONS AND WARRANTIES

- 1. <u>Shipper's Warranty:</u> Shipper warrants that it will, if required, maintain, or have maintained on its behalf, all external approvals including the governmental, regulatory, import/export permits and other approvals or authorizations that are required from any federal, state or provincial authorities for the gas quantities to be handled under the Contract. Shipper further warrants that it shall maintain in effect the Facilitating Agreements.
- 2. <u>Financial Representations:</u> Shipper represents and warrants that the financial assurances (including the Initial Financial Assurances and Security), if any, shall remain in place throughout the term hereof unless Shipper and Union agree otherwise. Shipper shall notify Union in the event of any change to the financial assurances (including the Initial Financial Assurances and Security), if any, throughout the term hereof. Should Union have reasonable grounds to believe that Shipper will not be able to perform or continue to perform any of its obligations under the Contract for any reason (a "Material Event"), then Shipper shall within fourteen (14) days of receipt of written notice by Union, obtain and provide to Union a letter of credit or other security in the form and amount reasonably required by Union (the "Security"). In the event that Shipper does not provide to Union such Security, Union may deem a default in accordance with the provisions of Article XII herein.

In the event that Shipper in good faith, reasonably believes that it should be entitled to reduce the amount of or value of the Security previously provided, it may request such a reduction from Union and to the extent that the Material Event has been mitigated or eliminated, Union shall return all or a portion of the Security to Shipper within fourteen (14) Business Days after receipt of the request.

3. <u>License:</u> Shipper represents and warrants to Union that Shipper possesses all licenses and permits needed to inject gas into, store gas in, and remove gas from the pool.

## XX. MISCELLANEOUS PROVISIONS

- 1. <u>Assignment:</u> Shipper may not assign the Contract without the written consent of Union and, if required, the approval of the OEB. Should Union consent to the assignment, and if OEB approval is needed, Union will apply for OEB approval with all costs of the application to be paid by Shipper.
- 2. <u>Title to Gas:</u> Shipper represents and warrants to Union that Shipper shall have good and marketable title to, or legal authority to deliver to Union, all gas delivered to Union hereunder. Furthermore, Shipper hereby agrees to indemnify and save Union harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising from or out of claims of any or all third parties to such gas or on account of Taxes, or other charges thereon.

## XXI. PRECONDITIONS TO TRANSPORTATION SERVICES

- 1. <u>Union Conditions:</u> The obligations of Union to provide Services hereunder are subject to the following conditions precedent, which are for the sole benefit of Union and which may be waived or extended in whole or in part in the manner provided in the Contract:
  - a. Union shall have obtained, in form and substance satisfactory to Union, and all conditions shall have been satisfied under, all governmental, regulatory and other third party approvals, consents, orders and authorizations, that are required to provide the Services; and,
  - Union shall have obtained all internal approvals that are necessary or appropriate to provide the Services;
     and.
  - c. Union shall have received from Shipper the requisite financial assurances reasonably necessary to ensure Shipper's ability to honour the provisions of the Contract (the "Initial Financial Assurances"). The Initial Financial Assurances, if required, will be as determined solely by Union; and,
  - d. Shipper and Union shall have entered into the Interruptible Service HUB Contract or equivalent (the "Facilitating Agreement") with Union; and,
  - e. Shipper shall have paid any amounts owing pursuant to Schedule 1 Aid to Construction; and,
  - f. With regard to the Union Expansion Facilities:
    - i. Union shall have obtained, in form and substance satisfactory to Union, and all conditions shall have been satisfied under, all governmental, regulatory and other third party approvals, consents, orders and authorizations required to construct the Union Expansion Facilities;
    - ii. Union shall have obtained all internal approvals that are necessary or appropriate to construct the Union Expansion Facilities;
    - iii. Union shall have completed and placed into service the Union Expansion Facilities; and,
  - g. Shipper shall, at Shipper's own cost and expense, have obtained a registered lease or freehold ownership in Union's favour for the Union Expansion Facilities located at the Pool Station satisfactory to Union and sufficient to provide Union with free uninterrupted access to, from, under and above the Pool Station for a term (and extended terms) identical to the Contract, plus sixty (60) days (such land rights being referred to as the "Pool Station Land Rights"), and shall provide Union with a bona fide copy of such agreements prior to Union commencing the construction of the Union Expansion Facilities.
- 2. <u>Shipper Conditions:</u> The obligations of Shipper hereunder are subject to the following conditions precedent, which are for the sole benefit of Shipper and which may be waived or extended in whole or in part in the manner provided in the Contract:
  - a. Shipper shall, as required, have entered into the necessary contracts with Union and/or others to facilitate the Services contemplated herein, including contracts for upstream and downstream transportation, and shall specifically have an executed and valid Facilitating Agreement; and shall, as required, have entered into the necessary contracts to purchase the gas quantities handled under the Contract; and,
  - b. Shipper shall have obtained, in form and substance satisfactory to Shipper, and all conditions shall have been satisfied under, all governmental, regulatory and other third party approvals, consents, orders and authorizations, that are required from federal, state, or provincial authorities for the gas quantities handled under the Contract; and,

#### SCHEDULE "A 2013"

- c. Shipper shall have obtained all internal approvals that are necessary or appropriate for the Shipper to execute the Contract.
- 3. <u>Satisfaction of Conditions:</u> Union and Shipper shall each use due diligence and reasonable efforts to satisfy and fulfil the conditions precedent specified in this Article XXI Section 1 a, c, d, e, f i., f iii., and g and Section 2 a and b. Each party shall notify the other forthwith in writing of the satisfaction or waiver of each condition precedent for such party's benefit. If a party concludes that it will not be able to satisfy a condition precedent that is for its benefit, such party may, upon written notice to the other party, terminate the Contract and upon the giving of such notice, the Contract shall be of no further force and effect and each of the parties shall be released from all further obligations thereunder.
- 4. Non-Satisfaction of Conditions: If any of the conditions precedent in this Article XXI Section 1 c or Section 2 are not satisfied or waived by the party entitled to the benefit of that condition by the Conditions Date as such term is defined in the Contract, then either party may, upon written notice to the other party, terminate the Contract and upon the giving of such notice, the Contract shall be of no further force and effect and each of the parties shall be released from all further obligations hereunder, provided that any rights or remedies that a party may have for breaches of the Contract prior to such termination and any liability a party may have incurred before such termination shall not thereby be released.



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## CROSS FRANCHISE TRANSPORTATION RATES

## (A) Applicability

To a Shipper who enters into a Contract with Union for delivery by Shipper of gas to Union at one of Union's points listed below for redelivery by Union to Shipper at one of Union's points.

Applicable Points	(1)	(2)
	Ojibway	WDA
	St. Clair	NDA
	Dawn*	SSMDA
	Parkway	SWDA
	Kirkwall	CDA
	Bluewater	EDA

<sup>\*</sup>Dawn as a receipt point: Dawn (TCPL), Dawn (Facilities), Dawn (Tecumseh), Dawn (Vector) and Dawn (TSLE).

## (B) Services

Transportation Service under this rate schedule is transportation on Union's pipeline facilities between any two Points as specified in Section (A), column 1.

## (C) Rates

The identified rates (excluding gas supply charges, if applicable) represent maximum prices for service. These rates may change periodically. Multi-year prices may also be negotiated, which may be higher than the identified rates.

## **Transportation Service (1):**

		Monthly Demand	Fuel and Commodity Charges						
		<u>Charges</u>	Union Sup	plied Fuel	Shipper Supplied Fuel				
		(applied to daily	Fuel and Commodity Charge		<u>Fuel f</u>	Fuel Ratio		Commodity	
		contract demand)	Apr.1-Oct.31	Nov.1-Mar.31	Apr.1-Oct.31	Nov.1-Mar.31		<u>Charge</u>	
		Rate/GJ	Rate/GJ	Rate/GJ	<u>%</u>	<u>%</u>	<u>and</u>	Rate/GJ	
a)	Firm Transportation								
	Between:								
	St.Clair & Dawn	\$3.155	\$0.007	\$0.009	0.208%	0.267%			
	Ojibway & Dawn	\$3.155	\$0.016	\$0.011	0.449%	0.305%			
	Bluewater & Dawn	\$3.155	\$0.007	\$0.009	0.208%	0.267%			
	From:								
	Parkway to Kirkwall	\$0.874	\$0.011	\$0.006	0.301%	0.158%			
	Parkway to Dawn	\$0.874	\$0.011	\$0.006	0.301%	0.158%			
	Kirkwall to Dawn	\$1.542	\$0.006	\$0.006	0.158%	0.158%			
	Dawn to Kirkwall	\$3.154	\$0.011	\$0.027	0.319%	0.764%			
	Dawn to Parkway	\$3.716	\$0.021	\$0.037	0.585%	1.042%			
	Kirkwall to Parkway	\$0.561	\$0.015	\$0.015	0.423%	0.436%			
b)	Firm Transportation between two points	within Dawn							
D)	Dawn to Dawn-Vector	\$0.030	n/a	n/a	0.341%	0.158%		Ī	
	Dawn to Dawn-Vector  Dawn to Dawn-TCPL	\$0.030	n/a	n/a	0.158%	0.150%			
	Dawn to Dawn-TCT L	Ψ0.137	Π/a	II/a	0.13070	0.33370		ı	
c)	Interruptible Transportation between two	points within Dawn*							
	*includes Dawn (TCPL), Dawn Facilities, Dawn (Tecumseh), Dawn (Vector) and Dawn (TSLE) 0.158%				0.158%	0.158%			
d)	Interruptible and Short Term (1 year or le	ess) Firm Transportation:	\$75.00						

<sup>\*</sup>Dawn as a delivery point: Dawn (Facilities).



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# (C) Rates (Cont'd)

<b>Fuel and Com</b>	modity Charges
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	Union Su	Union Supplied Fuel		Shipper Supplied Fuel		
	Fuel and Com	Fuel and Commodity Charge		Fuel Ratio		Commodity
	Apr.1-Oct.31	Nov.1-Mar.31	Apr.1-Oct.31	Nov.1-Mar.31		<u>Charge</u>
	Rate/GJ	Rate/GJ	<u>%</u>	<u>%</u>	<u>and</u>	Rate/GJ
e) Cap-and-Trade Facility-Related Charges (applied to all quantities	es transported):					
St.Clair / Ojibway / Bluewater & Dawn	\$0.004	\$0.004				\$0.004
Parkway to Dawn / Kirkwall	\$0.003	\$0.003				\$0.003
Kirkwall to Dawn	\$0.002	\$0.002				\$0.002
Dawn to Kirkwall / Parkway (Cons) / Lisgar	\$0.006	\$0.006				\$0.006
Dawn to Parkway (TCPL)	\$0.009	\$0.009				\$0.009
Kirkwall to Parkway (Cons) / Lisgar	\$0.002	\$0.002				\$0.002
Kirkwall to Parkway (TCPL)	\$0.005	\$0.005				\$0.005
Dawn to Dawn-Vector	\$0.003	\$0.003				\$0.003
Dawn to Dawn-TCPL	\$0.004	\$0.004				\$0.004
Interruptible Transportation between two points within Dawn*	·					
*includes Dawn (TCPL), Dawn Facilities, Dawn (Tecumseh	n), Dawn (Vector) an	d Dawn (TSLE)				\$0.002

## **Authorized Overrun:**

The following Overrun rates are applied to any quantities transported in excess of the Contract parameters. Overrun will be authorized at Union's sole discretion.

		Union Supplied Fuel		Shipper Supplied Fuel			
			modity Charge		<u>Ratio</u>		Commodity
			Nov.1-Mar.31		Nov.1-Mar.31		<u>Charge</u>
,		Rate/GJ	Rate/GJ	<u>%</u>	<u>%</u>	<u>and</u>	Rate/GJ
a)	Firm Transportation						
	Between:						_
	St.Clair & Dawn	\$0.111	\$0.113	0.208%	0.267%		\$0.104
	Ojibway & Dawn	\$0.120	\$0.115	0.449%	0.305%		\$0.104
	Bluewater & Dawn	\$0.111	\$0.113	0.208%	0.267%		\$0.104
	From:						
	Parkway to Kirkwall	\$0.155	\$0.150	0.921%	0.778%		\$0.122
	Parkway to Dawn	\$0.155	\$0.150	0.921%	0.778%		\$0.122
	Kirkwall to Dawn	\$0.078	\$0.078	0.778%	0.778%		\$0.051
	Dawn to Kirkwall	\$0.137	\$0.153	0.939%	1.384%		\$0.104
	Dawn to Parkway	\$0.165	\$0.181	1.205%	1.662%		\$0.122
	Kirkwall to Parkway	\$0.055	\$0.056	1.043%	1.056%		\$0.018
b)	Firm Transportation within Dawn						
	Dawn to Dawn-Vector	n/a	n/a	0.341%	0.158%		\$0.001
	Dawn to Dawn-TCPL	n/a	n/a	0.158%	0.353%		\$0.005
c)	Cap-and-Trade Facility-Related Charges (applied to all quantities to	ransported):					
	St.Clair / Ojibway / Bluewater & Dawn	\$0.004	\$0.004				\$0.004
	Parkway to Dawn / Kirkwall	\$0.003	\$0.003				\$0.003
	Kirkwall to Dawn	\$0.002	\$0.002				\$0.002
	Dawn to Kirkwall / Parkway (Cons) / Lisgar	\$0.006	\$0.006				\$0.006
	Dawn to Parkway (TCPL)	\$0.009	\$0.009				\$0.009
	Kirkwall to Parkway (Cons) / Lisgar	\$0.002	\$0.002				\$0.002
	Kirkwall to Parkway (TCPL)	\$0.005	\$0.005				\$0.005
	Dawn to Dawn-Vector	\$0.003	\$0.003				\$0.003
	Dawn to Dawn-TCPL	\$0.004	\$0.004				\$0.004

Authorized overrun for short-term firm transportation is available at negotiated rates.



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## (C) Rates (Cont'd)

## **Unauthorized Overrun**:

The Unauthorized Overrun rate shall be the higher of the reported daily spot price of gas at either, Dawn, Parkway, Niagara, Iroquois or Chicago in the month of or the month following the month in which the overrun occurred plus 25% for all usage on any day in excess of 102% of Union's contractual obligation.

Notes for Section (C) Rates:

(1) A demand charge of \$0.070/GJ/day/month will be applicable to customers contracting for firm all day transportation service in addition to the demand charges appearing on this schedule for all firm transportation service paths.

## (D) Terms of Service

The General Terms & Conditions applicable to this rate schedule shall be in accordance with the attached Schedule "A" for contracts in effect before October 1, 2010. The General Terms & Conditions applicable to this rate schedule shall be in accordance with the attached Schedule "A 2010" for contracts in effect on or after October 1, 2010.

## (E) Nominations

Nominations under this rate schedule shall be in accordance with the attached Schedule "B" for contracts in effect before October 1, 2010. Nominations under this rate schedule shall be in accordance with the attached Schedule "B 2010" for contracts in effect on or after October 1, 2010.

## (F) Receipt and Delivery Points and Pressures

Receipt and Delivery Points and Pressures under this rate schedule shall be in accordance with Schedule "C 2010" for contracts in effect on or after October 1, 2010.

# RATE C1 GENERAL TERMS & CONDITIONS

## I. DEFINITIONS

Except where the context expressly requires or states another meaning, the following terms, when used in these General Terms & Conditions and in any contract into which these General Terms & Conditions are incorporated, shall be construed to have the following meanings:

- 1. "Contract" shall refer to the Contract to which these General Terms & Conditions shall apply, and into which they are incorporated;
- 2. "cubic metre" shall mean the volume of gas which occupies one cubic metre when such gas is at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute;
- 3. "day" shall mean a period of twenty-four (24) consecutive hours beginning at 9:00 a.m. Central Standard time. The reference date for any day shall be the calendar date upon which the twenty-four (24) hour period shall commence;
- 4. "delivery" shall mean any gas that is delivered by Union into Shipper's possession, or to the possession of Shipper's agent;
- 5. "firm" shall mean service not subject to curtailment or interruption except under Articles XI and XII of this Schedule "A";
- 6. "gas" shall mean gas as defined in the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Sch. B, as amended, supplemented or re-enacted from time to time;
- 7. "gross heating value" shall mean the total heat expressed in megajoules per cubic metre (MJ/m³) produced by the complete combustion at constant pressure of one (1) cubic metre of gas with air, with the gas free of water vapour and the temperature of the gas, air and products of combustion at standard temperature and all water formed by the combustion reaction condensed to the liquid state;
- 8. "interruptible service" shall mean service subject to curtailment or interruption, after notice, at any time;
- 9. "Interconnecting Pipeline" shall mean a pipeline that directly connects to the Union pipeline system;
- 10. "joule" (J) shall mean the work done when the point of application of a force of one (1) newton is displaced a distance of one (1) metre in the direction of the force. The term "megajoule" (MJ) shall mean 1,000,000 joules. The term "gigajoule" (GJ) shall mean 1,000,000,000 joules;
- 11. "limited interruptible service" shall mean gas service subject to interruption or curtailment on a limited number of days as specified in the Contract;
- 12. "m³" shall mean cubic metre of gas and "10³m³" shall mean 1,000 cubic metres of gas;
- 13. "month" shall mean the period beginning at 9:00 a.m. Central Standard time on the first day of a calendar month and ending at 9:00 a.m. Central Standard time on the first day of the following calendar month;
- 14. "OEB" means the Ontario Energy Board;
- 15. "pascal" (Pa) shall mean the pressure produced when a force of one (1) newton is applied to an area of one (1) square metre. The term "kilopascal" (kPa) shall mean 1,000 pascals;
- 16. "receipt" shall mean any gas that is delivered into Union's possession, or the possession of Union's agent;
- 17. "Shipper" shall have the meaning as defined in the Contract and shall also include Shipper's agent(s);

- 18. "TCPL" means TransCanada PipeLines Limited;
- 19. "cricondentherm hydrocarbon dewpoint" shall mean the highest hydrocarbon dewpoint temperature on the phase envelope;
- 20. "hydrocarbon dewpoint" shall mean temperature at a specific pressure where hydrocarbon vapour condensation begins;
- 21. "specific gravity" shall mean density of the gas divided by density of air, with both at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute;
- 22. "Wobbe Number" shall mean gross heating value of the gas divided by the square root of its specific gravity.

## II. GAS QUALITY

- Natural Gas: The minimum gross heating value of the gas delivered to/by Union hereunder, shall be thirty-six (36) megajoules per cubic metre. The maximum gross heating value of the gas delivered to/by Union hereunder shall be forty point two (40.2) megajoules per cubic metre. The gas to be delivered hereunder to Union may be a commingled supply from Shipper's gas sources of supply. The gas to be delivered by Union may be a commingled supply from Union's sources of gas supply; provided, however, that helium, natural gasoline, butane, propane and other hydrocarbons, except methane, may be removed prior to delivery to Shipper. Further, Union may subject, or permit the subjection of, the gas to compression, dehydration, cooling, cleaning and other processes.
- 2. Freedom from objectionable matter: The gas to be delivered to/by Union hereunder,
  - a. shall be commercially free from bacteria, sand, dust, gums, crude oils, lubricating oils, liquids, chemicals or compounds used in the production, treatment, compression or dehydration of the gas or any other objectionable substance in sufficient quantity so as to render the gas toxic, unmerchantable or cause injury to, or interference with, the proper operation of the lines, regulators, meters or other appliances through which it flows.
  - b. shall not contain more than seven (7) milligrams of hydrogen sulphide per cubic metre of gas, nor more than four hundred and sixty (460) milligrams of total sulphur per cubic metre of gas,
  - c. shall not contain more than five (5) milligrams of mercaptan sulphur per cubic metre of gas,
  - d. shall not contain more than two point zero (2.0) molar percent by volume of carbon dioxide in the gas,
  - e. shall not contain more than zero point four (0.4) molar percent by volume of oxygen in the gas,
  - f. shall not contain more than zero point five (0.5) molar percent by volume of carbon monoxide in the gas,
  - g. shall not contain more than four point zero (4.0) molar percent by volume of hydrogen in the gas,
  - h. shall not contain more than sixty-five (65) milligrams of water vapour per cubic metre of gas,
  - i. shall not have a cricondentherm hydrocarbon dewpoint exceeding minus eight (-8) degrees Celsius,
  - j. shall have Wobbe Number from forty seven point fifty (47.50) megajoules per cubic metre of gas to fifty one point forty six (51.46) megajoules per cubic metre of gas, maximum of one point five (1.5) mole percent by volume of butane plus (C4+) in the gas, and maximum of four point zero (4.0) mole percent by volume of total inerts in the gas in order to be interchangeable with other Interconnecting Pipeline gas.

- 3. <u>Non-conforming Gas:</u> In addition to any other right or remedy of a party, each party shall be entitled to refuse to accept delivery of any gas which does not conform to any of the specifications set out in this Article II.
- 4. Quality of Gas Received: The quality of the gas to be received by Union hereunder is to be of a merchantable quality and in accordance with the quality standards as set out by Union in this Article II, but, Union will also accept gas of a quality as set out in any other Interconnecting Pipeline's general terms and conditions, provided that all Interconnecting Pipelines accept such quality of gas. In addition to any other right or remedy of a party, each party shall be entitled to refuse to accept delivery of any gas which does not conform to any of the specifications set out in Union's C1 Rate Schedule.

## III. MEASUREMENTS

1. <u>Storage, Transportation, and/or Sales Unit:</u> The unit of the gas delivered to Union shall be a megajoule or a gigajoule. The unit of gas transported or stored by Union shall be a megajoule or a gigajoule. The unit of gas delivered by Union shall be a megajoule, a gigajoule, a cubic metre (m³) or one thousand cubic metres (10³m³) at Union's discretion.

## 2. <u>Determination of Volume and Energy:</u>

- a. The volume and energy amounts determined under the Contract shall be determined in accordance with the <u>Electricity and Gas Inspection Act (Canada)</u>, RSC 1985, c E-4- (the "**Act**") and the <u>Electricity and Gas Inspection Regulations</u>, SOR 86/131 (the "**Regulations**"), and any documents issued under the authority of the Act and Regulations and any amendments thereto.
- b. The supercompressibility factor shall be determined in accordance with either the "Manual for Determination of Supercompressibility Factors for Natural Gas" (PAR Project NX-19) published in 1962 or with American Gas Association Transmission Measurement Committee Report No. 8, Nov. 1992, at Union's discretion, all as amended from time to time.
- c. The volume and/or energy of the gas delivered to/by Union hereunder shall be determined by the measurement equipment designated in Article VII herein.
- d. Upon request by Union, Shipper shall obtain measurement of the total quantity of gas received by Union hereunder from the Interconnecting Pipeline. Such measurement shall be done in accordance with established practices between Union and the Interconnecting Pipeline.

## IV. RECEIPT POINT AND DELIVERY POINT

- 1. Unless otherwise specified in the Contract, the point or points of receipt for all gas to be covered hereunder shall be on the outlet side of the measuring stations located at or near the point or points of connection specified in the Contract, where Union takes possession of the gas.
- 2. Unless otherwise specified in the Contract, the point or points of delivery for all gas to be covered hereunder shall be on the outlet side of the measuring stations located at or near the point or points of connection as specified in the Contract where Shipper takes possession of the gas.

## V. POSSESSION OF AND RESPONSIBILITY FOR GAS

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#### VI. FACILITIES ON SHIPPER'S PROPERTY

Except under those conditions where Union is delivering to TCPL for TCPL or Shipper at Union's Parkway Point of Delivery, or to an Interconnecting Pipeline, or where otherwise specified in the Contract, the following will apply:

- 1. <u>Construction and Maintenance:</u> Union, at its own expense may construct, maintain and operate on Shipper's property at the delivery point a measuring station properly equipped with a meter or meters and any other necessary measuring equipment for properly measuring the gas redelivered under the Contract. Shipper will grant to Union a lease and/or rights-of-way over property of Shipper as required by Union to install such facilities and to connect same to Union's pipeline.
- Entry: Union, its servants, agents and each of them may at any reasonable time on notice (except in cases of emergency) to Shipper or his duly authorized representative enter Shipper's property for the purpose of constructing, maintaining, removing, operating and/or repairing station equipment.
- 3. <u>Property:</u> The said station and equipment will be and remain the property of Union notwithstanding it is constructed on and attached to the realty of Shipper, and Union may at its own expense remove it upon termination of the Contract and will do so if so requested by Shipper.

## VII. MEASURING EQUIPMENT

- 1. <u>Metering by Union:</u> Union will install and operate meters and related equipment as required and in accordance with the Act and Regulations referenced in Article III herein.
- Metering by Others: In the event that all or any gas delivered to/by Union hereunder is measured by a meter that is owned and operated by an Interconnecting Pipeline, then Union and Shipper agree to accept that metering for the purpose of determining the volume and energy of gas delivered to/by Union on behalf of the Shipper. The standard of measurement and tests for the gas delivered to/by Union hereunder shall be in accordance with the general terms and conditions as incorporated in that Interconnecting Pipeline company's gas tariff as approved by their regulatory body.
- 3. <u>Check Measuring Equipment:</u> Shipper may install, maintain and operate, at the redelivery point, at its own expense, such check measuring equipment as desired, provided that such equipment shall be so installed as not to interfere with the operation of Union's measuring equipment at or near the delivery point, and shall be installed, maintained and operated in conformity with the same standards and specifications applicable to Union's metering facilities.
- 4. <u>Rights of Parties:</u> The measuring equipment installed by either party, together with any building erected by it for such equipment, shall be and remain its property. However, Union and Shipper shall have the right to have representatives present at the time of any installing, reading, cleaning, changing, repairing, inspecting, testing, calibrating, or adjusting done in connection with the other's measuring equipment used in measuring or checking the measurement of deliveries of gas to/by Union under the Contract. Either party will give the other party reasonable notice of its intention to carry out the acts herein specified. The records from such measuring equipment shall remain the property of their owner, but upon request each will submit to the other its records and charts, together with calculations therefrom, for inspection and verification, subject to return within ten (10) days after receipt thereof.
- Calibration and Test of Measuring Equipment: The accuracy of Union's measuring equipment shall be verified by Union at reasonable intervals, and if requested, in the presence of representatives of Shipper, but Union shall not be required to verify the accuracy of such equipment more frequently than once in any thirty (30) day period. In the event either party notifies the other that it desires a special test of any measuring equipment, the parties shall co-operate to secure a prompt verification of the accuracy of such equipment. The expense of any such special test, if called for by Shipper, shall be borne by Shipper if the measuring equipment tested is found to be in error by not more than two per cent (2%). If, upon test, any measuring equipment is found to be in error by not more than two per cent (2%), previous recordings of such equipment shall be considered accurate in computing receipts and deliveries of gas, but such equipment shall be adjusted at once to record as near to absolute accuracy as possible. If the test conducted shows a percentage of inaccuracy greater than two percent (2%), the financial adjustment, if any, shall be calculated in accordance with the Act and Regulations, as may be amended from time to time and in accordance with any successor statutes and regulations.

- 6. <u>Preservation of Metering Records:</u> Union and Shipper shall each preserve for a period of at least six (6) years all test data, and other relevant records.
- 7. <u>Error in Metering or Meter Failure</u>: In the event of an error in metering or a meter failure, (such error or failure being determined through check measurement by Union or any other available method), then Shipper shall enforce its rights as Shipper with the Interconnecting Pipeline(s) to remedy such error or failure including enforcing any inspection and/or verification rights and procedures.

#### VIII. BILLING

- 1. Monthly Billing Date: Union shall render bills on or before the 10th day of each month for all services furnished during the preceding month. Such charges may be based on estimated quantities, if actual quantities are unavailable in time to prepare the billing. Union shall provide, in a succeeding month's billing, an adjustment based on any difference between actual quantities and estimated quantities, without any interest charge. If presentation of a bill to Shipper is delayed after the 10th day of the month, then the time of payment shall be extended accordingly, unless Shipper is responsible for such delay.
- 2. <u>Right of Examination:</u> Both Union and Shipper shall have the right to examine at any reasonable time the books, records and charts of the other to the extent necessary to verify the accuracy of any statement, chart or computation made under or pursuant to the provisions of the Contract.

## IX. PAYMENTS

- 1. <u>Monthly Payments</u>: Shipper shall pay the invoiced amount directly into Union's bank account as directed on the invoice on or before the twentieth (20th) day of each month. If the payment date is not a business day, then payment must be received in Union's account on the first business day preceding the twentieth (20th) day of the month.
- 2. <u>Remedies for Non-payment:</u> Should Shipper fail to pay all of the amount of any bill as herein provided when such amount is due,
  - a. Shipper shall pay to Union interest on the unpaid portion of the bill accruing at a rate per annum equal to the minimum commercial lending rate of Union's principal banker in effect from time to time from the due date until the date of payment.
  - b. If such failure to pay continues for thirty (30) days after payment is due, Union, in addition to any other remedy it may have under the Contract, may suspend service(s) until such amount is paid. Notwithstanding such suspension, all demand charges shall continue to accrue hereunder as if such suspension were not in place.

If Shipper in good faith disputes the amount of any such bill or part thereof Shipper shall pay to Union such amounts as it concedes to be correct. At any time thereafter, within twenty (20) days of a demand made by Union, Shipper shall furnish financial assurances satisfactory to Union, guaranteeing payment to Union of the amount ultimately found due upon such bill after a final determination. Such a final determination may be reached either by agreement, arbitration decision or judgement of the courts, as may be the case. Union shall not be entitled to suspend service(s) because of such non-payment unless and until default occurs in the conditions of such financial assurances or default occurs in payment of any other amount due to Union hereunder.

Notwithstanding the foregoing paragraph(s), Shipper is not relieved from the obligation to continue its deliveries of gas to Union under the terms of any agreement, where Shipper has contracted to deliver specified quantities of gas to Union.

3. <u>Billing Adjustments:</u> If it shall be found that at any time or times Shipper has been overcharged or undercharged in any form whatsoever under the provisions of the Contract and Shipper shall have actually paid the bills containing such

overcharge or undercharge, Union shall refund the amount of any such overcharge and interest shall accrue from and including the first day of such overcharge as paid to the date of refund and shall be calculated but not compounded at a rate per annum determined each day during the calculation period to be equal to the minimum commercial lending rate of Union's principal banker, and the Shipper shall pay the amount of any such undercharge, but without interest. In the event Union renders a bill to Shipper based upon measurement estimates, the required adjustment to reflect actual measurement shall be made on the bill next following the determination of such actual measurement, without any charge of interest. In the event an error is discovered in the amount billed in any statement rendered by Union, such error shall be adjusted by Union. Such overcharge, undercharge or error shall be adjusted by Union on the bill next following its determination (where the term "bill" next following shall mean a bill rendered at least fourteen (14) days after the day of its determination), provided that claim therefore shall have been made within six (6) years from the date of the incorrect billing. In the event any refund is issued with Shipper's gas bill, the aforesaid date of refund shall be deemed to be the date of the issue of bill.

## X. ARBITRATION

If and when any dispute, difference or question shall arise between the parties hereto touching the Contract or anything herein contained, or the construction hereof, or the rights, duties or liabilities of the parties in relation to any matter hereunder, the matter in dispute shall be submitted and referred to arbitration within ten (10) days after written request of either party. Upon such request each party shall appoint an arbitrator, and the two so appointed shall appoint a third. A majority decision of the arbitrators shall be final and binding upon both parties. In all other respects the provisions of the Arbitration Act of the Province of Ontario, or any act passed in amendment thereof or substitution therefore, shall apply to each such submission. Operations under the Contract shall continue, without prejudice, during any such arbitration and the costs attributable to such arbitration shall be shared equally by the parties hereto.

## XI. FORCE MAJEURE

- 1. The term "force majeure" as used herein shall mean acts of God, strikes, lockouts or any other industrial disturbance, acts of the public enemy, sabotage, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests and restraints of governments and people, civil disturbances, explosions, breakage or accident to machinery or lines of pipe, freezing of wells or lines of pipe, inability to obtain materials, supplies, permits or labour, any laws, orders, rules, regulations, acts or restraints of any governmental body or authority (civil or military), any act or omission that is excused by any event or occurrence of the character herein defined as constituting force majeure, any act or omission by parties not controlled by the party having the difficulty and any other similar cases not within the control of the party claiming suspension and which by the exercise of due diligence such party is unable to prevent or overcome.
- 2. In the event that either the Shipper or Union is rendered unable, in whole or in part, by force majeure, to perform or comply with any obligation or condition of the Contract, such party shall give notice and full particulars of such force majeure in writing delivered by hand, fax or other direct written electronic means to the other party as soon as possible after the occurrence of the cause relied on and subject to the provision of this Article.
- Neither party shall be entitled to the benefit of the provisions of force majeure hereunder if any or all of the following circumstances prevail: the failure resulting in a condition of force majeure was caused by the negligence of the party claiming suspension; the failure was caused by the party claiming suspension where such party failed to remedy the condition by making all reasonable efforts (short of litigation, if such remedy would require litigation); the party claiming suspension failed to resume the performance of such condition obligations with reasonable dispatch; the failure was caused by lack of funds; the party claiming suspension did not, as soon as possible after determining, or within a period within which it should acting reasonably have determined, that the occurrence was in the nature of force majeure and would affect its ability to observe or perform any of its conditions or obligations under the Contract, give to the other party the notice required hereunder.
- 4. The party claiming suspension shall likewise give notice as soon as possible after the force majeure condition is remedied, to the extent that the same has been remedied, and that such party has resumed or is then in a position to resume the performance of the obligations and conditions of the Contract.

- 5. An event of force majeure on Union's system will excuse the failure to deliver gas by Union or the failure to accept gas by Union hereunder, and both parties shall be excused from performance of their obligations hereunder, except for payment obligations, to the extent of and for the duration of the force majeure.
- 6. Upstream or Downstream Force Majeure: An event of force majeure upstream or downstream of Union's system shall not relieve Shipper of any payment obligations.
- Delay of Firm Transportation Services: Despite Article XI herein, if Union is prevented, by reason of an event of force majeure on Union's system from delivering gas on the Day or Days upon which Union has accepted gas from Shipper, Union shall thereafter make all reasonable efforts to deliver such quantities as soon as practicable and on such Day or Days as are agreed to by Shipper and Union. If Union accepts such gas on this basis, Shipper shall not receive any demand charge relief as contemplated under Article XI herein.
- 8. Demand Charge Relief for Firm Transportation Services: Despite Article XI herein, if on any Day Union fails to accept gas from Shipper by reason of an event of force majeure on Union's system and fails to deliver the quantity of gas nominated hereunder by Shipper up to the firm Contract Demand for that Contract, then for that Day the Monthly demand charge shall be reduced by an amount equal to the applicable Daily Demand Rate, as defined in this paragraph, multiplied by the difference between the quantity of gas actually delivered by Union during such Day and the quantity of gas which Shipper in good faith nominated on such Day. The term "Daily Demand Rate" shall mean the Monthly demand charge or equivalent pursuant to the C1 Rate Schedule divided by the number of days in the month for which such rate is being calculated.
- 9. If, due to the occurrence of an event of force majeure as outlined above, the capacity for gas deliveries by Union is impaired, it will be necessary for Union to curtail Shipper's gas receipts to Union hereunder, via proration based on utilization of such facilities for the Day. This prorating shall be determined by multiplying the capability of such facilities as available downstream of the impairment on the Day, by a fraction where the numerator is Shipper's nominated firm quantity and the denominator is the total of all such nominated firm quantities for nominated services and planned consumption for in-franchise customers on the Day. For the purposes of this Article XI, firm services shall mean all firm services provided by Union to in-franchise customers and ex-franchise shippers.

## XII. DEFAULT AND TERMINATION

In case of the breach or non-observance or non-performance on the part of either party hereto of any covenant, proviso, condition, restriction or stipulation contained in the Contract (but not including herein failure to take or make delivery in whole or in part of the gas delivered to/by Union hereunder occasioned by any of the reasons provided for in Article XI hereof) which has not been waived by the other party, then and in every such case and as often as the same may happen, the Non-defaulting party may give written notice to the Defaulting party requiring it to remedy such default and in the event of the Defaulting party failing to remedy the same within a period of thirty (30) days from receipt of such notice, the Non-defaulting party may at its sole option declare the Contract to be terminated and thereupon the Contract shall be terminated and be null and void for all purposes other than and except as to any liability of the parties under the same incurred before and subsisting as of termination. The right hereby conferred upon each party shall be in addition to, and not in derogation of or in substitution for, any other right or remedy which the parties respectively at law or in equity shall or may possess.

## XIII. MODIFICATION

Subject to Union's C1 Rate Schedule, Schedule A, Article XV and the ability of Union to amend the C1 Rate Schedule with the approval of the OEB, no amendment or modification of the Contract shall be effective unless the same shall be in writing and signed by each of the Shipper and Union.

#### XIV. NON-WAIVER AND FUTURE DEFAULT

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## XV. LAWS, REGULATIONS AND ORDERS

The Contract and the respective rights and obligations of the parties hereto are subject to all present and future valid laws, orders, rules and regulations of any competent legislative body, or duly constituted authority now or hereafter having jurisdiction and the Contract shall be varied and amended to comply with or conform to any valid order or direction of any board, tribunal or administrative agency which affects any of the provisions of the Contract.

# RATE C1 GENERAL TERMS & CONDITIONS

## I. DEFINITIONS

Except where the context expressly requires or states another meaning, the following terms, when used in these General Terms & Conditions and in any contract into which these General Terms & Conditions are incorporated, shall be construed to have the following meanings:

"Authorized Overrun" shall mean the amount by which Shipper's Authorized Quantity exceeds the Contract Demand;

"Available Capacity" shall mean at any time, Union's remaining available capacity to provide Transportation Services;

"Business Day" shall mean any day, other than Saturday, Sunday or any days on which national banks in the Province of Ontario are authorized to close;

"Contract" shall refer to the Contract to which these General Terms & Conditions shall apply, and into which they are incorporated;

"Contract Year" shall mean a period of three hundred and sixty-five (365) consecutive days; provided however, that any such period which contains a date of February 29 shall consist of three hundred and sixty-six (366) consecutive days, commencing on November 1 of each year; except for the first Contract Year which shall commence on the Commencement Date and end on the first October 31 that follows such date:

"cricondentherm hydrocarbon dewpoint" shall mean the highest hydrocarbon dewpoint temperature on the phase envelope;

"cubic metre" shall mean the volume of gas which occupies one cubic metre when such gas is at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute;

"Day" shall mean a period of twenty-four (24) consecutive hours beginning at 10:00 a.m. Eastern Clock Time. The reference date for any Day shall be the calendar date upon which the twenty-four (24) hour period shall commence;

"delivery" shall mean any gas that is delivered by Union into Shipper's possession, or to the possession of Shipper's agent;

"Eastern Clock Time" shall mean the local clock time in the Eastern Time Zone on any Day;

**"Expansion Facilities**" shall mean any new facilities to be constructed by Union in order to provide Transportation Services;

"firm" shall mean service not subject to curtailment or interruption except under Articles XI, XII and XVIII herein;

"gas" shall mean gas as defined in the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Sch. B, as amended, supplemented or re-enacted from time to time;

"gross heating value" shall mean the total heat expressed in megajoules per cubic metre (MJ/m³) produced by the complete combustion at constant pressure of one (1) cubic metre of gas with air, with the gas free of water vapour and the temperature of the gas, air and products of combustion at standard temperature and all water formed by the combustion reaction condensed to the liquid state;

"hydrocarbon dewpoint" shall mean temperature at a specific pressure where hydrocarbon vapour condensation begins;

"Interruptible Service HUB Contract" shall mean a contract between Shipper and Union under which Union provides interruptible HUB service;

"interruptible service" or "Interruptible" shall mean service subject to curtailment or interruption, after notice, at any time:

"Interconnecting Pipeline" shall mean a pipeline that directly connects to the Union pipeline system;

"joule" (J) shall mean the work done when the point of application of a force of one (1) newton is displaced a distance of one (1) metre in the direction of the force. The term "megajoule" (MJ) shall mean 1,000,000 joules. The term "gigajoule" (GJ) shall mean 1,000,000,000 joules:

"Limited Firm" shall mean gas service subject to interruption or curtailment on a limited number of Days as specified in the Contract;

"Loaned Quantities" shall mean those quantities of gas loaned to Shipper under the Facilitating Agreement;

"m³" shall mean cubic metre of gas and "10³m³" shall mean 1,000 cubic metres of gas;

"Month" shall mean the period beginning at 10:00 a.m. Eastern Clock Time on the first day of a calendar month and ending at 10:00 a.m. Eastern Clock Time on the first day of the following calendar month;

"NAESB" shall mean North American Energy Standards Board;

"OEB" means the Ontario Energy Board;

"Open Season" or "open season" shall mean an open access auction or bidding process held by Union as a method of allocating capacity;

"pascal" "(Pa)" shall mean the pressure produced when a force of one (1) newton is applied to an area of one (1) square metre. The term "kilopascal" "(kPa)" shall mean 1,000 pascals;

"receipt" shall mean any gas that is delivered into Union's possession, or the possession of Union's agent;

"Shipper" shall have the meaning as defined in the Contract, and shall also include Shipper's agent(s);

"specific gravity" shall mean density of the gas divided by density of air, with both at a temperature of 15 degrees Celsius, and at a pressure of 101.325 kilopascals absolute;

"Taxes" shall mean any tax (other than tax on income or tax on property), duty, royalty, levy, license, fee or charge not included in the charges and rates as per the applicable rate schedule (including but not limited to charges under any form of cap and trade, carbon tax, or similar system) and that is levied, assessed or made by any governmental authority on the gas itself, or the act, right, or privilege of producing, severing, gathering, storing, transporting, handling, selling or delivering gas under the Contract;

"TCPL" means TransCanada PipeLines Limited;

"Wobbe Number" shall mean gross heating value of the gas divided by the square root of its specific gravity.

## II. GAS QUALITY

1. Natural Gas: The minimum gross heating value of the gas delivered to/by Union hereunder, shall be thirty-six (36) megajoules per cubic metre. The maximum gross heating value of the gas delivered to/by Union hereunder shall be forty point two (40.2) megajoules per cubic metre. The gas to be delivered hereunder to Union may be a commingled supply from Shipper's gas sources of supply. The gas to be delivered by Union may be a commingled supply from Union's sources of gas supply; provided, however, that helium, natural gasoline, butane, propane and other hydrocarbons, except methane, may be removed prior to delivery to Shipper. Further, Union may subject, or permit the subjection of, the gas to compression, dehydration, cooling, cleaning and other processes.

- 2. Freedom from objectionable matter: The gas to be delivered to/by Union hereunder,
  - a. shall be commercially free from bacteria, sand, dust, gums, crude oils, lubricating oils, liquids, chemicals or compounds used in the production, treatment, compression or dehydration of the gas or any other objectionable substance in sufficient quantity so as to render the gas toxic, unmerchantable or cause injury to, or interference with, the proper operation of the lines, regulators, meters or other appliances through which it flows,
  - b. shall not contain more than seven (7) milligrams of hydrogen sulphide per cubic metre of gas, nor more than four hundred and sixty (460) milligrams of total sulphur per cubic metre of gas,
  - c. shall not contain more than five (5) milligrams of mercaptan sulphur per cubic metre of gas,
  - d. shall not contain more than two point zero (2.0) molar percent by volume of carbon dioxide in the gas,
  - e. shall not contain more than zero point four (0.4) molar percent by volume of oxygen in the gas,
  - f. shall not contain more than zero point five (0.5) molar percent by volume of carbon monoxide in the gas,
  - g. shall not contain more than four point zero (4.0) molar percent by volume of hydrogen in the gas,
  - h. shall not contain more than sixty-five (65) milligrams of water vapour per cubic metre of gas,
  - i. shall not have a cricondentherm hydrocarbon dewpoint exceeding minus eight (-8) degrees Celsius,
  - j. shall have Wobbe Number from forty seven point fifty (47.50) megajoules per cubic metre of gas to fifty one point forty six (51.46) megajoules per cubic metre of gas, maximum of one point five (1.5) mole percent by volume of butane plus (C4+) in the gas, and maximum of four point zero (4.0) mole percent by volume of total inerts in the gas in order to be interchangeable with other Interconnecting Pipeline gas.
- 3. <u>Non-conforming Gas:</u> In addition to any other right or remedy of a party, each party shall be entitled to refuse to accept delivery of any gas which does not conform to any of the specifications set out in this Article II.
- 4. Quality of Gas Received: The quality of the gas to be received by Union hereunder is to be of a merchantable quality and in accordance with the quality standards as set out by Union in this Article II, but, Union will also accept gas of a quality as set out in any other Interconnecting Pipeline's general terms and conditions, provided that all Interconnecting Pipelines accept such quality of gas. In addition to any other right or remedy of a party, each party shall be entitled to refuse to accept delivery of any gas which does not conform to any of the specifications set out in Union's C1 Rate Schedule.

## III. MEASUREMENTS

- 1. <u>Storage, Transportation, and/or Sales Unit:</u> The unit of the gas delivered to Union shall be a megajoule or a gigajoule. The unit of gas transported or stored by Union shall be a megajoule or a gigajoule. The unit of gas delivered by Union shall be a megajoule, a gigajoule, a cubic metre (m³) or one thousand cubic metres (10³m³) at Union's discretion.
- 2. <u>Determination of Volume and Energy:</u>
  - a. The volume and energy amounts determined under the Contract shall be determined in accordance with the Electricity and Gas Inspection Act (Canada), RSC 1985, c E-4- (the "Act") and the Electricity and Gas Inspection Regulations, SOR 86/131 (the "Regulations"), and any documents issued under the authority of the Act and Regulations and any amendments thereto.
  - b. The supercompressibility factor shall be determined in accordance with either the "Manual for Determination of Supercompressibility Factors for Natural Gas" (PAR Project NX-19) published in 1962 or with American Gas

Association Transmission Measurement Committee Report No. 8, Nov. 1992, at Union's discretion, all as amended from time to time.

- c. The volume and/or energy of the gas delivered to/by Union hereunder shall be determined by the measurement equipment designated in Article VII herein.
- d. Upon request by Union, Shipper shall obtain measurement of the total quantity of gas received by Union hereunder from the Interconnecting Pipeline. Such measurement shall be done in accordance with established practices between Union and the Interconnecting Pipeline.

## IV. RECEIPT POINT AND DELIVERY POINT

 Unless otherwise specified in the Contract, the point or points of receipt and point or points of delivery for all gas to be covered hereunder shall be on the outlet side of the measuring stations located at or near the point or points of connection specified in the Contract, where possession of the gas changes from one party to the other, and as per Schedule "C 2010".

## V. POSSESSION OF AND RESPONSIBILITY FOR GAS

- 1. <u>Possession of Gas:</u> Union accepts no responsibility for any gas prior to such gas being delivered to Union at the Receipt Point or after its delivery by Union at the Delivery Point. As between the parties hereto, Union shall be deemed to be in control and possession of and responsible for all such gas from the time that such gas enters Union's system until such gas is delivered to Shipper.
- 2. <u>Liability:</u> Shipper agrees that Union is not a common carrier and is not an insurer of Shipper's gas, and that Union shall not be liable to Shipper or any third party for loss of gas in Union's possession, except to the extent such loss is caused entirely by Union's negligence or wilful misconduct.

## VI. FACILITIES ON SHIPPER'S PROPERTY

Except under those conditions where Union is delivering to TCPL for TCPL or Shipper at Parkway (TCPL), or to an Interconnecting Pipeline, or where otherwise specified in the Contract, the following will apply:

- 1. <u>Construction and Maintenance:</u> Union, at its own expense may construct, maintain and operate on Shipper's property at the delivery point a measuring station properly equipped with a meter or meters and any other necessary measuring equipment for properly measuring the gas redelivered under the Contract. Shipper will grant to Union a lease and/or rights-of-way over property of Shipper as required by Union to install such facilities and to connect same to Union's pipeline.
- 2. <u>Entry:</u> Union, its servants, agents and each of them may at any reasonable time on notice (except in cases of emergency) to Shipper or his duly authorized representative enter Shipper's property for the purpose of constructing, maintaining, removing, operating and/or repairing station equipment.
- 3. <u>Property:</u> The said station and equipment will be and remain the property of Union notwithstanding it is constructed on and attached to the realty of Shipper, and Union may at its own expense remove it upon termination of the Contract and will do so if so requested by Shipper.

## VII. MEASURING EQUIPMENT

1. <u>Metering by Union:</u> Union will install and operate meters and related equipment as required and in accordance with the Act and Regulations referenced in Article III herein.

- 2. Metering by Others: In the event that all or any gas delivered to/by Union hereunder is measured by a meter that is owned and operated by an Interconnecting Pipeline, then Union and Shipper agree to accept that metering for the purpose of determining the volume and energy of gas delivered to/by Union on behalf of the Shipper. The standard of measurement and tests for the gas delivered to/by Union hereunder shall be in accordance with the general terms and conditions as incorporated in that Interconnecting Pipeline company's gas tariff as approved by its regulatory body.
- 3. <u>Check Measuring Equipment:</u> Shipper may install, maintain and operate, at the redelivery point, at its own expense, such check measuring equipment as desired, provided that such equipment shall be so installed as not to interfere with the operation of Union's measuring equipment at or near the delivery point, and shall be installed, maintained and operated in conformity with the same standards and specifications applicable to Union's metering facilities.
- 4. Rights of Parties: The measuring equipment installed by either party, together with any building erected by it for such equipment, shall be and remain its property. However, Union and Shipper shall have the right to have representatives present at the time of any installing, reading, cleaning, changing, repairing, inspecting, testing, calibrating, or adjusting done in connection with the other's measuring equipment used in measuring or checking the measurement of deliveries of gas to/by Union under the Contract. Either party will give the other party reasonable notice of its intention to carry out the acts herein specified. The records from such measuring equipment shall remain the property of their owner, but upon request each will submit to the other its records and charts, together with calculations therefrom, for inspection and verification, subject to return within ten (10) days after receipt thereof.
- 5. <u>Calibration and Test of Measuring Equipment:</u> The accuracy of Union's measuring equipment shall be verified by Union at reasonable intervals, and if requested, in the presence of representatives of Shipper, but Union shall not be required to verify the accuracy of such equipment more frequently than once in any thirty (30) day period. In the event either party notifies the other that it desires a special test of any measuring equipment, the parties shall co-operate to secure a prompt verification of the accuracy of such equipment. The expense of any such special test, if called for by Shipper, shall be borne by Shipper if the measuring equipment tested is found to be in error by not more than two per cent (2%). If, upon test, any measuring equipment is found to be in error by not more than two per cent (2%), previous recordings of such equipment shall be considered accurate in computing receipts and deliveries of gas, but such equipment shall be adjusted at once to record as near to absolute accuracy as possible. If the test conducted shows a percentage of inaccuracy greater than two percent (2%), the financial adjustment, if any, shall be calculated in accordance with the Act and Regulations, as may be amended from time to time and in accordance with any successor statutes and regulations.
- 6. <u>Preservation of Metering Records:</u> Union and Shipper shall each preserve for a period of at least six (6) years all test data, and other relevant records.
- 7. <u>Error in Metering or Meter Failure:</u> In the event of an error in metering or a meter failure, (such error or failure being determined through check measurement by Union or any other available method), then Shipper shall enforce its rights as Shipper with the Interconnecting Pipeline(s) to remedy such error or failure including enforcing any inspection and/or verification rights and procedures.

## VIII. BILLING

- 1. <u>Monthly Billing Date:</u> Union shall render bills on or before the tenth (10<sup>th</sup>) day of each month for all Transportation Services furnished during the preceding Month. Such charges may be based on estimated quantities, if actual quantities are unavailable in time to prepare the billing. Union shall provide, in a succeeding Month's billing, an adjustment based on any difference between actual quantities and estimated quantities, without any interest charge. If presentation of a bill to Shipper is delayed after the tenth (10<sup>th</sup>) day of the month, then the time of payment shall be extended accordingly, unless Shipper is responsible for such delay.
- 2. <u>Right of Examination:</u> Both Union and Shipper shall have the right to examine at any reasonable time the books, records and charts of the other to the extent necessary to verify the accuracy of any statement, chart or computation made under or pursuant to the provisions of the Contract.
- 3. <u>Amendment of Statements:</u> For the purpose of completing a final determination of the actual quantities of gas handled in any of the Transportation Services to Shipper, the parties shall have the right to amend their statement for a period equal to

the time during which the Interconnecting Pipeline retains the right to amend their statements, which period shall not exceed three (3) years from the date of termination of the Contract.

## IX. PAYMENTS

- 1. <u>Monthly Payments:</u> Shipper shall pay the invoiced amount directly into Union's bank account as directed on the invoice on or before the twentieth (20<sup>th</sup>) day of each month. If the payment date is not a Business Day, then payment must be received in Union's account on the first Business Day preceding the twentieth (20th) day of the month.
- 2. <u>Remedies for Non-payment:</u> Should Shipper fail to pay all of the amount of any bill as herein provided when such amount is due,
  - Shipper shall pay to Union interest on the unpaid portion of the bill accruing at a rate per annum equal to the minimum commercial lending rate of Union's principal banker in effect from time to time from the due date until the date of payment; and,
  - b. If such failure to pay continues for thirty (30) days after payment is due, Union, in addition to any other remedy it may have under the Contract, may suspend Services until such amount is paid. Notwithstanding such suspension, all demand charges shall continue to accrue hereunder as if such suspension were not in place.

If Shipper in good faith disputes the amount of any such bill or part thereof Shipper shall pay to Union such amounts as it concedes to be correct. At any time thereafter, within twenty (20) days of a demand made by Union, Shipper shall furnish financial assurances satisfactory to Union, guaranteeing payment to Union of the amount ultimately found due upon such bill after a final determination. Such a final determination may be reached either by agreement, arbitration decision or judgement of the courts, as may be the case. Union shall not be entitled to suspend Services because of such non-payment unless and until default occurs in the conditions of such financial assurances or default occurs in payment of any other amount due to Union hereunder.

Notwithstanding the foregoing, Shipper is not relieved from the obligation to continue its deliveries of gas to Union under the terms of any agreement, where Shipper has contracted to deliver specified quantities of gas to Union.

- 3. <u>Billing Adjustments:</u> If it shall be found that at any time or times Shipper has been overcharged or undercharged in any form whatsoever under the provisions of the Contract and Shipper shall have actually paid the bills containing such overcharge or undercharge, Union shall refund the amount of any such overcharge and interest shall accrue from and including the first day of such overcharge as paid to the date of refund and shall be calculated but not compounded at a rate per annum determined each day during the calculation period to be equal to the minimum commercial lending rate of Union's principal banker, and the Shipper shall pay the amount of any such undercharge, but without interest. In the event Union renders a bill to Shipper based upon measurement estimates, the required adjustment to reflect actual measurement shall be made on the bill next following the determination of such actual measurement, without any charge of interest. In the event an error is discovered in the amount billed in any statement rendered by Union, such error shall be adjusted by Union. Such overcharge, undercharge or error shall be adjusted by Union on the bill next following its determination (where the term "bill next following" shall mean a bill rendered at least fourteen (14) days after the day of its determination), provided that claim therefore shall have been made within three (3) years from the date of the incorrect billing. In the event any refund is issued with Shipper's bill, the aforesaid date of refund shall be deemed to be the date of the issue of bill.
- 4. <u>Taxes:</u> In addition to the charges and rates as per the applicable rate schedules and price schedules, Shipper shall pay all Taxes which are imposed currently or subsequent to the execution of the Contract by any legal authority having jurisdiction and any amount in lieu of such Taxes paid or payable by Union.

Shipper shall make reasonable efforts to eliminate/minimize the withholding tax related to the fees/payments paid to Union, including but not limited to requesting from Union the relevant documentation necessary to determine the appropriate withholding, if any, for tax purposes. In the event taxes are withheld from the fees/payment paid by Shipper, Shipper shall remit such withheld taxes to the applicable taxing authority and Shipper will provide Union, after the calendar year end, Union's Federal Form 1042-S and a comparable state/international form, if applicable, within the applicable statutory time frame.

5. <u>Set Off:</u> If either party shall, at any time, be in arrears under any of its payment obligations to the other party under the Contract, then the party not in arrears shall be entitled to reduce the amount payable by it to the other party in arrears under the Contract, or any other contract, by an amount equal to the amount of such arrears or other indebtedness to the other party. In addition to the foregoing remedy, Union may, upon forty-eight (48) hours verbal notice, to be followed by written notice, take possession of any or all of Shipper's gas under the Contract or any enhancement to the Contract, which shall be deemed to have been assigned to Union, to reduce such arrears or other indebtedness to Union.

## X. ARBITRATION

If and when any dispute, difference or question shall arise between the parties hereto touching the Contract or anything herein contained, or the construction hereof, or the rights, duties or liabilities of the parties in relation to any matter hereunder, the matter in dispute shall be submitted and referred to arbitration within ten (10) days after written request of either party. Upon such request each party shall appoint an arbitrator, and the two so appointed shall appoint a third. A majority decision of the arbitrators shall be final and binding upon both parties. In all other respects the provisions of the Arbitration Act, 1991, or any act passed in amendment thereof or substitution therefore, shall apply to each such submission. Operations under the Contract shall continue, without prejudice, during any such arbitration and the costs attributable to such arbitration shall be shared equally by the parties hereto.

## XI. FORCE MAJEURE

- 1. <u>Definition:</u> The term "force majeure" as used herein shall mean acts of God, strikes, lockouts or any other industrial disturbance, acts of the public enemy, sabotage, wars, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests and restraints of governments and people, civil disturbances, explosions, breakage or accident to machinery or lines of pipe, freezing of wells or lines of pipe, inability to obtain materials, supplies, permits or labour, any laws, orders, rules, regulations, acts or restraints of any governmental body or authority (civil or military), any act or omission that is excused by any event or occurrence of the character herein defined as constituting force majeure, any act or omission by parties not controlled by the party having the difficulty and any other similar cases not within the control of the party claiming suspension and which by the exercise of due diligence such party is unable to prevent or overcome.
- 2. <u>Notice:</u> In the event that either the Shipper or Union is rendered unable, in whole or in part, by force majeure, to perform or comply with any obligation or condition of the Contract, such party shall give notice and full particulars of such force majeure in writing delivered by hand, fax or other direct written electronic means to the other party as soon as possible after the occurrence of the cause relied on and subject to the provision of this Article.
- 3. Exclusions: Neither party shall be entitled to the benefit of the provisions of force majeure hereunder if any or all of the following circumstances prevail: the failure resulting in a condition of force majeure was caused by the negligence of the party claiming suspension; the failure was caused by the party claiming suspension where such party failed to remedy the condition by making all reasonable efforts (short of litigation, if such remedy would require litigation); the party claiming suspension failed to resume the performance of such condition obligations with reasonable dispatch; the failure was caused by lack of funds; the party claiming suspension did not, as soon as possible after determining, or within a period within which it should acting reasonably have determined, that the occurrence was in the nature of force majeure and would affect its ability to observe or perform any of its conditions or obligations under the Contract, give to the other party the notice required hereunder.
- 4. <u>Notice of Remedy:</u> The party claiming suspension shall likewise give notice as soon as possible after the force majeure condition is remedied, to the extent that the same has been remedied, and that such party has resumed or is then in a position to resume the performance of the obligations and conditions of the Contract.
- 5. <u>Obligation to Perform:</u> An event of force majeure on Union's system will excuse the failure to deliver gas by Union or the failure to accept gas by Union hereunder, and both parties shall be excused from performance of their obligations hereunder, except for payment obligations, to the extent of and for the duration of the force majeure.

- 6. <u>Upstream or Downstream Force Majeure:</u> An event of force majeure upstream or downstream of Union's system shall not relieve Shipper of any payment obligations.
- 7. <u>Delay of Firm Transportation Services:</u> Despite Article XI herein, if Union is prevented, by reason of an event of force majeure on Union's system from delivering gas on the Day or Days upon which Union has accepted gas from Shipper, Union shall thereafter make all reasonable efforts to deliver such quantities as soon as practicable and on such Day or Days as are agreed to by Shipper and Union. If Union accepts such gas on this basis, Shipper shall not receive any demand charge relief as contemplated under Article XI herein.
- 8. <u>Demand Charge Relief for Firm Transportation Services:</u> Despite Article XI herein, if on any Day Union fails to accept gas from Shipper by reason of an event of force majeure on Union's system and fails to deliver the quantity of gas nominated hereunder by Shipper up to the firm Contract Demand for that Contract, then for that Day the Monthly demand charge shall be reduced by an amount equal to the applicable Daily Demand Rate, as defined in this paragraph, multiplied by the difference between the quantity of gas actually delivered by Union during such Day and the quantity of gas which Shipper in good faith nominated on such Day. The term "Daily Demand Rate" shall mean the Monthly demand charge or equivalent pursuant to the C1 Rate Schedule divided by the number of days in the month for which such rate is being calculated.
- 9. Proration of Firm Transportation Service: If, due to the occurrence of an event of force majeure as outlined above, the capacity for gas deliveries by Union is impaired, it will be necessary for Union to curtail Shipper's gas receipts to Union hereunder, via proration based on utilization of such facilities for the Day. This prorating shall be determined by multiplying the capability of such facilities as available downstream of the impairment on the Day, by a fraction where the numerator is Shipper's nominated firm quantity and the denominator is the total of all such nominated firm quantities for nominated services and planned consumption for in-franchise customers on the Day. For the purposes of this Article XI, firm services shall mean all firm services provided by Union to in-franchise customers and ex-franchise shippers.

## XII. DEFAULT AND TERMINATION

In case of the breach or non-observance or non-performance on the part of either party hereto of any covenant, proviso, condition, restriction or stipulation contained in the Contract (but not including herein failure to take or make delivery in whole or in part of the gas delivered to/by Union hereunder occasioned by any of the reasons provided for in Article XI herein) which has not been waived by the other party, then and in every such case and as often as the same may happen, the non-defaulting party may give written notice to the defaulting party requiring it to remedy such default and in the event of the defaulting party failing to remedy the same within a period of thirty (30) days from receipt of such notice, the non-defaulting party may at its sole option declare the Contract to be terminated and thereupon the Contract shall be terminated and be null and void for all purposes other than and except as to any liability of the parties under the same incurred before and subsisting as of termination. The right hereby conferred upon each party shall be in addition to, and not in derogation of or in substitution for, any other right or remedy which the parties respectively at law or in equity shall or may possess.

## XIII. AMENDMENT

Subject to Article XV herein and the ability of Union to amend the applicable rate schedules and price schedules, with the approval of the OEB (if required), no amendment or modification of the Contract shall be effective unless the same shall be in writing and signed by each of the Shipper and Union.

## XIV. NON-WAIVER AND FUTURE DEFAULT

No waiver of any provision of the Contract shall be effective unless the same shall be in writing and signed by the party entitled to the benefit of such provision and then such waiver shall be effective only in the specific instance and for the specified purpose for which it was given. No failure on the part of Shipper or Union to exercise, and no course of dealing with respect to, and no delay in exercising, any right, power or remedy under the Contract shall operate as a waiver thereof.

## XV. LAWS, REGULATIONS AND ORDERS

The Contract and the respective rights and obligations of the parties hereto are subject to all present and future valid laws, orders, rules and regulations of any competent legislative body, or duly constituted authority now or hereafter having jurisdiction and the Contract shall be varied and amended to comply with or conform to any valid order or direction of any board, tribunal or administrative agency which affects any of the provisions of the Contract.

## XVI. ALLOCATION OF CAPACITY

- 1. <u>Requests for Transportation Service:</u> A potential shipper may request transportation service on Union's system at any time. Any request for C1 transportation service must include: potential shipper's legal name, Receipt Point(s), Delivery Point(s), Commencement Date, Initial Term, Contract Demand, proposed payment, and type of transportation service requested.
- 2. <u>Expansion Facilities:</u> If requests for firm transportation services cannot be met through existing capacity such that the only way to satisfy the requests for transportation service would require the construction of Expansion Facilities which create new capacity, Union shall allocate any such new capacity by open season, subject to the terms of the open season, and these General Terms and Conditions.
- 3. <u>Open Seasons:</u> If requests for long-term transportation service can be met through existing facilities upon which long-term capacity is becoming available, Union shall allocate such long-term capacity by open season, subject to the terms of the open season, and these General Terms and Conditions. "**Long-term**", for the purposes of this Article XVI, means, in the case of a transportation service, a service that has a term of one year or greater.
- 4. <u>Awarding Open Season Capacity:</u> Capacity requests received during an open season shall be awarded starting with those bids with the highest economic value. If the economic values of two or more independent bids are equal, then service shall be allocated on a pro-rata basis. The economic value shall be based on the net present value which shall be calculated based on the proposed per- unit rate and the proposed term of the contract and without regard to the proposed Contract Demand ("NPV").
- 5. <u>Available Capacity Previously Offered in Open Season:</u> Union may at any time allocate capacity to respond to any C1 transportation service request through an open season. If a potential shipper requests C1 transportation service that can be provided through Available Capacity that was previously offered by Union in an open season but was not awarded, then:
  - a. Any such request must conform to the requirements of Section 1 of this Article XVI;
  - b. Union shall allocate capacity to serve such request pursuant to this Section 5, and subject to these General Terms and Conditions and Union's standard form C1 transportation contract;
  - c. Union may reject a request for C1 transportation service for any of the following reasons:
    - i) if there is insufficient Available Capacity to fully meet the request, but if that is the only reason for rejecting the request for service, Union must offer to supply the Available Capacity to the potential shipper;
    - ii) if the proposed monthly payment is less than Union's Monthly demand charge plus fuel requirements for the applicable service;
    - iii) if prior to Union accepting the request for transportation service Union receives a request for transportation service from one or more other potential shippers and there is, as a result, insufficient Available Capacity to service all the requests for service, in which case Union shall follow the procedure in Section 5 d hereof;
    - iv) if Union does not provide the type of transportation service requested; or
    - if all of the conditions precedent specified in Article XXI Sections 1 and 2 herein have not been satisfied or waived.

- d. Union will advise the potential shipper in writing whether Union accepts or rejects the request for service, subject to Article XVI 5(c) within 5 calendar days of receiving a request for C1 transportation service. If Union rejects a request for service, Union shall inform the potential shipper of the reasons why its request is being rejected; and
- e. If Union has insufficient Available Capacity to service all pending requests for transportation service Union may:
  - i) Reject all the pending requests for transportation service and conduct an open season; or
  - ii) Union shall inform all the potential shippers who have submitted a pending request for transportation service that it does not have sufficient capacity to service all pending requests for service, and Union shall provide all such potential shippers with an equal opportunity to submit a revised request for service. Union shall then allocate the Available Capacity to the request for transportation service with the highest economic value to Union. If the economic values of two or more requests are equal, then service shall be allocated on a pro-rata basis. The economic value of any request shall be based on the NPV.

#### XVII. RENEWALS

1. Contracts with an Initial Term of five (5) years or greater, with Receipt Points and Delivery Points of Parkway or Kirkwall or Dawn (Facilities), will continue in full force and effect beyond the Initial Term, automatically renewing for a period of one (1) year, and every one (1) year thereafter. Shipper may reduce the Contract Demand or terminate the Contract with notice in writing by Shipper at least two (2) years prior to the expiration thereof.

For all other contracts, the Contract will continue in full force and effect until the end of the Initial Term, but shall not renew.

#### XVIII. SERVICE CURTAILMENT

1. Right to Curtail: Union shall have the right to curtail or not to schedule part or all of Transportation Services, in whole or in part, on all or a portion of its pipeline system at any time for reasons of Force Majeure or when, in Union sole discretion, acting reasonably, capacity or operating conditions so require or it is desirable or necessary to make modifications, repairs or operating changes to its pipeline system. Union shall provide Shipper such notice of such curtailment as is reasonable under the circumstances. If due to any cause whatsoever Union is unable to receive or deliver the quantities of Gas which Shipper has requested, then Union shall order curtailment by all Shippers affected and to the extent necessary to remove the effect of the disability. Union has a priority of service policy to determine the order of service curtailment. In order to place services on the priority of service list, Union considers the following business principles: appropriate level of access to core services, customer commitment, encouraging appropriate contracting, materiality, price and term, and promoting and enabling in-franchise consumption.

The Priority ranking for all services utilizing Union Gas' storage, transmission and distribution system as applied to both infranchise and ex-franchise services are as follows; with number 1 having the highest priority and the last interrupted.

- 1. Firm In-franchise Transportation and Distribution services and firm Ex-franchise services (Note 1)
- 2. In-franchise Interruptible Distribution services
- 3. C1/M12 IT Transport and IT Exchanges with Take or Pay rates
- 4. Balancing (Hub Activity) < = 100 GJ/d; Balancing (Direct Purchase) < = 500 GJ/d; In-franchise distribution authorized overrun (Note 3)
- 5. C1/M12 IT Transport and IT Exchanges at premium rates
- 6. C1/M12 Overrun < = 20% of CD (Note 4)
- 7. Balancing (Direct Purchase) > 500 GJ/d
- 8. Balancing (Hub Activity) > 100 GJ/d; C1/M12 IT Transport and IT Exchanges
- 9. C1/M12 Overrun > 20% of CD
- 10. C1/M12 IT Transport and IT Exchanges at a discount
- 11. Late Nominations
  Notes:

- 1. Nominated services must be nominated on the NAESB Timely Nomination Cycle otherwise they are considered to be late nomination and are therefore interruptible.
- 2. Higher value or more reliable IT is contemplated in the service and contract, when purchase at market competitive prices.
- 3. Captures the majority of customers that use Direct Purchase balancing transactions.
- 4. Captures the majority of customers that use overrun.
- 2. <u>Capacity Procedures:</u> Union reserves the right to change its procedures for sharing interruptible capacity and will provide Shipper with two (2) months prior notice of any such change.
- 3. <u>Maintenance:</u> Union's facilities from time to time may require maintenance or construction. If such maintenance or construction is required, and in Union's sole opinion, acting reasonably, such maintenance or construction may impact Union's ability to meet Shipper's requirements, Union shall provide at least ten (10) days notice to Shipper, except in the case of an emergency. In the event the maintenance impacts Union's ability to meet Shipper's requirements, Union shall not be liable for any damages and shall not be deemed in breach of the Contract. To the extent that Union's ability to accept and/or deliver Shipper's gas is impaired, the Monthly demand charge shall be reduced in accordance with Article XI Section 8 and available capacity allocated in accordance with Article XI Section 9 herein.

Union shall use reasonable efforts to determine a mutually acceptable period during which such maintenance or construction will occur and also to limit the extent and duration of any impairments. Union will endeavour to schedule and complete the maintenance and construction, which would normally be expected to impact on Union's ability to meet Shipper's requirements, during the period from April 1 through to November 1.

#### XIX. SHIPPER'S REPRESENTATIONS AND WARRANTIES

- 1. <u>Shipper's Warranty:</u> Shipper warrants that it will, if required, maintain, or have maintained on its behalf, all external approvals including the governmental, regulatory, import/export permits and other approvals or authorizations that are required from any federal, state or provincial authorities for the gas quantities to be handled under the Contract. Shipper further warrants that it shall maintain in effect the Facilitating Agreements.
- 2. <u>Financial Representations:</u> Shipper represents and warrants that the financial assurances (including the Initial Financial Assurances and Security) (if any) shall remain in place throughout the term hereof, unless Shipper and Union agree otherwise. Shipper shall notify Union in the event of any change to the financial assurances throughout the term hereof. Should Union have reasonable grounds to believe that Shipper will not be able to perform or continue to perform any of its obligations under the Contract as a result of one of the following events ("Material Event");
  - a. Shipper is in default, which default has not been remedied, of the Contract or is in default of any other material contract with Union or another party; or,
  - b. Shipper's corporate or debt rating falls below investment grade according to at least one nationally recognized rating agency; or,
  - c. Shipper ceases to be rated by a nationally recognized agency; or,
  - d. Shipper has exceeded credit available as determined by Union from time to time,

then Shipper shall within fourteen (14) days of receipt of written notice by Union, obtain and provide to Union a letter of credit or other security in the form and amount reasonably required by Union (the "Security"). The Security plus the Initial Financial Assurances shall not exceed twelve (12) months of Monthly demand charges (in accordance with Article IX herein) multiplied by Contract Demand. In the event that Shipper does not provide to Union such Security within such fourteen (14) day period, Union may deem a default under the Default and Termination provisions of Article XII herein.

In the event that Shipper in good faith, reasonably believes that it should be entitled to reduce the amount of or value of the Security previously provided, it may request such a reduction from Union and to the extent that the Material Event has been mitigated or eliminated, Union shall return all or a portion of the Security to Shipper within fourteen (14) Business Days after

receipt of the request.

#### XX. MISCELLANEOUS PROVISIONS

- 1. Permanent Assignment: Shipper may assign the Contract to a third party ("Assignee"), up to the Contract Demand, (the "Capacity Assigned"). Such assignment shall require the prior written consent of Union and release of obligations by Union for the Capacity Assigned from the date of assignment. Such consent and release shall not be unreasonably withheld and shall be conditional upon the Assignee providing, amongst other things, financial assurances as per Article XXI herein. Any such assignment will be for the full rights, obligations and remaining term of the Contract as relates to the Capacity Assigned.
- 2. <u>Temporary Assignment:</u> Shipper may, upon notice to Union, assign all or a part of its service entitlement under the Contract (the "Assigned Quantity") and the corresponding rights and obligations to an Assignee on a temporary basis for not less than one calendar month. Such assignment shall not be unreasonably withheld and shall be conditional upon the Assignee executing the Facilitating Agreement as per Article XXI herein. Notwithstanding such assignment, Shipper shall remain obligated to Union to perform and observe the covenants and obligations contained herein in regard to the Assigned Quantity to the extent that Assignee fails to do so.
- 3. <u>Title to Gas:</u> Shipper represents and warrants to Union that Shipper shall have good and marketable title to, or legal authority to deliver to Union, all gas delivered to Union hereunder. Furthermore, Shipper hereby agrees to indemnify and save Union harmless from all suits, actions, debts, accounts, damages, costs, losses and expenses arising from or out of claims of any or all third parties to such gas or on account of Taxes, or other charges thereon.

#### XXI. PRECONDITIONS TO TRANSPORTATION SERVICES

- 1. <u>Union Conditions:</u> The obligations of Union to provide Transportation Services hereunder are subject to the following conditions precedent, which are for the sole benefit of Union and which may be waived or extended in whole or in part in the manner provided in the Contract:
  - a. Union shall have obtained, in form and substance satisfactory to Union, and all conditions shall have been satisfied under, all governmental, regulatory and other third party approvals, consents, orders and authorizations, that are required to provide the Transportation Services; and,
  - b. Union shall have obtained all internal approvals that are necessary or appropriate to provide the Transportation Services; and,
  - c. Union shall have received from Shipper the requisite financial assurances reasonably necessary to ensure Shipper's ability to honour the provisions of the Contract (the "**Initial Financial Assurances**"). The Initial Financial Assurances, if required, will be as determined solely by Union; and,
  - d. Shipper and Union shall have entered into the Interruptible Service HUB Contract or equivalent (the "Facilitating Agreement") with Union.
- 2. <u>Shipper Conditions:</u> The obligations of Shipper hereunder are subject to the following conditions precedent, which are for the sole benefit of Shipper and which may be waived or extended in whole or in part in the manner provided in the Contract:
  - a. Shipper shall, as required, have entered into the necessary contracts with Union and/or others to facilitate the Transportation Services contemplated herein, including contracts for upstream and downstream transportation, and shall specifically have an executed and valid Facilitating Agreement; and shall, as required, have entered into the necessary contracts to purchase the gas quantities handled under the Contract; and.

#### SCHEDULE "A 2010"

- b. Shipper shall have obtained, in form and substance satisfactory to Shipper, and all conditions shall have been satisfied under, all governmental, regulatory and other third party approvals, consents, orders and authorizations, that are required from federal, state, or provincial authorities for the gas quantities handled under the Contract; and,
- Shipper shall have obtained all internal approvals that are necessary or appropriate for the Shipper to execute the Contract.
- 3. <u>Satisfaction of Conditions:</u> Union and Shipper shall each use due diligence and reasonable efforts to satisfy and fulfil the conditions precedent specified in this Article XXI Section 1 a, c, and d and Section 2 a and b. Each party shall notify the other forthwith in writing of the satisfaction or waiver of each condition precedent for such party's benefit. If a party concludes that it will not be able to satisfy a condition precedent that is for its benefit, such party may, upon written notice to the other party, terminate the Contract and upon the giving of such notice, the Contract shall be of no further force and effect and each of the parties shall be released from all further obligations thereunder.
- 4. <u>Non-Satisfaction of Conditions:</u> If any of the conditions precedent in this Article XXI Section 1 c or Section 2 are not satisfied or waived by the party entitled to the benefit of that condition by the Conditions Date as such term is defined in the Contract, then either party may, upon written notice to the other party, terminate the Contract and upon the giving of such notice, the Contract shall be of no further force and effect and each of the parties shall be released from all further obligations hereunder, provided that any rights or remedies that a party may have for breaches of the Contract prior to such termination and any liability a party may have incurred before such termination shall not thereby be released.

# RATE C1 NOMINATIONS

- a) For Services provided either under this rate schedule or referenced to this rate schedule:
  - i) For Services required on any day Shipper shall provide Union with details regarding the quantity it desires to be handled at the applicable Receipt Point(s) and/or Delivery Point(s), and such additional information as Union determines to be necessary (a "Nomination").
  - ii) All Nominations shall be submitted by electronic means via *Unionline*. Union, in its sole discretion, may amend or modify the nominating procedures or *Unionline* at any time. Nominations shall be submitted so as to be received by Union in accordance with timelines established by Union, which reflect the NAESB standard nomination cycles. Union will accept all Nominations on each of the nomination cycles. Nominations made after the applicable deadline shall not be accepted except at the sole discretion of Union. The nomination cycle timelines are posted on Union's website and the nomination deadlines are provided in *Unionline*.
  - iii) For customers electing firm all day transportation, nominations shall be provided to Union's Gas Management Services as outlined in the F24 –T Agreement.
- b) Union shall determine whether or not all or any portion of the Nomination will be accepted. In the event Union determines that it will not accept such Nomination, Union shall advise Shipper of the reduced quantity (the "Quantity Available") for Services at the applicable points as outlined in each nomination cycle. After receiving such advice from Union but no later than one half hour after the Quantities Available deadline as outlined in each nomination cycle, Shipper shall provide a "Revised Nomination" to Union which shall be no greater than the Quantity Available. If such Revised Nomination is not provided within the time allowed as required above or such Revised Nomination is greater than the Quantity Available, then the Revised Nomination shall be deemed to be the Quantity Available. If the Revised Nomination (delivered within the time allowed as required above) is less than the Quantity Available, then such lesser amount shall be the Revised Nomination.
- c) That portion of a Shipper's Nomination or Revised Nomination, as set out in (a) and (b), above, which Union shall accept for Services hereunder, shall be known as Shipper's "Authorized Quantity".
- d) If on any day the actual quantities handled by Union, for each of the Services authorized, exceed Shipper's Authorized Quantity, and such excess was caused by either Shipper's incorrect nomination or by its delivering or receiving too much gas, then the amount by which the actual quantities handled for each of the Services exceed Shipper's Authorized Quantity, such excess shall be deemed "Unauthorized Overrun".
- e) The daily quantity of gas nominated by Shipper will be delivered by Shipper at rates of flow that are as nearly constant as possible, however, Union shall use reasonable efforts to take receipt of gas on any day at an hourly rate of flow up to one twentieth (1/20) of the quantity received for that day. Union shall have the right to limit Services when on any day the cumulative hourly imbalance between receipts and deliveries exceeds one twentieth (1/20) of the quantity handled for that day, for each applicable Service.
- f) A nomination for a daily quantity of gas on any day shall remain in effect and apply to subsequent days unless and until Union receives a new nomination from the Shipper or unless Union gives Shipper written notice that it is not acceptable in accordance with either (a) or (b) of this schedule.
- g) Except for periods of gas or quantity balancing as provided in the Contract, nominations by Shipper for deliveries to Union and redeliveries by Union shall be the same delivery of gas by Union either to Shipper or a Shipper's Account with Union.

## RATE C1 NOMINATIONS

- 1. For Transportation Services required on any Day under the Contract, Shipper shall provide Union with details regarding the quantity of Gas it desires to be handled at the applicable Receipt Points(s) and/or Delivery Point(s), and such additional information as Union determines to be necessary (a "Nomination").
- 2. All Nominations shall be submitted by electronic means via *Unionline*. Union, in its sole discretion, may amend or modify the nominating procedures or *Unionline* at any time. Nominations shall be submitted so as to be received by Union in accordance with timelines established by Union, which reflect the NAESB standard nomination cycles. Union will accept all Nominations on each of the nomination cycles. Nominations made after the applicable deadline shall not be accepted except at the sole discretion of Union. The nomination cycle timelines are posted on Union's website and the nomination deadlines are provided in *Unionline*.
- 3. Union shall determine whether or not all or any portion of the Nomination will be scheduled at each nomination cycle. With respect to each nomination cycle, in the event Union determines that it will not schedule such Nomination, Union shall advise Shipper of the reduced quantity (the "Quantities Available") for Transportation Services at the applicable points as outlined in each nomination cycle. After receiving such advice from Union, but no later than one half hour after the Quantities Available deadline as outlined in each nomination cycle, Shipper shall provide a revised nomination ("Revised Nomination") to Union which shall be no greater than the Quantity Available. If such Revised Nomination is not provided within the time allowed as required above or such Revised Nomination is greater than the Quantities Available, then the Revised Nomination shall be deemed to be the Quantity Available. If the Revised Nomination (delivered with the time allowed as required above) is less than the Quantity Available, then such lessor amount shall be the Revised Nomination.
- 4. For Shippers electing firm all day transportation service, nominations shall be provided to Union's Gas Management Services as outlined in the F24 –T Agreement.
- 5. For Transportation Services requiring Shipper to provide compressor fuel in kind, the nominated fuel requirements will be calculated by rounding to the nearest whole GJ.
- 6. All Timely Nominations shall have rollover options. Specifically, Shippers shall have the ability to nominate for several days, months or years, provided the Nomination start date and end date are both within the term of the Transportation Agreement.
- 7. Nominations received after the nomination deadline shall, if accepted by Union, be scheduled after Nominations received before the nomination deadline.
- 8. All Services are required to be nominated in whole Gigajoules (GJ).
- 9. To the extent Union is unable to complete a Nomination confirmation due to inaccurate, untimely or incomplete data involving an Interconnecting Pipeline entity, Union shall undertake reasonable efforts to confirm the transaction on a non-discriminatory basis until such time that the transaction is adequately verified by the parties, or until such time that Union determines that the Nomination is invalid at which time the Union shall reject the Nomination.
- 10. That portion of a Shipper's Nomination or Revised Nomination, as set out in paragraphs 1 and 3 above, which Union shall schedule for Transportation Services hereunder, shall be known as Shipper's "**Authorized Quantity**".
- 11. If on any day the actual quantities handled by Union, for each of the Transportation Services authorized, exceed Shipper's Authorized Quantity, and such excess was caused by either Shipper's incorrect nomination or by its delivering or receiving too much gas, then the amount by which the actual quantities handled for each of the Transportation

Services exceed Shipper's Authorized Quantity shall be deemed "Unauthorized Overrun".

- 12. The daily quantity of gas nominated by Shipper will be delivered by Shipper at rates of flow that are as nearly constant as possible, however, Union shall use reasonable efforts to take receipt of gas on any day at an hourly rate of flow up to one twentieth (1/20<sup>th</sup>) of the quantity received for that day. Union shall have the right to limit Transportation Services when on any day the cumulative hourly imbalance between receipts and deliveries exceeds one twentieth (1/20<sup>th</sup>) of the quantity handled for that day, for each applicable Transportation Service.
- 13. The parties hereto recognize that with respect to Transportation Services, on any day, receipts of gas by Union and deliveries of gas by Union may not always be exactly equal, but each party shall cooperate with the other in order to balance as nearly as possible the quantities transacted on a daily basis, and any imbalances arising shall be allocated to the Facilitating Agreement and shall be subject to the respective terms and charges contained therein, and shall be resolved in a timely manner.
- 14. Shipper may designate via Unionline access request form, a third party as agent for purposes of providing a Nomination, and for giving and receiving notices related to Nominations, and Union shall only accept nominations from the agent. Any such designation, if acceptable to Union, shall be effective following the receipt and processing of the written notice and will remain in effect until revoked in writing by Shipper.

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#### SCHEDULE "C 2010"

# RATE C1 RECEIPT AND DELIVERY POINTS AND PRESSURES

#### 1. Receipt and Delivery Points:

The following defines each Receipt Point and/or Delivery Point, as indicated (R= Receipt Point; D= Delivery Point)

R, D	DAWN (FACILITIES):	Union's Compressor Station site situated in the northwest corner of Lot Twenty-Five (25), Concession II, in the Township of Dawn-Euphemia, in the County of Lambton. This point is applicable for quantities of gas that have been previously transported or stored under other contracts that Shipper may have in place with Union.
R, D	DAWN (TCPL):	At the junction of Union's and TCPL's facilities, at or adjacent to Dawn (Facilities).
R, D	DAWN (TECUMSEH):	At the junction of Union's and Enbridge Gas Distribution Inc.'s (Enbridge) Tecumseh Gas Storage's facilities, at or adjacent to Dawn (Facilities).
R, D	DAWN (TSLE):	At the junction of Union's and Enbridge Gas Distribution Inc.'s (" <b>Enbridge</b> ") NPS 16 Tecumseh Sombra Line Extension facilities; at or adjacent to Dawn (Facilities)
R, D	DAWN (VECTOR):	At the junction of Union's and Vector Pipeline Limited Partnership (" <b>Vector</b> ") facilities, at or adjacent to Dawn (Facilities).
R, D	PARKWAY (TCPL):	At the junction of Union's and TCPL's facilities, at or adjacent to Union's facilities situated in the Part Lot 9 and Part Lot 10, Concession IX, New Survey, Town of Milton, Regional Municipality of Halton (now part of City of Mississauga)
R, D	KIRKWALL:	At the junction of Union's and TCPL's facilities at or adjacent to Union's facilities situated in Part Lot Twenty-Five (25), Concession 7, Town of Flamborough.
D	PARKWAY (CONSUMERS):	At the junction of Union's and Enbridge's facilities, at or adjacent to Union's facilities situated in Part Lot 9 and Part Lot 10, Concession IX, New Survey, Town of Milton, Regional Municipality of Halton (now part of City of Mississauga)
D	LISGAR:	At the junction of the facilities of Union and Enbridge situated at 6620 Winston Churchill Boulevard, City of Mississauga.
R, D	OJIBWAY:	At the junction of Union's and Panhandle Eastern Pipe Line Company, LP's ("Panhandle") facilities, located at the International Border between Canada and the United States in the St. Clair River.
R, D	ST.CLAIR (MICHCON):	At the junction of Michigan Consolidated Gas Company's ("MichCon") and St. Clair Pipelines L.P.'s facilities, located at the International Border between Canada and the

United States in the St. Clair River.

#### R, D BLUEWATER:

At the junction of Bluewater Gas Storage, LLC ("Bluewater") and St. Clair Pipelines L.P.'s facilities, located at the International Border between Canada and the United States in the St. Clair River.

#### 2. Receipt and Delivery Pressures:

- (a) All Gas tendered by or on behalf of Shipper to Union shall be tendered at the Receipt Point(s) at Union's prevailing pressure at that Receipt Point, or at such pressure as per operating agreements between Union and the applicable Interconnecting Pipeline as amended or restated from time to time.
- (b) All Gas tendered by or on behalf of Union to Shipper shall be tendered at the Delivery Point(s) at Union's prevailing pressure at that Delivery Point or at such pressure as per agreements between Union and the applicable Interconnecting Pipeline as amended or restated from time to time.
- (c) Under no circumstances shall Union be obligated to receive or deliver gas hereunder at pressures exceeding the maximum allowable operating pressures prescribed under any applicable governmental regulations; nor shall Union be required to make any physical deliveries or to accept any physical receipts which its existing facilities cannot accommodate.

# **Appendix C**

#### **UNION GAS LIMITED**

## Infranchise Customers Summary of Average Interruptible Rate and Price Adjustment Changes for Rates 25, M4, M5A, M7, T1 and T2 Effective January 1, 2018

Line No.	Particulars (cents / m³)	Monthly Charge Increase / (Decrease) (a)	Delivery Commodity Charge Increase / (Decrease) (b)	Delivery - Price Adjustment Increase / (Decrease) (c)	Gas Commodity Price Adjustment Rate (1) (d)
1	Rate 25 - All Zones Including Cap-and-Trade Customer-Related Charge	(\$17.39)	(0.0016)		(0.2720)
2	Excluding Cap-and-Trade Customer-Related Charge	(\$17.39)	(0.0016)		(0.2720)
	Rate M4 - Interruptible	4			
3 4	Including Cap-and-Trade Customer-Related Charge Excluding Cap-and-Trade Customer-Related Charge	(\$10.10) (\$10.10)	0.0742 0.0742		
	Rate M5A - Interruptible				
5	Including Cap-and-Trade Customer-Related Charge	(\$10.10)	0.0742		
6	Excluding Cap-and-Trade Customer-Related Charge	(\$10.10)	0.0742		
	Rate M7				
	Interruptible				
7	Including Cap-and-Trade Customer-Related Charge		0.0632		
8	Excluding Cap-and-Trade Customer-Related Charge Seasonal		0.0632		
9	Including Cap-and-Trade Customer-Related Charge		0.0632		
10	Excluding Cap-and-Trade Customer-Related Charge		0.0632		
	Rate T1 - Interruptible Transportation - Union supplies fuel				
11	Including Cap-and-Trade Customer-Related Charge		(0.0031)		
12	Excluding Cap-and-Trade Customer-Related Charge Transportation - Customer supplies fuel		(0.0031)		
13	Including Cap-and-Trade Customer-Related Charge		0.0061		
14	Excluding Cap-and-Trade Customer-Related Charge		0.0061		
	Rate T2 - Interruptible Transportation - Union supplies fuel				
15	Including Cap-and-Trade Customer-Related Charge		0.0008		
16	Excluding Cap-and-Trade Customer-Related Charge Transportation - Customer supplies fuel		0.0008		
17	Including Cap-and-Trade Customer-Related Charge		0.0119		
18	Excluding Cap-and-Trade Customer-Related Charge		0.0119		

(1) Applies to sales service customers only.

# **Appendix D**

# **Appendix E**

#### <u>UNION GAS LIMITED</u> <u>Miscellaneous Non-Energy Charges</u>

Service	Fee
Residential Customer Class Service	
Connection Charge	\$35
Temporary Seal - Turn-off (Seasonal)	\$22
Temporary Seal - Turn-on (Seasonal)	\$35
Landlord Turn-on	\$35
Disconnect/Reconnect for Non-Payment	\$65
Commercial/Industrial Customer Class Service	
Connection Charge	\$38
Temporary Seal - Turn-off (Seasonal)	\$22
Temporary Seal - Turn-on (Seasonal)	\$38
Landlord Turn-on	\$38
Disconnect/Reconnect for Non-Payment	\$65
Statement of Account/History Statements	
History Statement (previous year)	\$15/statement
History Statement (beyond previous year)	\$40/hour
Duplicate Bills * (if processed by system)	No charge
Duplicate Bills * (if manually processed)	\$15/statement
Dispute Meter Test Charges	
Meter Test - Residential Meter	\$50 flat fee for removal and test
Meter Test - Commercial/Industrial Meter	Hourly charge based on actual costs
Direct Purchase Administration Charges	
Monthly fee per bundled t-service contract or unbundled U2 contract	\$75.00
Monthly per customer fee	\$0.19
Invoice Vendor Adjustment (IVA) fee	\$1.09
(for each successfully submitted IVA transaction)	

### Notes:

<sup>\*</sup> Duplicate bill charges only apply when customer wants two copies of a bill. Lost bills from the last billing period will be replaced free of charge.

# Appendix F

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#### **UNION GAS LIMITED**

#### Accounting Entries for Short-term Storage and Other Balancing Services Deferral Account No. 179-70

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 571

Storage Revenue

Credit - Account No. 179-70

Other Deferred Charges - Short-term Storage and Other Balancing Services

To record, as a debit (credit) in Deferral Account No. 179-70 the utility portion of actual net revenues for Short-term Storage and Other Balancing Services, less the 10% shareholder incentive to provide these services and less the net revenue forecast for these services as approved by the Board for ratemaking purposes. The utility portion of actual net revenues for Short-term Storage and Other Balancing Services is determined by allocating total margins received from the sale of these services based on the utility share of the total quantity of the services sold each calendar year. The utility share reflects the transactions supported by utility storage space (up to the 100 PJ cap – both planned and excess over planned).

Debit - Account No. 571

Storage Revenue

Credit - Account No. 179-70

Other Deferred Charges – Short-term Storage and Other Balancing Services

To record, as a credit in Deferral Account No. 179-70 payments by Union Gas Limited's non-utility business to its utility business for storage encroachment.

Debit - Account No.179-70

Other Deferred Charges - Short-term Storage and Other Balancing Services

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-70, interest on the balance in Deferral Account No. 179-70. Simple interest will be computed monthly upon finalization of the year end balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Lost Revenue Adjustment Mechanism Deferral Account No. 179-75

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-75

Other Deferred Charges - Lost Revenue Adjustment Mechanism

Credit - Account No. 529

Other Sales

To record, as a debit (credit) in Deferral Account No. 179-75, the difference between actual margin reductions related to Union's DSM plans and the margin reduction included in gas delivery rates as approved by the Board.

Debit - Income Account No. 179-75

Other Deferred Charges - Lost Revenue Adjustment Mechanism

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-75, interest expense on the balance in Deferral Account No. 179-75. Simple interest will be computed monthly upon finalization of the year end balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

# Accounting Entries for Transportation Tolls and Fuel – Northern and Eastern Operations Area <u>Deferral Account No. 179-100</u>

This account is applicable to the Northern and Eastern Operations of Union Gas Limited. Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-100

Other Deferred Charges - Transportation Tolls and Fuel - Northern and Eastern

Operations Area

Credit - Account No. 663

Transportation of Gas by Others

To record, as a debit (credit) in Deferral Account No. 179-100, the difference in the costs between the actual per unit transportation and associated fuel costs and the forecast per unit transportation and associated fuel costs included in the rates as approved by the Board.

Debit - Account No. 179-100

Other Deferred Charges - Transportation Tolls and Fuel - Northern and Eastern

Operations Area

Credit - Account No. 663

Transportation of Gas by Others

To record, as a debit (credit) in Deferral Account No. 179-100 charges that result from the Limited Balancing Agreement.

Debit - Account No. 500

Sales Revenue

Credit - Account No. 179-100

Other Deferred Charges - Transportation Tolls and Fuel - Northern and Eastern

Operations Area

To record, as a credit (debit) in Deferral Account No. 179-100 revenue from T-Service customers for load balancing service resulting from the Limited Balancing Agreement.

Debit - Account No. 179-100

Other Deferred Charges - Transportation Tolls and Fuel – Northern and Eastern

Operations Area

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-100 interest expense on the balance in Deferral Account No. 179-100. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

# Accounting Entries for Unbundled Services Unauthorized Storage Overrun <u>Deferral Account No. 179-103</u>

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A, prescribed under the Ontario Energy Board Act.

Debit - Account No.571

Storage Revenue

Credit - Account No. 179-103

Other Deferred Charges – Unbundled Services Unauthorized Storage Overrun

To record as a credit (debit) in Deferral Account No. 179-103 any unauthorized storage overrun charges incurred by customers electing unbundled service.

Debit - Account No. 179-103

Other Deferred Charges – Unbundled Services Unauthorized Storage Overrun

Credit - Account No. 323

Other Interest Expense

To record as a debit (credit) in Deferral Account No. 179-103, interest on the balance in Deferral Account No. 179-103. Simple interest will be computed on the monthly opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for North Purchase Gas Variance Account <u>Deferral Account No. 179-105</u>

This account is applicable to the Northern and Eastern Operations area of Union Gas Limited. Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-105

Other Deferred Charges - North Purchase Gas Variance Account

Credit - Account No. 623

Cost of Gas

To record, as a debit (credit) in Deferral Account No. 179-105, the difference between the unit cost of gas purchased each month for the Northern and Eastern Operations area and the unit cost of gas included in the gas sales rates as approved by the Board, including the difference between the actual heat content of the gas purchased and the forecast heat content included in gas sales rates.

Debit - Account No. 179-105

Other Deferred Charges - North Purchase Gas Variance Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-105, interest expense on the balance in Deferral Account No. 179-105. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for South Purchase Gas Variance Account Deferral Account No. 179-106

This account is applicable to the Southern Operations area of Union Gas Limited. Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-106

Other Deferred Charges - South Purchase Gas Variance Account

Credit - Account No. 623

Cost of Gas

To record, as a debit (credit) in Deferral Account No. 179-106, the difference between the unit cost of gas purchased each month for the Southern Operations and the unit cost of gas included in the gas sales rates as approved by the Board, including the difference between the actual heat content of the gas purchased and the forecast heat content included in gas sales rates.

Debit - Account No. 179-106

Other Deferred Charges - South Purchase Gas Variance Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-106, interest expense on the balance in Deferral Account No. 179-106. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Spot Gas Variance Account Deferral Account No. 179-107

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-107

Other Deferred Charges -Spot Gas Variance Account

Credit - Account No. 623

Cost of Gas

To record, as a debit (credit) in Deferral Account No. 179-107, the difference between the unit cost of spot gas purchased each month and the unit cost of gas included in the gas sales rates as approved by the Board on the spot volumes purchased in excess of planned purchases.

Debit - Account No. 623

Cost of Gas

Credit - Account No. 179-107

Other Deferred Charges -Spot Gas Variance Account

To record, as a credit (debit) in Deferral Account No. 179-107, the approved gas supply charges recovered through the delivery component of rates.

Debit - Account No. 179-107

Other Deferred Charges - Spot Gas Variance Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-107, interest expense on the balance in Deferral Account No. 179-107. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Unabsorbed Demand Cost (UDC) Variance Account Deferral Account No. 179-108

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-108

Other Deferred Charges - Unabsorbed Demand Cost Variance Account

Credit - Account No. 663

Transportation of Gas by Others

To record, as a debit (credit) in Deferral Account No. 179-108, the difference between the actual unabsorbed demand costs incurred by Union and the amount of unabsorbed demand charges included in rates as approved by the Board.

Debit - Account No. 663

Transportation of Gas by Others

Credit - Account No.179-108

Other Deferred Charges - Unabsorbed Demand Cost Variance Account

To record, as a credit (debit) in Deferral Account No. 179-108, the benefit from the temporary assignment of unutilized capacity under Union's transportation contracts to the Northern and Eastern Operations Area. The benefit will be equal to the recovery of pipeline demand charges and other charges resulting from the temporary assignment of unutilized capacity that have been included in gas sales rates.

Debit - Account No. 179-108

Other Deferred Charges - Unabsorbed Demand Cost Variance Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-108, interest expense on the balance in Deferral Account No. 179-108. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Inventory Revaluation Account Deferral Account No. 179-109

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A, prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-109

Other Deferred Charges - Inventory Revaluation

Credit - Account No. 152

Gas in Storage - Available for Sale

To record, as a debit (credit) in Deferral Account No. 179-109, the decrease (increase) in the value of gas inventory available for sale to sales service customers due to changes in Union's weighted average cost of gas approved by the Board for rate making purposes.

Debit - Account No. 179-109

Other Deferred Charges – Inventory Revaluation Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-109, interest expense on the balance in Deferral Account No. 179-109. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Demand Side Management Variance Account Deferral Account No. 179-111

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-111

Demand Side Management Variance Account

Credit - Account No. 728

General Expense

To record as a debit (credit) in Deferral Account No. 179-111, the difference between actual and the approved direct DSM expenditure budget currently approved for recovery in rates, provided that any excess over the approved direct DSM expenditure budget does not exceed 15% of the direct DSM expenditure budget. Any excess over the approved direct DSM expenditure budget for the year must be for incremental DSM volume savings that are cost effective as determined by the Total Resource Cost Test.

Debit - Account No.179-111

Other Deferred Charges – Demand Side Management Variance Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-111, interest expense on the balance in Deferral Account No. 179-111. Simple interest will be computed monthly upon finalization of the year end balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

# Accounting Entries for Gas Distribution Access Rule (GDAR) Costs <u>Deferral Account No. 179-112</u>

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-112

Other Deferred Charges - Deferred Gas Distribution Access Rule (GDAR) Costs

Credit - Account No. 728

General Expense

To record, as a debit (credit) in Deferral Account No. 179-112 the difference between the actual costs required to implement the appropriate process and system changes to achieve compliance with GDAR and the costs included in rates as approved by the Board.

Debit - Account No.179-112

Other Deferred Charges - Deferred Gas Distribution Access Rule (GDAR) Costs

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-112, interest on the balance in Deferral Account No. 179-112. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

### Accounting Entries for CGAAP to IFRS Conversion Costs Deferral Account No. 179-120

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-120

Other Deferred Charges - CGAAP to IFRS Conversion Costs

Credit - Account No. 728

General Expense

To record, as a debit (credit) in Deferral Account No. 179-120 the difference between the actual incremental one-time administrative costs incurred to convert accounting policies and processes from their current compliance with Canadian Generally Accepted Accounting Principles (CGAAP) to their future compliance with International Financial Reporting Standards (IFRS) and the costs included in rates as approved by the Board.

Debit - Account No.179-120

Other Deferred Charges - CGAAP to IFRS Conversion Costs

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-120, interest on the balance in Deferral Account No. 179-120. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Conservation Demand Management Deferral Account No. 179-123

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 312

Non-Gas Operating Revenue

Credit - Account No.179-123

Other Deferred Charges – Conservation Demand Management

To record, as a credit in Deferral Account No. 179-123, 50% of the actual revenues generated from the Conservation Demand Management (CDM) program that will be paid to customers upon approval by the Board for rate making purposes.

Debit - Account No.179-123

Other Deferred Charges - Conservation Demand Management

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-123, interest expense on the balance in Deferral Account No. 179-123. Simple interest will be computed monthly on the opening balance in the said account at the short term debt rate as approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Demand Side Management Incentive Deferral Account No. 179-126

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-126

Other Deferred Charges – Demand Side Management Incentive

Credit - Account No. 319

Other Income

To record, as a debit in Deferral Account No. 179-126, the shareholder incentive earned by the Company in relation to its Demand Side Management (DSM) Programs.

Debit - Account No.179-126

Other Deferred Charges – Demand Side Management Incentive

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-126, interest on the balance in Deferral Account No. 179-126. Simple interest will be computed monthly on the opening balance in the said account at the short term debt rate as approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Upstream Transportation Optimization Deferral Account No. 179-131

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-131

Other Deferred Charges – Upstream Transportation Optimization

Credit - Account No. 626

Exchange Gas

To record as a debit in Deferral Account No. 179-131 a receivable from customers and a reduction in cost of gas for the unit rate of optimization revenues refunded to in-franchise customers multiplied by the actual distribution transportation volumes.

Debit - Account No. 579

Miscellaneous Operating Revenue

Credit - Account No. 179-131

Other Deferred Charges – Upstream Transportation Optimization

To record as a credit in Deferral Account No. 179-131 a payable to customers and a reduction in transportation revenue equal to the ratepayer portion (90%) of the actual net revenue from gas supply optimization activities.

Debit - Account No. 323

Other Interest Expense

Credit - Account No. 179-131

Other Deferred Charges – Upstream Transportation Optimization

To record, as a debit (credit) in Deferral Account No. 179-131, interest on the balance in Deferral Account No. 179-131. Simple interest will be computed monthly upon finalization of the year- end balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Deferral Clearing Variance Account Deferral Account No. 179-132

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-132

Other Deferred Charges – Deferral Clearing Variance Account

Credit - Account No. 179

Other Deferred Charges

To record as a debit (credit) in Deferral Account No. 179-132 a receivable from (payable to) ratepayers for the amount arising from differences between actual and forecast volumes used for the purposes of clearing nongas commodity deferral account, earnings sharing and other balances.

Debit - Account No. 179-132

Other Deferred Charges - Deferral Clearing Variance Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-132, interest on the balance in Deferral Account No. 179-132. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Normalized Average Consumption (NAC) Account Deferral Account No. 179-133

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-133

Normalized Average Consumption Account

Credit - Account No. 500

Sales Revenue

To record as a debit (credit) in Deferral Account No. 179-133 the variance in revenue resulting from the difference between forecast normalized average consumption (NAC) included in rates as approved by the Board and actual NAC for general service rate classes Rate M1, Rate M2, Rate 01, and Rate 10.

Debit - Account No. 179-133

Normalized Average Consumption Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-133, interest on the balance in Deferral Account No. 179-133. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Tax Variance Deferral Account Deferral Account No. 179-134

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-134

Tax Variance Deferral Account

Credit - Account No. 300

Operating Revenues

To record as a debit (credit) in Deferral Account No. 179-134 50% of the variance in costs resulting from the difference between the actual tax rates and the approved tax rates included in rates as approved by the Board.

Debit - Account No. 179-134

Tax Variance Deferral Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-134, interest on the balance in Deferral Account No. 179-134. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Unaccounted for Gas (UFG) Volume Variance Account Deferral Account No. 179-135

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-135

UFG Volume Variance Account

Credit - Account No. 654

Gas Losses

To record as a debit (credit) in Deferral Account No. 179-135 the difference between the UFG recovered in revenue at rates approved by the Board and the actual cost of UFG expensed, in excess of \$5 million.

Debit - Account No. 179-135

UFG Volume Variance Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-135, interest on the balance in Deferral Account No. 179-135. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

### UNION GAS LIMITED

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#### Accounting Entries for Parkway West Project Costs Deferral Account No. 179-136

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-136

Other Deferred Charges - Parkway West Project Costs

Credit - Account No. 579

Miscellaneous Operating Revenue

To record, as a debit (credit) in Deferral Account No. 179-136, the difference between the actual revenue requirement related to the costs for the Parkway West Project and the revenue requirement included in rates as approved by the Board.

Debit - Account No.179-136

Other Deferred Charges – Parkway West Project Costs

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-136, interest on the balance in Deferral Account No. 179-136. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

#### **UNION GAS LIMITED**

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#### Accounting Entries for Brantford-Kirkwall/Parkway D Project Costs Deferral Account No. 179-137

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-137

Other Deferred Charges – Brantford-Kirkwall/Parkway D Project Costs

Credit - Account No. 579

Miscellaneous Operating Revenue

To record, as a debit (credit) in Deferral Account No. 179-137, the difference between the actual revenue requirement related to the costs for the Brantford-Kirkwall/Parkway D Project and the revenue requirement included in rates as approved by the Board.

Debit - Account No.179-137

Other Deferred Charges – Brantford-Kirkwall/Parkway D Project Costs

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-137, interest on the balance in Deferral Account No. 179-137. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Parkway Obligation Rate Variance Deferral Account No. 179-138

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-138

Other Deferred Charges - Parkway Obligation Rate Variance

Credit - Account No. 300

Operating Revenue

To record, as a debit (credit) in Deferral Account No. 179-138, the rate variances associated with the timing differences between the effective date of the Parkway delivery obligation changes and the temporary capacity and the inclusion of the cost impacts in approved rates (January 1 of the following year).

Debit - Account No.179-138

Other Deferred Charges - Parkway Obligation Rate Variance

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-138, interest on the balance in Deferral Account No. 179-138. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Unaccounted for Gas (UFG) Price Variance Account Deferral Account No. 179-141

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-141

Other Deferred Charges - UFG Price Variance Account

Credit - Account No. 179-106/105

Other Deferred Charges – South/North Purchase Gas Variance Accounts

To record as a debit (credit) in Deferral Account No. 179-141, the variance between the actual price of Union's purchases and the applicable Board-approved reference price, applied to Union's actual experienced UFG volumes.

Debit - Account No. 179-141

Other Deferred Charges - UFG Price Variance Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-141, interest on the balance in Deferral Account No. 179-141. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

UNION GAS LIMITED

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#### Accounting Entries for Lobo C Compressor/Hamilton to Milton Pipeline Project Costs Deferral Account No. 179-142

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-142

Other Deferred Charges - Lobo C Compressor/Hamilton to Milton Pipeline Project Costs

Credit - Account No. 579

Miscellaneous Operating Revenue

To record, as a debit (credit) in Deferral Account No. 179-142, the difference between the actual revenue requirement related to the costs for the Lobo C Compressor/Hamilton to Milton Pipeline Project and the revenue requirement included in rates as approved by the Board.

Debit - Account No.179-142

Other Deferred Charges - Lobo C Compressor/Hamilton to Milton Pipeline Project Costs

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-142, interest on the balance in Deferral Account No. 179-142. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Unauthorized Overrun Non-Compliance Account Deferral Account No. 179-143

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 500

Sales Revenue

Credit - Account No. 179-143

Other Deferred Charges – Unauthorized Overrun Non-Compliance Account

To record as a credit (debit) in Deferral Account No. 179-143 any unauthorized overrun non-compliance charges incurred by interruptible distribution customers for not complying with a distribution interruption.

Debit - Account No. 323

Other Interest Expense

Credit - Account No. 179-143

Other Deferred Charges – Unauthorized Overrun Non-Compliance Account

To record, as a credit (debit) in Deferral Account No. 179-143, interest on the balance in Deferral Account No. 179-143. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Dawn H/Lobo D/Bright C Compressor Project Costs Deferral Account No. 179-144

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-144

Other Deferred Charges - Dawn H/Lobo D/Bright C Compressor Project Costs

Credit - Account No. 579

Miscellaneous Operating Revenue

To record, as a debit (credit) in Deferral Account No. 179-144, the difference between the actual revenue requirement related to the costs for the Dawn H/Lobo D/Bright C Compressor Project and the revenue requirement included in rates as approved by the Board.

Debit - Account No.179-144

Other Deferred Charges – Dawn H/Lobo D/Bright C Compressor Project Costs

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-144, interest on the balance in Deferral Account No. 179-144. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Transportation Tolls and Fuel – Union North West Operations Area Deferral Account No. 179-145

This account is applicable to the North West Operations of Union Gas Limited. Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-145

Other Deferred Charges - Transportation Tolls and Fuel - Union North West Operations

Area

Credit - Account No. 623

Cost of Gas

To record, as a debit (credit) in Deferral Account No. 179-145, the difference in the costs between the actual cost of the transportation portfolio to serve Union North West delivery areas including associated fuel costs and the forecast cost of the transportation portfolio to serve these areas including associated forecast fuel costs as approved by the Board.

Debit - Account No. 179-145

Other Deferred Charges - Transportation Tolls and Fuel – Union North West Operations

Area

Credit - Account No. 623

Cost of Gas

To record, as a debit (credit) in Deferral Account No. 179-145 charges that result from the Limited Balancing Agreement.

Debit - Account No. 500

Sales Revenue

Credit - Account No. 179-145

Other Deferred Charges - Transportation Tolls and Fuel - Union North West Operations

Area

To record, as a credit (debit) in Deferral Account No. 179-145 revenue from T-Service customers for load balancing service resulting from the Limited Balancing Agreement.

Debit - Account No. 179-145

Other Deferred Charges - Transportation Tolls and Fuel – Union North West Operations

Area

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-145 interest expense on the balance in Deferral Account No. 179-145. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Transportation Tolls and Fuel – Union North East Operations Area Deferral Account No. 179-146

This account is applicable to the North East Operations of Union Gas Limited. Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-146

Other Deferred Charges - Transportation Tolls and Fuel - Union North East Operations

Area

Credit - Account No. 623

Cost of Gas

To record, as a debit (credit) in Deferral Account No. 179-146, the difference in the costs between the actual cost of the transportation portfolio to serve Union North East delivery areas including associated fuel costs and the forecast cost of the transportation portfolio to serve these areas including associated forecast fuel costs as approved by the Board.

Debit - Account No. 179-146

Other Deferred Charges - Transportation Tolls and Fuel - Union North East Operations

Area

Credit - Account No. 623

Cost of Gas

To record, as a debit (credit) in Deferral Account No. 179-146 charges that result from the Limited Balancing Agreement.

Debit - Account No. 500

Sales Revenue

Credit - Account No. 179-146

Other Deferred Charges - Transportation Tolls and Fuel - Union North East Operations

Area

To record, as a credit (debit) in Deferral Account No. 179-146 revenue from T-Service customers for load balancing service resulting from the Limited Balancing Agreement.

Debit - Account No. 179-146

Other Deferred Charges - Transportation Tolls and Fuel - Union North East Operations

Area

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-146 interest expense on the balance in Deferral Account No. 179-146. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Union North West Purchase Gas Variance Account Deferral Account No. 179-147

This account is applicable to the North West delivery areas of Union Gas Limited. Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-147

Other Deferred Charges - Union North West Purchase Gas Variance Account

Credit - Account No. 623

Cost of Gas

To record, as a debit (credit) in Deferral Account No. 179-147, the difference between the unit cost of gas purchased each month for the Union North West delivery areas and the unit cost of gas included in the gas sales rates as approved by the Board, including the difference between the actual heat content of the gas purchased and the forecast heat content included in gas sales rates.

Debit - Account No. 179-147

Other Deferred Charges - Union North West Purchase Gas Variance Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-147, interest expense on the balance in Deferral Account No. 179-147. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Union North East Purchase Gas Variance Account Deferral Account No. 179-148

This account is applicable to the North East delivery areas of Union Gas Limited. Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-148

Other Deferred Charges - Union North East Purchase Gas Variance Account

Credit - Account No. 623

Cost of Gas

To record, as a debit (credit) in Deferral Account No. 179-148, the difference between the unit cost of gas purchased each month for the Union North East delivery areas and the unit cost of gas included in the gas sales rates as approved by the Board, including the difference between the actual heat content of the gas purchased and the forecast heat content included in gas sales rates.

Debit - Account No. 179-148

Other Deferred Charges - Union North East Purchase Gas Variance Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-148, interest expense on the balance in Deferral Account No. 179-148. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Burlington Oakville Project Costs Deferral Account No. 179-149

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-149

Other Deferred Charges – Burlington Oakville Project Costs

Credit - Account No. 579

Miscellaneous Operating Revenue

To record, as a debit (credit) in Deferral Account No. 179-149, the difference between the actual revenue requirement related to the costs for the Burlington Oakville Project and the revenue requirement included in rates as approved by the Board.

Debit - Account No.179-149

Other Deferred Charges – Burlington Oakville Project Costs

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-149, interest on the balance in Deferral Account No. 179-149. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

## Accounting Entries for Demand Side Management Cost-Efficiency Incentive Deferral Account ("DSMCEIDA") <u>Deferral Account No. 179-150</u>

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 728

General Expense

Credit - Account No. 179-150

Other Deferred Charges - DSMCEIDA

The purpose of the DSMCEIDA is to record, as a credit in Deferral Account No. 179-150, the differences between Union Gas Limited's (Union or the Company) annual approved DSM budget and the actual amounts spent to achieve the total aggregate annual lifetime savings (cumulative cubic metres of natural gas, or CCM) targets made up of all 100% CCM targets across all programs, in accordance with program evaluation results. Any OEB-approved DSMCEIDA amounts will be available to use in meeting the Company's targets in a subsequent year over the 2015-2020 DSM term.

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#### **UNION GAS LIMITED**

#### Accounting Entries for OEB Cost Assessment Variance Account Deferral Account No. 179-151

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No. 179-151

Other Deferred Charges - OEB Cost Assessment Variance Account

Credit - Account No. 728

General Expense

To record as a debit (credit) in Deferral Account No. 179-151 any differences between OEB cost assessments currently built into rates, and cost assessments that will result from the application of the new cost assessment model effective April 1, 2016.

Debit - Account No. 179-151

Other Deferred Charges - OEB Cost Assessment Variance Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-151, interest on the balance in Deferral Account No. 179-151. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Greenhouse Gas Emissions Impact Deferral Account <u>Deferral Account No. 179-152</u>

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-152

Other Deferred Charges - Greenhouse Gas Emissions Impact Deferral Account

Credit - Account No. 728

General Expense

To record, as a debit (credit) in Deferral Account No. 179-152, the administrative costs associated with the impacts of provincial and federal regulations related to greenhouse gas emission requirements.

Debit - Account No.179-152

Other Deferred Charges - Greenhouse Gas Emissions Impact Deferral Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-152, interest on the balance in Deferral Account No. 179-152. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Base Service North T-Service TransCanada Capacity Deferral Account Deferral Account No. 179-153

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-153

Other Deferred Charges - Base Service North T-Service TransCanada Capacity Deferral

Account

Credit - Account No. 140

Accounts Receivable - Customers

To record, as a debit (credit) in Deferral Account No. 179-153, the differences between revenues and costs for the excess capacity from Parkway to the Union Point of Receipt as part of the Base Service offering of the North T-Service Transportation from Dawn.

Debit - Account No. 179-153

Other Deferred Charges - Base Service North T-Service TransCanada Capacity Deferral

Account

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-153 interest expense on the balance in Deferral Account No. 179-153. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

## Accounting Entries for Greenhouse Gas Emissions Compliance Obligation – Customer-Related <u>Deferral Account No. 179-154</u>

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-154

Other Deferred Charges - Greenhouse Gas Emissions Compliance Obligation -

Customer-Related

Credit - Account No. 579

Miscellaneous Operating Revenue

To record, as a debit (credit) in Deferral Account No. 179-154, the variance between actual customer-related obligation costs and customer-related obligation costs recovered in rates as approved by the Board.

Debit - Account No.179-154

Other Deferred Charges - Greenhouse Gas Emissions Compliance Obligation -

Customer-Related

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-154, interest on the balance in Deferral Account No. 179-154. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Greenhouse Gas Emissions Compliance Obligation – Facility-Related Deferral Account No. 179-155

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-155

Other Deferred Charges – Greenhouse Gas Emissions Compliance Obligation – Facility-

Related

Credit - Account No. 579

Miscellaneous Operating Revenue

To record, as a debit (credit) in Deferral Account No. 179-155, the variance between actual facility-related obligation costs and facility-related obligation costs recovered in rates as approved by the Board.

Debit - Account No.179-155

Other Deferred Charges - Greenhouse Gas Emissions Compliance Obligation - Facility-

Related

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-155, interest on the balance in Deferral Account No. 179-155. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

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#### **UNION GAS LIMITED**

#### Accounting Entries for Panhandle Reinforcement Project Costs <u>Deferral Account No. 179-156</u>

Account numbers are from the Uniform System of Accounts for Gas Utilities, Class A prescribed under the Ontario Energy Board Act.

Debit - Account No.179-156

Other Deferred Charges – Panhandle Reinforcement Project Costs

Credit - Account No. 579

Miscellaneous Operating Revenue

To record, as a debit (credit) in Deferral Account No. 179-156, the difference between the actual net delivery revenue requirement related to the costs for the Panhandle Reinforcement Project and the net delivery revenue requirement included in rates as approved by the Board.

Debit - Account No.179-156

Other Deferred Charges – Panhandle Reinforcement Project Costs

Credit - Account No. 323

Other Interest Expense

To record, as a debit (credit) in Deferral Account No. 179-156, interest on the balance in Deferral Account No. 179-156. Simple interest will be computed monthly on the opening balance in the said account in accordance with the methodology approved by the Board in EB-2006-0117.

## Appendix G

### UNION GAS LIMITED Parkway West Project Revenue Requirement

Line			Reve	nue Requirem	ent	
No.	Particulars (\$000's)	2014	2015	2016	2017	2018
		(a)	(b)	(c)	(d)	(e)
	Rate Base Investment					
1	Capital Expenditures	73,978	144,652	800	0	0
2	Average Investment	8,969	102,133	213,094	208,357	203,254
	Revenue Requirement Calculation:					
	Operating Expenses:					
3	Operating and Maintenance Expenses (1)	0	739	1,615	1,649	1,683
4	Depreciation Expense (2)	485	3,026	5,094	5,105	5,105
5	Property Taxes (3)	236	290	510	521	532
6	Total Operating Expenses	721	4,055	7,218	7,274	7,320
7	Required Return (4)	518	5,898	12,306	12,032	11,737
8	Total Operating Expenses and Return	1,239	9,953	19,524	19,306	19,057
	Income Taxes:					
9	Income Taxes - Equity Return (5)	104	1,182	2,466	2,411	2,352
10	Income Taxes - Utility Timing Differences (6)	(1,618)	(4,762)	(5,534)	(4,536)	(3,672)
11	Total Income Taxes	(1,515)	(3,580)	(3,068)	(2,124)	(1,320)
12	Total Revenue Requirement (7)	(276)	6,373	16,457	17,182	17,737
13	Incremental Project Revenue	0	0	0	0	0
14	Net Revenue Requirement	(276)	6,373	16,457	17,182	17,737

#### Notes:

- (1) 2018 O&M expenses include \$0.488 million in salary, wages and employee expenses, \$0.711 million in contract services and \$0.485 million in materials, utility cost, and company used fuel.
- (2) Depreciation expense at 2013 Board-approved depreciation rates.
- (3) Property taxes include \$0.247 million for land purchases, \$0.195 million for LCU compression and \$0.090 million for pipeline and building taxes.
- (4) The required return for 2018 assumes total rate base of \$203.254 million and a capital structure of 64% long-term debt at 4% and 36% common equity at the 2013 Board-approved return of 8.93%. The 2018 required return calculation is as follows:

203.254 million \* 64% \* 4% = \$5.203 million plus \$203.254 million \* 36% \* 8.93% = \$6.534 million for a total of \$11.737 million.

- (5) Taxes related to the equity component of the return at a tax rate of 26.5%.
- (6) Taxes related to utility timing differences are negative as the capital cost allowance deduction in arriving at taxable income exceeds the provision of book depreciation in the year.
- (7) As per EB-2012-0433 Schedule 12-1, Updated August 2013, line 9.

### UNION GAS LIMITED Brantford to Kirkwall and Parkway D Compressor Project Revenue Requirement

Line			Revenue Re	quirement	
No.	Particulars (\$000's)	2015	2016	2017	2018
		(a)	(b)	(c)	(d)
	Rate Base Investment				
1	Capital Expenditures	200,069	4,007	0	0
2	Average Investment	23,533	197,123	193,535	188,206
	Revenue Requirement Calculation:				
	Operating Expenses:				
3	Operating and Maintenance Expenses (1)	107	642	642	642
4	Depreciation Expense (2)	2,622	5,287	5,329	5,329
5	Property Taxes (3)	142	853	853	853
6	Total Operating Expenses	2,871	6,782	6,824	6,824
7	Required Return (4)	1,359	11,383	11,176	10,868
8	Total Operating Expenses and Return	4,230	18,165	18,001	17,693
	Income Taxes:				
9	Income Taxes - Equity Return (5)	272	2,281	2,240	2,178
10	Income Taxes - Utility Timing Differences (6)	(4,580)	(5,726)	(4,808)	(3,969)
11	Total Income Taxes	(4,307)	(3,445)	(2,568)	(1,791)
12	Total Revenue Requirement (7)	(77)	14,720	15,433	15,902
13	Incremental Project Revenue (8)	1,534	9,204	9,204	9,204
14	Net Revenue Requirement	(1,611)	5,516	6,229	6,698

#### Notes:

- O&M expenses include \$0.012 million for pipeline related O&M and \$0.630 million of annual Parkway Compressor maintenance.
- (2) Depreciation expense at 2013 Board-approved depreciation rates.
- (3) Property taxes include \$0.187 million for compression and \$0.665 million for pipeline and building taxes.
- (4) The required return for 2018 assumes total rate base of \$188.206 million and a capital structure of 64% long-term debt at 4% and 36% common equity at the 2013 Board-approved return of 8.93%. The 2018 required return calculation is as follows:

- (5) Taxes related to the equity component of the return at a tax rate of 26.5%.
- (6) Taxes related to utility timing differences are negative as the capital cost allowance deduction in arriving at taxable income exceeds the provision of book depreciation in the year.
- (7) As per EB-2013-0074 Schedule 10-1 line 9.
- (8) As per EB-2013-0074 Schedule 9-4.

### UNION GAS LIMITED Hamilton-Milton Pipeline and Lobo C Compressor Project Revenue Requirement

Line				
No.	Particulars (\$000's)	2016	2017	2018
		(a)	(b)	(c)
	D. D. Y.			
	Rate Base Investment			
1	Capital Expenditures	378,233	12,482	-
2	Average Investment	44,292	376,925	372,457
	Revenue Requirement Calculation:			
	Operating Expenses:			
3	Operating and Maintenance Expenses (1)	187	1,128	1,150
4	Depreciation Expense (2)	4,528	9,158	9,261
5	Property Taxes (3)	191	1,149	1,172
6	Total Operating Expenses	4,906	11,435	11,583
7	Required Return (6.031% x line 2) (4)	2,671	22,732	22,462
	Income Taxes:			
8	Income Taxes - Equity Return (5)	487	4.147	4,097
9	Income Taxes - Utility Timing Differences (6)	(7,381)	(9,192)	(7,892)
10	Total Income Taxes	(6,894)	(5,046)	(3,795)
11	Total Revenue Requirement (line 6 + line 7 + line 10)	683	29,121	30,251
12	Incremental Project Revenue (7)	1,559	9,357	9,357
12	meremental i foject revenue (1)	1,339	2,331	7,331
13	Net Revenue Requirement (line 11 - line 12)	(876)	19,764	20,894

- (1) Expenses include salaries and wages, employee-related expenses, fleet costs, materials and operating expenses.
- (2) Depreciation expense at 2013 Board-approved depreciation rates.
- (3) Property taxes in 2018 include \$0.792 million for the Hamilton-Milton pipeline and \$0.380 million for Lobo C compressor and facilities.
- (4) The required return of 6.031% assumes a capital structure of 64% long-term debt at 4.4% and 36% common equity at the 2013 Board-approved return of 8.93% (0.64 \* 0.044 + 0.36 \* 0.0893)
  - The 2018 required return calculation is as follows:
    - \$372.457 million \* 64% \* 4.4% = \$10.488 million plus
    - 372.457 million 36% 8.93% = 11.974 million for a total of 22.462 million.
- (5) Taxes related to the equity component of the return at a tax rate of 25.5%.
- (6) Taxes related to utility timing differences are negative as the capital cost allowance deduction in arriving at taxable income exceeds the provision of book depreciation in the year.
- (7) Project revenue assumes an estimated M12 Dawn-Parkway rate of \$2.546 GJ/mth and an M12 Kirkwall-Parkway rate of \$0.450 GJ/mth.
  - The 2018 revenue is calculated as follows:
    - M12 Dawn-Parkway demands of 270,733 GJ x  $2.546 \times 12 / 1000 = 8.271 \text{ million plus}$
    - M12 Kirkwall-Parkway demands of 36,301 GJ x  $0.450 \times 12 / 1000 = 0.196 \times 10000 = 0.106 \times 1000 = 0.106 \times 1000 = 0.106 \times 1000 = 0.106 \times 1000 =$
    - Union North T-Service demands of 29,115 GJ x  $2.546 \times 12 / 1000 = 0.890 = 0.890$

## UNION GAS LIMITED Burlington to Oakville Project Revenue Requirement

Line				
No.	Particulars (\$000's)	2016	2017	2018
		(a)	(b)	(c)
	D. D. J. J.			
1	Rate Base Investment	117.710	1.767	0
1	Capital Expenditures	117,710	1,767	0
2	Average Investment	13,584	116,312	114,697
	Revenue Requirement Calculation:			
	Operating Expenses:			
3	Operating and Maintenance Expenses (1)	3	16	16
4	Depreciation Expense (2)	1,186	2,390	2,408
5	Property Taxes (3)	20	117_	120
6	Total Operating Expenses	1,208	2,523	2,544
7	Required Return (6.031% x line 2) (4)	819	7,015	6,917
	Income Taxes:			
8	Income Taxes - Equity Return (5)	149	1,280	1,262
9	Income Taxes - Utility Timing Differences (6)	(2,100)	(2,533)	(2,192)
10	Total Income Taxes	(1,951)	(1,254)	(930)
11	Total Revenue Requirement (line 6 + line 7 + line 10)	77	8,284	8,531
12	Incremental Project Revenue			
13	Net Revenue Requirement (line 11 - line 12)	77	8,284	8,531

#### Notes:

- (1) Expenses include labour, contractor services, materials and other operating expenses for the transmission lines of \$0.005 million and stations of \$0.011 million.
- (2) Depreciation expense at 2013 Board-approved depreciation rates.
- (3) Includes pipeline and station property taxes.
- (4) The required return of 6.031% assumes a capital structure of 64% long-term debt at 4.4% and 36% common equity at the 2013 Board-approved return of 8.93% (0.64\*0.044+0.36\*0.0893)

The 2018 required return calculation is as follows:

\$114.697 million \* 64% \* 4.4% = \$3.230 million plus \$114.697 million \* 36% \* 8.93% = \$3.687 million for a total of \$6.917 million.

- (5) Taxes related to the equity component of the return at a tax rate of 25.5%.
- (6) Taxes related to utility timing differences are negative as the capital cost allowance deduction in arriving at taxable income exceeds the provision of book depreciation in the year.

### UNION GAS LIMITED Lobo D, Bright C and Dawn H Compressor Project Revenue Requirement

Line No.	Portionlars (\$000%)	2016	2017	2018
NO.	Particulars (\$000's)			
		(a)	(b)	(c)
	Rate Base Investment			
1	Capital Expenditures	107,400	500,838	14,267
2	Average Investment	11,432	171,034	592,525
	Revenue Requirement Calculation:			
	<del></del>			
	Operating Expenses:			
3	Operating and Maintenance Expenses (1)	0	602	3,623
4	Depreciation Expense (2)	1,677	11,310	19,416
5	Property Taxes (3)	0	175	1,051
6	Total Operating Expenses	1,677	12,086	24,091
7	Required Return (5.77% x line 2) (4)	660	9,877	34,217
	Income Taxes:			
8	Income Taxes - Equity Return (5)	126	1,879	6,510
9	Income Taxes - Utility Timing Differences (6)	(4,178)	(17,084)	(22,179)
10	Total Income Taxes	(4,053)	(15,205)	(15,669)
10	Total mediae Taxes	(4,033)	(13,203)	(13,007)
11	Total Revenue Requirement (line 6 + line 7 + line 10)	(1,716)	6,758	42,639
12	Incremental Project Revenue (7)	-	2,925	17,551
13	Not Payanua Paguirament (line 11 line 12)	(1,716)	3,833	25.000
13	Net Revenue Requirement (line 11 - line 12)	(1,/10)	3,033	25,088

- (1) Expenses include salaries and wages, employee-related expenses, fleet costs, materials and operating expenses.
- (2) Depreciation expense at 2013 Board-approved depreciation rates.
- (3) Property taxes in 2018 include \$0.366 million for the Dawn H compressor and facilities and \$0.685 million for Lobo D and Bright C compressors and facilities.
- (4) The required return of 5.77% assumes a capital structure of 64% long-term debt at 4.0% and 36% common equity at the 2013 Board-approved return of 8.93% (0.64 \* 0.04 + 0.36 \* 0.0893)
  - The 2018 required return calculation is as follows:
    - \$592.525 million \* 64% \* 4.0% = \$15.169 million plus
    - \$592.525 million \* 36% \* 8.93% = \$19.048 million for a total of \$34.217 million.
- (5) Taxes related to the equity component of the return at a tax rate of 25.5%.
- (6) Taxes related to utility timing differences are negative as the capital cost allowance deduction in arriving at taxable income exceeds the provision of book depreciation in the year.
- (7) Project revenue assumes an estimated M12 Dawn-Parkway rate of \$2.937 GJ/mth, an M12 Kirkwall-Parkway rate of \$0.517 GJ/mth and a Dawn Compression rate of \$0.232 GJ/mth.
  - The 2018 revenue is calculated as follows:
    - M12 Dawn-Parkway demands of 441,778 GJ x \$2.937 x 12 / 1000 = \$15.570 million plus
    - C1 Dawn-Parkway demands (North T-Service) of 5,975 GJ x \$2.937 x 12 / 1000 = \$0.211 million plus
    - M12 Kirkwall-Parkway demands of 84,854 GJ x  $0.517 \times 12 / 1000 = 0.526 \times 10000 = 0.526 \times 1000 = 0.526 \times 1000 = 0.526 \times 1000 = 0.526 \times 1000 =$
    - M12/C1 Dawn Compression demands of 447,753 GJ x \$0.232 x 12 / 1000 = \$1.247 million

## UNION GAS LIMITED Panhandle Reinforcement Project Revenue Requirement

Line		
No.	Particulars (\$000's)	2018
		(a)
	Rate Base Investment	
1	Capital Expenditures	20,818
2	Average Investment	249,046
	Revenue Requirement Calculation:	
	Operating Expenses:	
3	Operating and Maintenance Expenses	15
4	Depreciation Expense	5,185
5	Property Taxes	1,569
6	Total Operating Expenses	6,769
7	Required Return (5.775% x line 2)	14,382
	Income Taxes:	
8	Income Taxes - Equity Return	2,882
9	Income Taxes - Utility Timing Differences	(6,356)
10	Total Income Taxes	(3,474)
11	Total Revenue Requirement (line 6 + line 7 + line 10) (1)	17,677
12	Incremental Project Revenue (2)	3,104
13	Net Revenue Requirement (line 11 - line 12)	14,574

- (1) EB-2016-0186, Exhibit A, Appendix B, Schedule 1, column (b), line 11.
- (2) Incremental Project Revenue includes incremental project transmission and distribution margin based on October 2017 QRAM rates.

## UNION GAS LIMITED 2018 Revenue Requirement Allocation to Rate Classes Based on Board-Approved Depreciation Rates

Line No.	Particulars	Total Revenue Requirement (\$000's)	Incremental Project Revenue (2) (\$000's)	Net Revenue Requirement (\$000's)
		(a)	(b)	(c) = (a - b)
1	Rate M1	2,563	648	1,915
2	Rate M2	1,314	221	1,092
3	Rate M4	1,585	237	1,348
4	Rate M5	(40)	3	(43)
5	Rate M7	489	73	415
6	Rate M9	(2)	-	(2)
7	Rate M10	(0)	-	(0)
8	Rate T1	1,209	180	1,029
9	Rate T2	8,837	1,295	7,542
10	Rate T3	(7)	-	(7)
11	Subtotal - Union South	15,948	2,658	13,290
12	Excess Utility Space	(35)	-	(35)
13	Rate C1	2,706	368	2,338
14	Rate M12	(191)	-	(191)
15	Rate M13	0	-	0
16	Rate M16	528	77	451
17	Subtotal - Ex-franchise	3,009	445	2,564
18	Rate 01	(941)	-	(941)
19	Rate 10	(131)	-	(131)
20	Rate 20	(99)	-	(99)
21	Rate 100	(77)	-	(77)
22	Rate 25	(29)	-	(29)
23	Subtotal - Union North	(1,277)	<u> </u>	(1,277)
24	Gas Supply Admin	(3)	<u> </u>	(3)
25	In-franchise (line 11 + line 23 + line 24)	14,668	2,658	12,010
26	Ex-franchise (line 17)	3,009	445	2,564
27	Total	17,677 (1)	3,104 (3)	14,574

- (1) EB-2016-0186, Exhibit A, Appendix B, Schedule 3, column (a), line 26.
- (2) Allocation of Incremental Project Revenue to rate classes based on the 2013 Board-approved Ojibway/St. Clair design day demands updated for the demands of the project.
- (3) Rate Order, Appendix G, p. 2, line 12.

## **Working Papers**

Filed: 2017-09-26 EB-2017-0087 Rate Order

### 2018 Rates Overview of Working Papers

Schedule 1	Calculation of Price Cap Index ("PCI") – This schedule provides the calculation of the average annual percentage change in the GDP IPI FDD over the four quarters ending June 2017.
Schedule 2	Calculation of Price Cap Adjustment – This schedule provides the 2018 PCI applied to the 2017 approved revenue adjusted for DSM, PDO, capital pass-through, and upstream transportation costs to arrive at the total price cap adjustment.
Schedule 3	<b>Summary of 2018 Proposed Rates</b> – This schedule summarizes the proposed 2018 rate changes by rate class.
Schedule 4	<b>Detailed In-franchise and Ex-franchise Rates</b> – This schedule provides detailed support for the proposed rate changes summarized in Schedule 3.
Schedule 5	Rate Impact Continuity – This schedule provides the rate class-specific impacts of each of the 2018 revenue adjustments to arrive at the final 2018 revenue.
Schedule 6	<b>Percentage Change in Average Unit Price</b> – This schedule identifies average unit price changes for in-franchise rate classes.
Schedule 7	<b>Summary of Approved 2017 Revenue Changes</b> – This schedule summarizes the approved revenue changes that occurred during 2017.
Schedule 8	<b>General Service Customer Bill Impacts</b> – This schedule provides illustrative customer bill impacts for general service customers in Rate M1, Rate M2, Rate 01, and Rate 10.
Schedule 9	Calculation of Sales Service and Direct Purchase Bill Impacts for Typical Small and Large Customers – This schedule provides illustrative customer bill impacts for all Union North and Union South in-franchise rate classes based on typical small and large customers within each rate class.
Schedule 10	Summary of 2018 Capital Pass-Through Adjustments – This schedule summarizes the 2018 cost adjustments by rate class related to Union's capital pass-through projects.

- Schedule 11 2017 and 2018 DSM Budget Allocation by Rate Class This schedule provides the 2017 and 2018 DSM budget included in rates.
- Schedule 12 Calculation of 2018 NAC Target Percentage Change This schedule provides the calculation of the NAC target percentage change used to adjust billing units for general service classes (Rate M1, Rate M2, Rate 01 and Rate 10).
- Schedule 13 Summary of S&T Transactional Margin Included in 2018 Rates This schedule provides the S&T transactional margin included in infranchise rates.
- Schedule 14 Summary of Gas Supply Optimization Margin Included in 2018

  Rates This schedule summarizes the gas supply optimization margin amounts included in rates and shows the allocation of the ratepayer portion of the margin to rate classes.
- Schedule 15 Total Upstream Transportation Costs in Union North Rates This schedule summarizes the approved changes to upstream transportation costs that occurred during 2017 through the QRAM process that are not subject to the price cap adjustment.
- Schedule 16 Calculation of 2018 Gas Supply Administration Charge This schedule provides the calculation of the 2018 gas supply administration charge included in commodity rates.
- Schedule 17 LRAM Volume Adjustment This schedule provides the LRAM-related volume adjustments by contract rate class included in the 2018 rate calculations.
- Schedule 18 Calculation of Supplemental Service Charges This schedule provides the calculation of Union's supplemental service charges.
- Schedule 19 Bundled Storage Rate Detail Southern Operations Area This schedule provides the derivation of the Rate M1 and Rate M2 bundled storage rates.
- Schedule 20 Parkway Delivery Obligation ("PDO") Rate Adjustments This schedule provides the 2018 costs related to the PDO and the Parkway Delivery Commitment Incentive ("PDCI").

Filed: 2017-09-26 EB-2017-0087 Rate Order

- Schedule 21 Ex-Franchise Transportation Fuel Ratios This schedule calculates the fuel ratios including adjustments related to the PCI and the PDO compressor fuel as shown at Working Paper Schedule 20, page 3.
- Schedule 22 In-Franchise Transportation Fuel Ratios This schedule calculates the fuel ratios including adjustments related to the PCI and the PDO compressor fuel as shown at Working Paper Schedule 20, page 3.
- Schedule 23 Union North Storage and Transportation Costs This schedule provides the Union North storage and transportation costs for each of the Union North West and Union North East Zones by rate class for the 2018 Gas Supply Plan.

Filed: 2017-09-26 EB-2017-0087 Rate Order Working Papers Schedule 1

## <u>UNION GAS LIMITED</u> Calculation of Price Cap Index <u>Effective January 1, 2018</u>

Line No.	Particulars	Annual % Change in GDP IPI FDD (1)		
1 2	July - September 2016 October - December 2016	0.95% 1.21%		
3	January - March 2017	1.29%		
4	April - June 2017	1.63%		
5	Inflation Factor (Average % Change)	1.27%		
		Inflation Factor (a)	X Factor (2)	2018 PCI (c) = (a-b)
6	2018 Price Cap Index	1.27%	0.76%	0.51%

- (1) Gross Domestic Product Implicit Price Index Final Domestic Demand, sourced from Statistics Canada CanSim Table 380-0066.
- (2) Equal to 60% of the Inflation factor in column (a) per EB-2013-0202 Settlement Agreement, p.22.

Filed: 2017-09-26 EB-2017-0087 Rate Order Working Papers Schedule 2

## UNION GAS LIMITED Calculation of Price Cap Adjustment Effective January 1, 2018

Line No.	Particulars (\$000's)	General Service	In-Franchise Contract	Total In-Franchise	Ex-Franchise	Total Company	
		(a)	(b)	(c) = (a+b)	(d)	(e) = (c+d)	
	Calculation of Price Cap Base Revenue						
1	2017 Current Approved Revenue (1)	763,982	147,114	911,095	256,219	1,167,315	
	Current year's pre-cap adjustments:						
2	2017 DSM	(42,592)	(15,978)	(58,570)	-	(58,570)	(2)
3	2017 Capital Pass-Throughs	9,575	(3,104)	6,471	(83,603)	(77,131)	(3)
4	2017 Parkway Delivery Obligation	(15,856)	(9,261)	(25,117)	(663)	(25,780)	(4)
5	Upstream Transportation	(88,853)	(7,383)	(96,236)	-	(96,236)	(5)
6	Price Cap Base Revenue	626,256	111,388	737,644	171,954	909,598	
7	2018 Price Cap Adjustment (Line 6 * PCI %)	3,194	568	3,762	877	4,639	
8	2018 PCI %	0.51% (6)	)				

- (1) Rate Order, Working Papers, Schedule 3, column (a). Rates per Board-approved October 1, 2017 QRAM (EB-2017-0278), excluding revenue associated with the Gas Supply Admin charge, Cap-and-Trade charges, Rate C1 Market Based Storage Services, Short-Term Transportation, Exchanges and Other Transactional not subject to escalation.
- (2) Rate Order, Working Papers, Schedule 3, column (c).
- (3) Rate Order, Working Papers, Schedule 3, column (d), excluding Gas Supply Admin charge and allocation to ex-franchise services not subject to escalation per Note (1).
- (4) Rate Order, Working Papers, Schedule 3, column (e), excluding allocation to ex-franchise services not subject to escalation per Note (1).
- (5) Rate Order, Working Papers, Schedule 15, column (f).
- (6) Rate Order, Working Papers, Schedule 1, column (c).

## <u>UNION GAS LIMITED</u> <u>Summary of 2018 Proposed Rates</u>

		Exclud			Adjustments to					_		Adjustments to 20				Exclud	
Line		Cap-and-Trac Current Approved Revenue (1)	e Charges Current Approved Rates (2)	2017 DSM (3)	2017 Capital Pass-Throughs (4)	(5)	2017 Upstream Transportation (6)	Adjusted Revenue	Price Cap Index (7)	Price Cap Index	2018 DSM (8)	2018 Capital Pass-Throughs (9)	(10)	Upstream Transportation (11)	Proposed Revenue	Cap-and-Trac Proposed Rates	Rate Change
No.	Particulars	(\$000's) (a)	(cents / m³) (b)	(\$000's) (c)	(\$000's) (d)	(\$000's) (e)	(\$000's) (f)	(\$000's) (g)	(\$000's) (h)	(%) (i)	(\$000's)	(\$000's) (k)	(\$000's) (I)	(\$000's) (m)	(\$000's) (n)	(cents / m <sup>3</sup> )	<u>(%)</u>
		(a)	(D)	(C)	(u)	( <del>e</del> )	(1)	(9)	(11)	(1)	(J)	(K)	(1)	(111)	(11)	(0)	(p)
	North Delivery																
1	Rate 01	159,704	17.5559	(8,100)	7,509	-	(1,836)	157,278	802	0.51%	9,124	(8,971)	-	1,836	160,069	18.0596	2.9%
2	Rate 10	20,666	6.1303	(2,951)	941	-	(485)	18,171	93	0.51%	3,093	(1,090)	-	485	20,752	6.3664	3.9%
3	Rate 20	13,580	2.2403	(1,734)	783	-	(132)	12,497	64	0.51%	1,773	(911)	-	132	13,555	2.2421	0.1%
4	Rate 25	4,340	2.7201	-	242	-	-	4,582	23	0.51%	-	(285)	-	-	4,320	2.7076	-0.5%
5	Rate 100	15,230	0.8392	(1,882)	665	-	(9)	14,004	71	0.51%	1,895	(778)	-	9	15,201	0.8380	-0.1%
6	Total North Delivery	213,520		(14,667)	10,140	_	(2,461)	206,532	1,053		15,885	(12,034)	-	2,461	213,897		
	South Delivery & Storage																
7	Rate M1	410,061	14.1538	(21,550)	8,077	(11,833)	_	384,756	1,962	0.51%	24,375	(5,197)	11,557	_	417,453	14.8650	5.0%
8	Rate M2	61,395	5.4475	(9,992)	(963)	(4,013)	_	46,427	237	0.51%	10,442		3,908	_	63,801	5.9089	8.5%
9	Rate M4	14,995	4.2933	(2,696)	(419)	(1,290)	-	10,590	54	0.51%	2,742	1,970	1,218	-	16,573	4.8857	13.8%
10	Rate M5A	13,634	2.9291	(3,589)	577	(253)	-	10,368	53	0.51%	3,638	(671)	171	-	13,559	3.0125	2.8%
11	Rate M7	4,900	3.9255	(940)	(220)	(575)	-	3,165	16	0.51%	964	739	548	-	5,432	4.5554	16.0%
12	Rate M9	1,023	1.6844	-	(111)	(227)	-	686	3	0.51%	-	149	210	-	1,048	1.7259	2.5%
13	Rate M10	13	6.7289	-	(2)	(5)	-	5	0	0.51%	-	3	5	-	14	7.1737	6.6%
14	Rate T1	11,618	2.2725	(1,532)	(269)	(812)	-	9,005	46	0.51%	1,573	1,378	718	-	12,719	2.5070	10.3%
15	Rate T2	51,985	1.1308	(3,605)	(3,199)	(4,679)	-	40,502	207	0.51%	3,653	11,379	4,263	-	60,004	1.3139	16.2%
16	Rate T3	6,769	2.4820	-	(815)	(1,419)	-	4,535	23	0.51%	-	1,091	1,361	-	7,011	2.5708	3.6%
17	Total South Delivery & Storage	576,392		(43,903)	2,656	(25,106)		510,038	2,601		47,387	13,628	23,959		597,614		
18	Total In-Franchise Delivery	789,912		(58,570)	12,796	(25,106)	(2,461)	716,570	3,655		63,272	1,594	23,959	2,461	811,511		

Notes:
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- Rate Order, Working Papers, Schedule 7, column (g).
  Rate Order, Working Papers, Schedule 4, column (c).
  Rate Order, Working Papers, Schedule 11, column (a).
  EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (m).
  EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (n) + (1) (2) (3) (4) (5)
- EB-2016-0296, Exhibit 7, Schedule 3, column (e). Rate Order, Working Papers, Schedule 15, column (f). (6)

- (7) (8) (9) (10)
- Rate Order, Working Papers, Schedule 2, line 7.
  Rate Order, Working Papers, Schedule 11, column (b).
  Rate Order, Working Papers, Schedule 10.
  Rate Order, Working Papers, Schedule 20, p. 1, column (i).
  Rate Order, Working Papers, Schedule 23, p. 1, column (c). (11)

## <u>UNION GAS LIMITED</u> <u>Summary of 2018 Proposed Rates</u>

		Exclud Cap-and-Trad			Adjustments to	2017 Base Ra 2017 Parkway	ates 2017	-		_		Adjustments to 2	018 Base Rate 2018 Parkway			Exclude Cap-and-Tra	
Line No.	Particulars	Current Approved Revenue (1) (\$000's)	Current Approved Rates (2) (cents / m³) (b)	2017 DSM (3) (\$000's) (c)	2017 Capital Pass-Throughs (4) (\$000's) (d)	Delivery Obligation (5) (\$000's)	Upstream Transportation (6) (\$000's)	Adjusted Revenue (\$000's)	Price Cap Index (7) (\$000's) (h)	Price Cap Index (%)	2018 DSM (8) (\$000's)	2018 Capital Pass-Throughs (9) (\$000's) (k)	Delivery Obligation (10) (\$000's)	Upstream Transportation (11) (\$000's) (m)	Proposed Revenue (\$000's)	Proposed Rates (cents / m³)	Rate Change (%) (p)
	North Transportation & Storage																
1	Rate 01	86,683	9.5289	-	(4,769)	(8)	(66,632)	15,274	78	0.51%	-	6,081	7	66,811	88,251	9.9568	4.5%
2	Rate 10	25,473	7.5561	-	(1,220)	(2)	(19,900)	4,350	22	0.51%	-	1,562	2	19,938	25,873	7.9375	5.0%
3	Rate 20	7,995	6.5571	-	(318)	(1)	(6,358)	1,318	7	0.51%	-	405	1	6,352	8,083	6.6286	1.1%
4	Rate 25	696	1.6229	-	4	-	(681)	20	0	0.51%	-	(6)	-	664	677	1.5784	-2.7%
5	Rate 100	336	-	-	(20)	(0)	(203)	112	1	0.51%	-	25	0	203	342	-	
6	Total North Transportation & Storage	121,184		-	(6,324)	(11)	(93,775)	21,074	107		-	8,066	11	93,968	123,226		
7	Gas Supply Admin Charge	6,723		-	66	<u> </u>		6,789	<u>-</u>		-	(100)	<u>-</u>		6,689		
8	Total In-Franchise	917,819		(58,570)	6,537	(25,117)	(96,236)	744,433	3,762		63,272	9,560	23,970	96,429	941,425		
	Ex-Franchise															-	
9	Rate M12	245,065		-	(81,408)	(652)	-	163,005	831	0.51%	-	114,965	680	-	279,481		14.0%
10	Rate M13	407		-	5	-	-	412	2	0.51%	-	(2)	-	-	412		1.1%
11	Rate M16	711		-	10	(3)	-	718	4	0.51%	-	441	2	-	1,165		63.7%
12	Rate C1	47,403		-	(1,922)	(213)	-	45,268	40		-	4,670	203	-	50,181		5.9%
13	Total Ex-Franchise	293,587		-	(83,315)	(868)		209,404	877		-	120,074	885		331,239		
14	Total In-Franchise & Ex-Franchise	1,211,406		(58,570)	(76,778)	(25,985)	(96,236)	953,836	4,639		63,272	129,633	24,855	96,429	1,272,665		

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- (1) (2) (3) (4)

- Rate Order, Working Papers, Schedule 7, column (g).
  Rate Order, Working Papers, Schedule 4, column (c).
  Rate Order, Working Papers, Schedule 11, column (a).
  EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (m).
  EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (n) + (5)
- EB-2016-0296, Exhibit 7, Schedule 3, column (e).
- (6) Rate Order, Working Papers, Schedule 15, column (f).

# Notes: (7) (8) (9)

- Rate Order, Working Papers, Schedule 2, line 7.
  Rate Order, Working Papers, Schedule 11, column (b).
  Rate Order, Working Papers, Schedule 10.
  Rate Order, Working Papers, Schedule 20, p. 1, column (i).
  Rate Order, Working Papers, Schedule 23, p. 1, column (c). (10) (11)

#### **UNION GAS LIMITED** Union North In-Franchise Customers Effective January 1, 2018

							Adjustments to 2	017 Base Rates				
Line No.	Particulars	Billing <u>Units</u>	Current Approved Forecast Usage (1) (a)	Current Approved Revenue (2) (\$000s)	Current Approved Rates (3) (cents / m³)	2017 DSM (4) (\$000s) (d)	2017 Capital Pass-Throughs (5) (\$000's) (e)	2017 Parkway Delivery Obligation (6) (\$000's)	2017 Upstream Transportation (7) (\$000's)	Adjusted Revenue (\$000's) (h) = (b+d+e+f+g)	Price Cap Index (8) 0.51% (\$000's)	Price Cap Index (%)
	Rate 01 General Service											
1	Monthly Charge Monthly Delivery Charge - All Zones	bills	3,839,732	80,634	\$21.00	-	5,499	-	-	86,134	439	
2	First 100 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	268,242	24,418	9.1028	(2,501)	621	-	(578)	21,958	112	
3	Next 200 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	304,582	27,016	8.8698	(2,768)	687	-	(621)	24,314	124	
4	Next 200 m <sup>3</sup>	10³m³	132,871	11,297	8.5021	(1,157)	287	-	(260)	10,167	52	
5	Next 500 m <sup>3</sup>	10³m³	90,752	7,410	8.1646	(759)	188	-	(171)	6,668	34	
6	Over 1,000 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	113,243	8,930	7.8858	(915)	227		(206)	8,037	41	
7	Delivery Commodity charge - 01	-	909,690	79,070	8.6920	(8,100)	2,010		(1,836)	71,144	363	0.51%
8	Total Delivery - 01	- -	909,690	159,704	17.5559	(8,100)	7,509		(1,836)	157,278	802	0.51%
	Gas Transportation											
9	Union North West	10 <sup>3</sup> m <sup>3</sup>	267,830	18,369	6.8585	-	(29)	-	(18,315)	25	0	
10	Union North East	10 <sup>3</sup> m <sup>3</sup>	659,134	19,775	3.0002		(72)		(18,069)	1,635	8	
11	Transportation - 01	-	926,963	38,144	4.1150		(101)		(36,384)	1,660	8	0.51%
	Storage											
12	Union North West	10 <sup>3</sup> m <sup>3</sup>	262,839	5,401	2.0547		(1,349)	(2)	(1,289)	2,760	14	
13	Union North East	10³m³	646,851	43,138	6.6690		(3,319)	(5)	(28,959)	10,854	55	
14	Storage - 01	-	909,690	48,539	5.3358		(4,668)	(8)	(30,249)	13,615	69	0.51%
15	Total Rate 01	- -	909,690	246,388	27.0848	(8,100)	2,740	(8)	(68,468)	172,552	880	0.51%

- (1) (2) (3) EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (t).
- Rate Order, Working Papers, Schedule 7, column (g). EB-2017-0278, Appendix A, rates effective October 1, 2017 (excludes Price Adjustments), minus Cap-and-Trade facility-related unit rates per EB-2016-0296, Exhibit 7, Schedule 1, p. 2, column (g) (where applicable).

  EB-2016-0245, Rate Order, Working Papers, Schedule 11, column (b).

  EB-2016-0245, Rate Order, Working Papers, Schedule 10, column (d).

  EB-2015-0245, Rate Order, Working Papers, Schedule 20, p. 1, column (i) + EB-2016-0296, Exhibit 7, Schedule 2, p. 1, column (i).

  Rate Order, Working Papers, Schedule 15, column (f).

  Rate Order, Working Papers, Schedule 2, line 8.

#### UNION GAS LIMITED Union North In-Franchise Customers Effective January 1, 2018

				Adjustments to	2018 Base Rat							
			2018	2018 Capital	2018 Parkway Delivery	2018 Upstream	Monthly Customer		NAC / LRAM Usage		Proposed	Rates
Line		Billing	DSM (9)	Pass-Throughs (10)	(11)	Transportation (12)	Charge Adjustment	Proposed Revenue	Adjustment (13)	Proposed Forecast	Rates	Rate Change
No.	Particulars	Units	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(10 <sup>3</sup> m <sup>3</sup> )	Usage	(cents / m³)	(%)
			(k)	(I)	(m)	(n)	(o)	(p)= sum(h:o)	(d)	(r) = (a + q)	(s) = (p / r)	(t)
	Rate 01 General Service											
1	Monthly Charge	bills	-	(6,669)	-	-	730	80,634	-	3,839,732	\$21.00	
	Monthly Delivery Charge - All Zones											
2	First 100 m <sup>3</sup>	10³m³	2,818	(711)	-	578	(226)	24,529	(6,885)	261,357	9.3853	
3	Next 200 m <sup>3</sup>	10³m³	3,117	(787)	-	621	(249)	27,141	(7,818)	296,764	9.1457	
4	Next 200 m <sup>3</sup>	10³m³	1,304	(329)	-	260	(104)	11,349	(3,411)	129,460	8.7665	
5	Next 500 m <sup>3</sup>	10³m³	855	(216)	-	171	(68)	7,444	(2,329)	88,423	8.4185	
6	Over 1,000 m <sup>3</sup>	10³m³	1,030	(260)		206	(82)	8,971	(2,907)	110,336	8.1310	
7	Delivery Commodity charge - 01		9,124	(2,302)		1,836	(730)	79,435	(23,350)	886,340	8.9621	
8	Total Delivery - 01		9,124	(8,971)		1,836	0	160,069	(23,350)	886,340	18.0596	2.9%
	Gas Transportation											
9	Union North West	10³m³	-	30	-	18,317		18,371	-	267,830	6.8594	
10	Union North East	10³m³		74		18,245		19,962		659,134	3.0285	
11	Transportation - 01			104		36,562		38,333		926,963	4.1353	0.5%
	Storage											
12	Union North West	10³m³	-	1,727	2	1,291	-	5,795	(6,747)	256,092	2.2627	
13	Union North East	10³m³		4,250	5	28,958	<u> </u>	44,123	(16,603)	630,247	7.0010	
14	Storage - 01			5,977	7	30,249	-	49,918	(23,350)	886,340	5.6319	5.5%
15	Total Rate 01		9,124	(2,890)	7	68,647	0	248,320	(23,350)	886,340	28.0164	3.4%

- Notes:

  (9) Rate Order, Working Papers, Schedule 11, column (b).
  (10) Rate Order, Working Papers, Schedule 10, column (d).
  (11) Rate Order, Working Papers, Schedule 20.
  (12) Rate Order, Working Papers, Schedule 23, column (c).
  (13) Rate Order, Working Papers, Schedule 12, p. 2 and 3, column (c) and Rate Order, Working Papers, Schedule 17, column (a).

#### **UNION GAS LIMITED** Union North In-Franchise Customers Effective January 1, 2018

							Adjustments to 20					
Line No.	Particulars	Billing Units	Current Approved Forecast Usage (1)	Current Approved Revenue (2) (\$000's)	Current Approved Rates (3) (cents / m³)	2017 DSM (4) (\$000's)	2017 Capital Pass-Throughs (5) (\$000's)	2017 Parkway Delivery Obligation (6) (\$000's)	Upstream Transportation (8) (\$000's)	Adjusted Revenue (\$000's)	Price Cap Index (8) 0.51% (\$000's)	Price Cap Index (%)
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h) = (b+d+e+f+g)	(i)	(j)
	Rate 10 General Service											
1	Monthly Charge	bills	24,629	1,724	\$70.00	-	303	-	-	2,027	10	
	Monthly Delivery Charge - All Zones		,	,	•					,		
2	First 1,000 m <sup>3</sup>	10³m³	24,725	1,887	7.6310	(294)	64	-	(49)	1,608	8	
3	Next 9,000 m <sup>3</sup>	10³m³	133,487	8,274	6.1985	(1,289)	279	-	(214)	7,050	36	
4	Next 20,000 m <sup>3</sup>	10³m³	84,909	4,693	5.5269	(731)	158	-	(118)	4,001	20	
5	Next 70,000 m <sup>3</sup>	10³m³	64,380	3,213	4.9901	(500)	108	-	(81)	2,739	14	
6	Over 100,000 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	29,612	875	2.9564	(136)	29		(22)	746	4	
7	Delivery Commodity charge - 10	-	337,112	18,942	5.6188	(2,951)	638		(485)	16,144	82	0.51%
8	Total Delivery - 10	- -	337,112	20,666	6.1303	(2,951)	941		(485)	18,171	93	0.51%
	Gas Transportation											
9	Union North West	10³m³	82,150	4,933	6.0054	-	0	-	(4,931)	3	0	
10	Union North East	10³m³	261,380	7,219	2.7620		1		(6,632)	588	3	
11	Transportation - 10	-	343,530	12,153	3.5376		2		(11,563)	591	3	0.51%
	Storage											
12	Union North West	10 <sup>3</sup> m <sup>3</sup>	80,615	1,244	1.5437		(292)	(1)	(301)	651	3	
13	Union North East	$10^{3}$ m <sup>3</sup>	256,497	12,075	4.7078		(930)	(2)	(8,037)	3,107	16	
14	Storage - 10	-	337,112	13,320	3.9512		(1,222)	(2)	(8,337)	3,758	19	0.51%
15	Total Rate 10	- -	337,112	46,138	13.6864	(2,951)	(280)	(2)	(20,385)	22,521	115	0.51%

- EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (t).
- (1) (2) (3) Rate Order, Working Papers, Schedule 7, column (g). EB-2017-0278, Appendix A, rates effective October 1, 2017 (excludes Price Adjustments), minus Cap-and-Trade facility-related unit rates per EB-2016-0296, Exhibit 7,
- Schedule 1, p. 2, column (g) (where applicable).

  EB-2016-0245, Rate Order, Working Papers, Schedule 11, column (b).

  EB-2016-0245, Rate Order, Working Papers, Schedule 10, column (d).

  EB-2015-0245, Rate Order, Working Papers, Schedule 20, p. 1, column (i) + EB-2016-0296, Exhibit 7, Schedule 2, p. 1, column (i).

  Rate Order, Working Papers, Schedule 15, column (f).

  Rate Order, Working Papers, Schedule 2, line 8.

				Adjustments to 20	)18 Base Rates							
			2018	2018 Capital	2018 Parkway Delivery	2018 Upstream	Customer		NAC / LRAM Usage		Proposed	Rates
Line		Billing	DSM (9)	Pass-Throughs (10)	Obligation (11)	Transportation (12)	Charge Adjustment	Proposed Revenue	Adjustment (13)	Proposed Forecast	Rates	Rate Change
No.	Particulars	Units	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(10³m³)	Usage	(cents / m³)	(%)
			(k)	(I)	(m)	(n)	(o)	(p)= sum(h:o)	(q)	(r) = (a + q)	(s) = (p / r)	(t)
	Rate 10 General Service											
1	Monthly Charge	bills	-	(361)	-	-	47	1,724	-	24,629	\$70.00	
	Monthly Delivery Charge - All Zones											
2	First 1,000 m <sup>3</sup>	10³m³	308	(73)	-	49	(9)	1,891	(818)	23,907	7.9109	
3	Next 9,000 m <sup>3</sup>	10³m³	1,351	(319)	-	214	(38)	8,294	(4,415)	129,072	6.4258	
4	Next 20,000 m <sup>3</sup>	10³m³	766	(181)	-	118	-	4,726	(2,808)	82,100	5.7562	
5	Next 70,000 m <sup>3</sup>	10³m³	525	(124)	-	81	-	3,235	(2,129)	62,251	5.1971	
6	Over 100,000 m <sup>3</sup>	10³m³	143	(34)		22		882	(979)	28,632	3.0790	
7	Delivery Commodity charge - 10		3,093	(729)		485	(47)	19,028	(11,150)	325,962	5.8375	
8	Total Delivery - 10		3,093	(1,090)		485		20,752	(11,150)	325,962	6.3664	3.9%
	Gas Transportation											
9	Union North West	10³m³	-	(1)	-	4,931	-	4,934	-	82,150	6.0056	
10	Union North East	10³m³		(2)		6,669		7,258		261,380	2.7768	
11	Transportation - 10		-	(3)	-	11,600	-	12,192		343,530	3.5489	0.3%
	Storage											
12	Union North West	10³m³	-	374	1	301	-	1,330	(2,666)	77,949	1.7066	
13	Union North East	10³m³	-	1,190	2	8,036	-	12,351	(8,483)	248,013	4.9801	
14	Storage - 10		-	1,564	2	8,338	-	13,682	(11,150)	325,962	4.1973	6.2%
15	Total Rate 10		3,093	472	2	20,422		46,625	(11,150)	325,962	14.3038	4.5%

- Notes:

  (9) Rate Order, Working Papers, Schedule 11, column (b).

  (10) Rate Order, Working Papers, Schedule 10, column (d).

  (11) Rate Order, Working Papers, Schedule 20.

  (12) Rate Order, Working Papers, Schedule 23, column (c).

  (13) Rate Order, Working Papers, Schedule 12, p. 2 and 3, column (c) and Rate Order, Working Papers, Schedule 17, column (a).

							Adjustments to 20					
Line No.	Particulars	Billing Units	Current Approved Forecast Usage (1) (a)	Current Approved Revenue (2) (\$000's)	Current Approved Rates (3) (cents / m³) (c)	2017 DSM (4) (\$000's)	2017 Capital Pass-Throughs (5) (\$000's) (e)	2017 Parkway Delivery Obligation (6) (\$000's)	Upstream Transportation (8) (\$000's)	Adjusted Revenue (\$000's) (h) = (b+d+e+f+g)	Price Cap Index (8) 0.51% (\$000's)	Price Cap Index (%) (j)
1	Rate 20 Medium Volume Firm Service Monthly Charge	bills	748	662	\$884.46	-	97	-	-	759	4	
2 3 4 5 6	Monthly Demand Charge First 70,000 m³ All over 70,000 m³ Monthly Commodity Charge First 852,000 m³ All over 852,000 m³ Delivery (Commodity/Demand)	10 <sup>3</sup> m <sup>3</sup> /d 10 <sup>3</sup> m <sup>3</sup> /d 10 <sup>3</sup> m <sup>3</sup> 10 <sup>3</sup> m <sup>3</sup>	23,260 19,701 318,773 287,403 606,176	6,660 3,317 1,726 1,112 12,815	28.6326 16.8374 0.5413 0.3870 2.1140	(752) (375) (369) (238) (1,734)	298 148 146 94 686	- - - - -	(80) (52) (132)	6,205 3,091 1,423 916 11,635	32 16 7 5 59	0.51%
8	Transportation Account Charge Total Delivery - 20	10³m³ _ -	460 606,176	104 13,580	\$225.61 2.2403	(1,734)	783		(132)	104 12,497	64	0.51%
9 10 11	Gas Supply Demand Charge Union North West Union North East Gas Supply Demand - 20	10³m³ 10³m³ _	2,962 3,911 6,873	1,671 1,962 3,634	56.4242 50.1792 52.8706	- - -	(137) (181) (318)	(0) (0) (1)	(1,408) (1,623) (3,031)	126 158 284	1 1 1	0.51%
12 13 14	Commodity Transportation 1 Union North West Union North East Commodity Transportation 1 - 20	10³m³ 10³m³ _	28,383 45,073 73,456	1,027 1,194 2,222	3.6200 2.6498 3.0247	- - -	- - - -	- - -	(944) (1,089) (2,033)	84 105 189	0 1 1	0.51%
15 16 17	Commodity Transportation 2 Union North West Union North East Commodity Transportation 2 - 20	10³m³ 10³m³ _	14,503 33,976 48,479		· ·	- - -	- - - -	- - -		- - -	- - -	0.00%
18 19 20	Storage (GJ's) Demand Commodity Gas Supply Transportation - 20	GJ/d GJ _	99,288 639,477 121,935	2,009 130 7,995	20.238 0.204 6.5571	- - -	(318)		(1,282) (12) (6,358)	727 118 1,318	4 1 7	0.51%
21	Total Rate 20	- -	606,176	21,575	3.5593	(1,734)	465	(1)	(6,490)	13,815	70	0.51%

- EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (t).
  Rate Order, Working Papers, Schedule 7, column (g).
  EB-2017-0278, Appendix A, rates effective October 1, 2017 (excludes Price Adjustments), minus Cap-and-Trade facility-related unit rates per EB-2016-0296, Exhibit 7, (1) (2) (3)

- Schedule 1, p. 2, column (g) (where applicable).

  EB-2016-0245, Rate Order, Working Papers, Schedule 11, column (b).

  EB-2015-0245, Rate Order, Working Papers, Schedule 10, column (d).

  EB-2015-0245, Rate Order, Working Papers, Schedule 20, p. 1, column (i) + EB-2016-0296, Exhibit 7, Schedule 2, p. 1, column (i).
- Rate Order, Working Papers, Schedule 15, column (f).
  Rate Order, Working Papers, Schedule 2, line 8.

				Adjustments to 20	)18 Base Rates	<b>;</b>						
					2018 Parkway	2018			NAC / LRAM			
			2018	2018 Capital	Delivery	Upstream	Customer	5	Usage		Proposed	
Line		Billing	DSM	Pass-Throughs		Transportation	Charge Adjustment	Proposed	Adjustment	Proposed	Rates	Rate Change
No.	Particulars	Units	(9) (\$000's)	(10) (\$000's)	(11) (\$000's)	(12) (\$000's)	(\$000's)	Revenue (\$000's)	(13) (10³m³)	Forecast Usage	(cents / m³)	(%)
110.	Tarticulars	Office	(k)	(I)	(m)	(n)	(o)	(p)= sum(h:o)	(q)	(r) = (a + q)	(s) = (p / r)	(t)
	Rate 20 Medium Volume Firm Service											
1	Monthly Charge	bills	-	(119)	-	-		643	-	748	\$859.96	
	Monthly Demand Charge											
2	First 70,000 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup> /d	769	(344)	-	-		6,662	-	23,260	28.6438	
3	All over 70,000 m <sup>3</sup>	10³m³/d	383	(171)	-	-		3,318	-	19,701	16.8440	
4	Monthly Commodity Charge First 852,000 m <sup>3</sup>	10³m³	377	(169)		90		1,719	(052)	317,920	0.5406	
4 5	All over 852,000 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	243	(109)	_	80 52		1,719	(853) (769)	286,634	0.3865	
6	Delivery (Commodity/Demand)	10 111	1,773	(792)		132		12,807	(1,621)	604,555	2.1184	0.2%
7	Transportation Account Charge	10 <sup>3</sup> m <sup>3</sup>	- 1,770	- (102)		- 102		104	- (1,021)	460	\$226.76	0.270
8	Total Delivery - 20		1,773	(911)		132	-	13,555	(1,621)	604,555	2.2421	0.1%
	Gas Supply Demand Charge											
9	Union North West	10 <sup>3</sup> m <sup>3</sup>	-	161	0	1,408	-	1,696	-	2,962	57.2684	
10	Union North East	10 <sup>3</sup> m <sup>3</sup>		213	0	1,619		1,991		3,911	50.9054	
11	Gas Supply Demand - 20			374	1	3,027		3,687.07		6,872.75	53.6477	1.5%
	Commodity Transportation 1											
12	Union North West	10 <sup>3</sup> m <sup>3</sup>	-	-	-	944	-	1,028	-	28,383	3.6224	
13	Union North East	10 <sup>3</sup> m <sup>3</sup>				1,086		1,192		45,073	2.6450	0.40/
14	Commodity Transportation 1 - 20			-		2,030		2,220		73,456	3.0227	-0.1%
	Commodity Transportation 2											
15	Union North West	10 <sup>3</sup> m <sup>3</sup>	-	-	-	-	-	-	-	14,503	-	
16	Union North East	10 <sup>3</sup> m <sup>3</sup>								33,976		
17	Commodity Transportation 2 - 20									48,479		0.0%
	Storage (GJ's)	• • • • • • • • • • • • • • • • • • • •										
18 10	Demand Commodity	GJ/d GJ	-	29 2	-	1,282	-	2,042	-	99,288	20.568 0.208	
19 20	Gas Supply Transportation - 20	GJ		405		6,352		133 8,083	<u>-</u>	639,477 121,935	6.6286	1.1%
20	Odo Ouppry Transportation - 20			403		0,332		0,003		121,933	0.0200	1.1/0
21	Total Rate 20		1,773	(506)	1	6,484	-	21,637	(1,621)	604,555	3.5790	0.6%

- Notes:

  (9) Rate Order, Working Papers, Schedule 11, column (b).

  (10) Rate Order, Working Papers, Schedule 10, column (d).

  (11) Rate Order, Working Papers, Schedule 20.

  (12) Rate Order, Working Papers, Schedule 23, column (c).

  (13) Rate Order, Working Papers, Schedule 12, p. 2 and 3, column (c) and Rate Order, Working Papers, Schedule 17, column (a).

							Adjustments to 20					
			Current Approved	Current Approved	Current Approved	2017	2017 Capital	2017 Parkway Delivery	Upstream		Price Cap	
			Forecast	Revenue	Rates	DSM	Pass-Throughs	Obligation	Transportation	Adjusted	Index (8)	Price Cap
Line		Billing	Usage	(2)	(3)	(4)	(5)	(6)	(8)	Revenue	0.51%	Index
No.	Particulars	<u>Units</u>	(1)	(\$000's)	(cents / m³)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(%)
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h) = (b+d+e+f+g)	(i)	(j)
	Rate 25 Large Volume Interruptible Service											
1	Monthly Charge	bills	842	258	\$306.75	-	54	-	-	312	2	
2	Monthly Delivery Charge	10 <sup>3</sup> m <sup>3</sup>	159,555	4,074	2.5531	-	188	-	-	4,261	22	
3	Transportation Account Charge	bills _	36	8	\$225.61					8	0	0.540/
4	Total Delivery - 25	-	159,555	4,340	2.7201		242			4,582	23	0.51%
5	Gas Supply Transportation	10³m³ _	42,913	696	1.6229		4		(681)	20	0	
6	Total Rate 25	=	159,555	5,036	3.1565		246	-	(681)	4,601	23	0.51%
	Rate 100 Large Volume Firm Service											
7	Monthly Charge	bills	226	310	\$1,372.75	-	32	-	-	343	2	
8	Demand	10³m³/d	71,975	10,874	15.1083	(1,411)	474	-	-	9,937	51	
9	Commodity	10 <sup>3</sup> m <sup>3</sup>	1,814,867	3,995	0.2201	(470)	158		(9)	3,673	19	
10	Delivery (Commodity/Demand)	-	1,814,867	15,179	0.8364	(1,882)	632		(9)	13,921	71	0.51%
11	Transportation Account Charge	bills	226	51	\$225.61	(4.000)	-		- (0)	51	0	
12	Total Delivery - 100	-	1,814,867	15,230	0.8392	(1,882)	665		(9)	14,004	71	0.51%
	Gas Supply Demand Charge											
13	Union North West	10 <sup>3</sup> m <sup>3</sup>	-	-	114.2215	-	-	-	-	-	-	
14	Union North East	10³m³	-	-	161.5404	-	-	-	-	-	-	
	Commodity Transportation 1											
15	Union North West	10 <sup>3</sup> m <sup>3</sup>	-	-	6.4075	-	-	-	-	-	-	
16	Union North East	10 <sup>3</sup> m <sup>3</sup>	-	-	9.2385	-	-	-	-	-	-	
	Commodity Transportation 2											
17	Union North West	10 <sup>3</sup> m <sup>3</sup>	-	-	-	-	-	-	-	-	-	
18	Union North East	10³m³	-	-	-	-	-	-	-	-	-	
	Storage (GJ's)											
19	Demand	GJ/d	15,600	316	20.238	-	(19)	(0)	(201)	95	0	
20	Commodity	GJ _	100,000	20	0.204		(1)	(0)	(2)	17	0	
21	Gas Supply - 100	_	-	336	<del>-</del>		(20)	(0)	(203)	112	1	0.51%
22	Total Rate 100	- -	1,814,867	15,566	0.8577	(1,882)	644	(0)	(212)	14,116	72	0.51%

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  EB-2016-0245, Rate Order, Working Papers, Schedule 11, column (b).

  EB-2015-0245, Rate Order, Working Papers, Schedule 10, column (d).

  EB-2015-0245, Rate Order, Working Papers, Schedule 20, p. 1, column (i) + EB-2016-0296, Exhibit 7, Schedule 2, p. 1, column (i).

- Rate Order, Working Papers, Schedule 15, column (f).
  Rate Order, Working Papers, Schedule 2, line 8.
- (4) (5) (6) (7) (8)

				Adjustments to 20	18 Base Rates							
					2018 Parkway	2018			NAC / LRAM			
			2018	2018 Capital	Delivery	Upstream	Customer	Danasas	Usage	Danasa	Proposed	
Line		Billing	DSM (9)	Pass-Throughs (10)	Obligation (11)	Transportation (12)	Charge Adjustment	Proposed Revenue	Adjustment (13)	Proposed Forecast	Rates	Rate Change
No.	Particulars	Units	(\$000's)	(10) (\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(10 <sup>3</sup> m <sup>3</sup> )	Usage	(cents / m³)	(%)
	- articulare		(k)	(I)	(m)	(n)	(o)	(p)= sum(h:o)	(q)	$\frac{\text{coage}}{\text{(r) = (a + q)}}$	(s) = (p / r)	(t)
	Rate 25 Large Volume Interruptible Service											
1	Monthly Charge	bills	-	(70)	-	-		244	-	842	\$289.36	
2	Monthly Delivery Charge	10³m³	-	(215)	-	-		4,068	-	159,555	2.5498	
3	Transportation Account Charge	bills						8		36	\$226.76	
4	Total Delivery - 25			(285)		<del>-</del>		4,320		159,555	2.7076	-0.5%
5	Gas Supply Transportation	10³m³		(6)		664		677		42,913	1.5784	
6	Total Rate 25			(291)		664		4,998		159,555	3.1322	-0.8%
	Rate 100 Large Volume Firm Service											
7	Monthly Charge	bills	_	(41)	_	_		303	-	226	\$1,340.55	
,	Monthly Charge	billo		(41)				000		220	Ψ1,040.00	
8	Demand	10³m³/d	1,421	(552)	-	-		10,857	-	71,975	15.0839	
9	Commodity	10³m³	474	(184)		9		3,990	(762)	1,814,105	0.2200	
10	Delivery (Commodity/Demand)		1,895	(736)		9		15,150	(762)	1,814,105	0.8351	-0.2%
11	Transportation Account Charge	bills						51	- (7.2)	226	\$226.76	
12	Total Delivery - 100		1,895	(778)		9		15,201	(762)	1,814,105	0.8380	-0.1%
	Gas Supply Demand Charge											
13	Union North West	10³m³	-	-	-	-	-	-	-	-	112.9067	
14	Union North East	10 <sup>3</sup> m <sup>3</sup>	-	-	-	-	-	-	-	-	160.8218	
	Commodity Transportation 1											
15	Union North West	10³m³	-	-	-	-	-	-	-	-	6.3364	
16	Union North East	10 <sup>3</sup> m <sup>3</sup>	-	-	-	-	-	-	-	-	9.2013	
	Commodity Transportation 2											
17	Union North West	10³m³	-	-	-	-	-	-	-	-		
18	Union North East	10 <sup>3</sup> m <sup>3</sup>	-	-	-	-	-	-	-	-		
	Storage (GJ's)											
19	Demand	GJ/d	-	24	0	201	-	321	-	15,600	20.568	
20	Commodity	GJ		2	0	2		21		100,000	0.208	
21	Gas Supply - 100			25	0	203		342	<u> </u>	115,600	<del>-</del>	
22	Total Rate 100		1,895	(752)	0	212		15,543	(762)	1,814,105	0.8568	-0.1%

- Notes:

  (9) Rate Order, Working Papers, Schedule 11, column (b).

  (10) Rate Order, Working Papers, Schedule 10, column (d).

  (11) Rate Order, Working Papers, Schedule 20.

  (12) Rate Order, Working Papers, Schedule 23, column (c).

  (13) Rate Order, Working Papers, Schedule 12, p. 2 and 3, column (c) and Rate Order, Working Papers, Schedule 17, column (a).

							Adjustments to 2					
Line No.	Particulars	Billing Units	Current Approved Forecast Usage (1) (a)	Current Approved Revenue (2) (\$000's)	Current Approved Rates (3) (cents / m³) (c)	2017 DSM (4) (\$000's) (d)	2017 Capital Pass-Throughs (5) (\$000's) (e)	2017 Parkway Delivery Obligation (6) (\$000's)	Upstream Transportation (8) (\$000's) (g)	Adjusted Revenue (\$000's) (h) = (b+d+e+f+g)	Price Cap Index (8) 0.51% (\$000's)	Price Cap Index (%) (j)
	M1											
1	Monthly Charge	bills	12,706,802	266,843	\$21.00	-	12,469	-	-	279,312	1,424	
	Monthly Delivery Commodity Charge											
2	First 100 m <sup>3</sup>	10³m³	872,593	40,709	4.6653	(7,148)	(2,008)	(3,933)	-	27,621	141	
3	Next 150 m <sup>3</sup>	10³m³	774,838	34,280	4.4242	(6,025)	(1,691)	(3,312)	-	23,253	119	
4	All over 250 m <sup>3</sup>	10³m³	1,249,748	47,505	3.8012	(8,377)	(2,343)	(4,589)		32,197	164	
5	Total Delivery - M1	-	2,897,179	389,338	13.4385	(21,550)	6,428	(11,833)	<del>-</del>	362,382	1,848	0.51%
6	Storage	10 <sup>3</sup> m <sup>3</sup>	2,897,179	20,724	0.7153	-	1,650	-	-	22,373	114	
7	Total Rate M1	- =	2,897,179	410,061	14.1538	(21,550)	8,077	(11,833)	-	384,756	1,962	0.51%
	M2											
8	Monthly Charge  Monthly Delivery Commodity Charge	bills	81,451	5,702	\$70.00	-	388	-	-	6,089	31	
9	First 1,000 m <sup>3</sup>	10³m³	61,283	2,849	4.6486	(587)	(112)	(235)	_	1,914	10	
10	Next 6,000 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	298,234	13,602	4.5609	(2,805)	(535)	(1,122)	-	9,140	47	
11	Next 13,000 m <sup>3</sup>	10³m³	336,990	14,740	4.3740	(3,019)	(580)	(1,216)	-	9,925	51	
12	All over 20,000 m <sup>3</sup>	10³m³	430,521	17,456	4.0546	(3,580)	(686)	(1,440)	-	11,749	60	
13	Total Delivery - M2	-	1,127,028	54,348	4.8223	(9,992)	(1,525)	(4,013)	-	38,818	198	0.51%
14	Storage	10³m³	1,127,028	7,046	0.6252	-	563	-	-	7,609	39	
15	Total Rate M2	- =	1,127,028	61,395	5.4475	(9,992)	(963)	(4,013)		46,427	237	0.51%

- EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (t). (1)
- (2) Rate Order, Working Papers, Schedule 7, column (g).
- Rate Order, Working Papers, Schedule 7, column (g).
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  EB-2016-0245, Rate Order, Working Papers, Schedule 11, column (b).
  EB-2016-0245, Rate Order, Working Papers, Schedule 10, column (d).
  EB-2015-0245, Rate Order, Working Papers, Schedule 20, p. 1, column (i) + EB-2016-0296, Exhibit 7, Schedule 2, p. 1, column (i).
  Rate Order, Working Papers, Schedule 15, column (f).
  Rate Order, Working Papers, Schedule 2, line 8.

- (4) (5) (6) (7) (8)

				Adjustments to 20	018 Base Rates	i						
					2018 Parkway	2018	_		NAC / LRAM		_	
			2018 DSM	2018 Capital Pass-Throughs	Delivery Obligation	Upstream Transportation	Customer Charge	Proposed	Usage Adjustment	Proposed	Proposed	Rates Rate
Line		Billing	(9)	(10)	(11)	(12)	Adjustment	Revenue	(13)	Forecast	Rates	Change
No.	Particulars	Units	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(10 <sup>3</sup> m <sup>3</sup> )	Usage	(cents / m³)	(%)
			(k)	(I)	(m)	(n)	(o)	(p)= sum(h:o)	(q)	(r) = (a + q)	(s) = (p / r)	(t)
	M1											
1	Monthly Charge	bills	-	(15,272)	-	-	1,379	266,843	-	12,706,802	\$21.00	
	Monthly Delivery Commodity Charge			, ,								
2	First 100 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	8,101	3,982	3,841	-	(458)	43,227	(26,771)	845,823	5.1107	
3	Next 150 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	6,821	3,353	3,234	-	(386)	36,395	(23,772)	751,066	4.8457	
4	All over 250 m <sup>3</sup>	10³m³	9,453	4,647	4,482		(535)	50,408	(38,341)	1,211,407	4.1611	
5	Total Delivery - M1		24,375	(3,290)	11,557			396,873	(88,884)	2,808,296	14.1322	5.2%
6	Storage	10³m³	-	(1,907)	-	-		20,580	(88,884)	2,808,296	0.7328	2.4%
7	Total Rate M1		24,375	(5,197)	11,557			417,453	(88,884)	2,808,296	14.8650	5.0%
	M2											
8	Monthly Charge Monthly Delivery Commodity Charge	bills	-	(478)	-	-	59	5,702	-	81,451	\$70.00	
9	First 1,000 m <sup>3</sup>	10³m³	612	229	229	-	(10)	2,984	(2,571)	58,711	5.0819	
10	Next 6,000 m <sup>3</sup>	$10^{3}$ m <sup>3</sup>	2,920	1,095	1,093	-	(49)	14,245	(12,514)	285,720	4.9857	
11	Next 13,000 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	3,164	1,186	1,184	-	-	15,510	(14,140)	322,850	4.8041	
12	All over 20,000 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	3,747	1,405	1,402			18,363	(18,065)	412,456	4.4521	
13	Total Delivery - M2		10,442	3,437	3,908		(0)	56,803	(47,291)	1,079,737	5.2609	9.1%
14	Storage	10³m³	-	(650)	-	-		6,997	(47,291)	1,079,737	0.6481	3.7%
15	Total Rate M2		10,442	2,787	3,908		(0)	63,801	(47,291)	1,079,737	5.9089	8.5%

- Notes:

  (9) Rate Order, Working Papers, Schedule 11, column (b).

  (10) Rate Order, Working Papers, Schedule 10, column (d).

  (11) Rate Order, Working Papers, Schedule 20.

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  (13) Rate Order, Working Papers, Schedule 12, p. 2 and 3, column (c) and Rate Order, Working Papers, Schedule 17, column (a).

							Adjustments to 2					
Line No.	Particulars	Billing Units	Current Approved Forecast Usage (1) (a)	Current Approved Revenue (2) (\$000's)	Current Approved Rates (3) (cents / m³) (c)	2017 DSM (4) (\$000's) (d)	2017 Capital Pass-Throughs (5) (\$000's)	2017 Parkway Delivery Obligation (6) (\$000's)	Upstream Transportation (8) (\$000's)	Adjusted Revenue (\$000's) (h) = (b+d+e+f+g)	Price Cap Index (8) 0.51% (\$000's) (i)	Price Cap Index (%) (j)
	M4 Firm Commercial/Industrial Contract Rate Monthly Demand Charge											
1	First 8,450 m <sup>3</sup>	10³m³/d	12,905	7,355	56.9923	(1,151)	(179)	(551)	-	5,474	28	
2	Next 19,700 m <sup>3</sup>	10³m³/d	7,864	2,009	25.5539	(315)	(49)	(151)	-	1,495	8	
3	All over 28,150 m <sup>3</sup> Monthly Delivery Commodity Charge	10³m³/d	4,507	968	21.4688	(151)	(24)	(72)	-	720	4	
4	First Block	10³m³	341,905	4,624	1.3523	(1,068)	(166)	(512)	-	2,877	15	
5	All remaining use	10³m³	7,358	39	0.5306	(10)	(1)	(4)	-	24	0	
7	Total Rate M4	=	349,263	14,995	4.2933	(2,696)	(419)	(1,290)		10,590	54	0.51%
	M5A Interruptible Commercial/Industrial Contract Rate Firm contracts											
8	Monthly Demand Charge	10³m³/d	626	199	31.7959	(41)	1	(9)	-	150	1	
9	Monthly Delivery Commodity Charge	10³m³ _	15,121	349	2.3066	(76)	3	(9)		267	1	0.540/
10	Total Delivery - Firm M5A	<del>-</del>	15,121	548	3.6220	(117)	4	(18)	<u> </u>	417	2	0.51%
11	Interruptible contracts  Monthly Charge	bills	1,692	1,107	\$654.15	-	79	_	_	1,186	6	
12	Delivery Commodity Charge (Avg Price)	10³m³	450,329	11,979	2.6601	(3,472)	493	(236)	-	8,765	45	
13	Total Delivery -Interruptible M5A	=	450,329	13,086	2.9059	(3,472)	573	(236)		9,951	51	0.51%
14	Total Rate M5A	- -	465,451	13,634	2.9291	(3,589)	577	(253)		10,368	53	0.51%

- EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (t).
- (2) (3)
- Rate Order, Working Papers, Schedule 7, column (g). EB-2017-0278, Appendix A, rates effective October 1, 2017 (excludes Price Adjustments), minus Cap-and-Trade facility-related unit rates per EB-2016-0296, Exhibit 7,

- Schedule 1, p. 2, column (g) (where applicable).

  EB-2016-0245, Rate Order, Working Papers, Schedule 11, column (b).

  EB-2016-0245, Rate Order, Working Papers, Schedule 10, column (d).

  EB-2015-0245, Rate Order, Working Papers, Schedule 20, p. 1, column (i) + EB-2016-0296, Exhibit 7, Schedule 2, p. 1, column (i).

  Rate Order, Working Papers, Schedule 15, column (f).

  Rate Order, Working Papers, Schedule 2, line 8.

				Adjustments to 20								
			2018	2018 Capital	2018 Parkway Delivery	2018 Upstream	Customer		NAC / LRAM Usage		Proposed	Dates
Line		Billing	DSM (9)	Pass-Throughs (10)	Obligation (11)	Transportation (12)	Charge Adjustment	Proposed Revenue	Adjustment (13)	Proposed Forecast	Rates	Rate Change
No.	Particulars	Units	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(10 <sup>3</sup> m <sup>3</sup> )	Usage	(cents / m³)	<u>(%)</u>
			(k)	(I)	(m)	(n)	(o)	(p)= sum(h:o)	(q)	(r) = (a + q)	(s) = (p / r)	(t)
	M4 Firm Commercial/Industrial Contract Rate Monthly Demand Charge											
1	First 8,450 m <sup>3</sup>	10³m³/d	1,171	841	520	-		8,034	-	12,905	62.2530	
2	Next 19,700 m <sup>3</sup>	10³m³/d	320	230	142	-		2,195	-	7,864	27.9127	
3	All over 28,150 m <sup>3</sup>	10³m³/d	154	111	68	-		1,057	-	4,507	23.4505	
	Monthly Delivery Commodity Charge											
4	First Block	10³m³	1,087	781	483	-		5,244	(9,835)	332,070	1.5791	
5	All remaining use	10³m³	9	7	4	-		44	(212)	7,146	0.6088	
7	Total Rate M4		2,742	1,970	1,218		-	16,573	(10,047)	339,216	4.8857	13.8%
	M5A Interruptible Commercial/Industrial Contract Rate Firm contracts											
8	Monthly Demand Charge	10³m³/d	43	14	9	-		218	-	626	34.8081	
9	Monthly Delivery Commodity Charge	10³m³	75	(5)	6			345	(499)	14,622	2.3570	
10	Total Delivery - Firm M5A		118	9	15			562	(499)	14,622	3.8461	6.2%
	Interruptible contracts											
11	Monthly Charge	bills	-	(102)	-	-		1,090	-	1,692	\$644.05	
12	Delivery Commodity Charge (Avg Price)	10³m³	3,519	(578)	156			11,907	(14,863)	435,466	2.7343	
13	Total Delivery -Interruptible M5A		3,519	(680)	156			12,997	(14,863)	435,466	2.9845	2.7%
14	Total Rate M5A		3,638	(671)	171		-	13,559	(15,362)	450,088	3.0125	2.8%

- Notes:

  (9) Rate Order, Working Papers, Schedule 11, column (b).

  (10) Rate Order, Working Papers, Schedule 10, column (d).

  (11) Rate Order, Working Papers, Schedule 20.

  (12) Rate Order, Working Papers, Schedule 23, column (c).

  (13) Rate Order, Working Papers, Schedule 12, p. 2 and 3, column (c) and Rate Order, Working Papers, Schedule 17, column (a).

						-,	Adjustments to 20					
Line No.	<u>Particulars</u>	Billing Units	Current Approved Forecast Usage (1) (a)	Current Approved Revenue (2) (\$000's)	Current Approved Rates (3) (cents / m³)	2017 DSM (4) (\$000's) (d)	2017 Capital Pass-Throughs (5) (\$000's) (e)	2017 Parkway Delivery Obligation (6) (\$000's)	Upstream Transportation (8) (\$000's)	Adjusted Revenue (\$000's) (h) = (b+d+e+f+g)	Price Cap Index (8) 0.51% (\$000's)	Price Cap Index (%) (j)
1 2 3	M7 Special Large Volume Contract Rate Firm Contracts Monthly Demand Charge Monthly Delivery Commodity Charge Total Delivery - Firm M7	10³m³/d 10³m³ _ –	14,220 120,879 120,879	4,383 468 4,851	30.8246 0.3873 4.0135	(816) (95) (910)	(227) 0 (227)	(438) (137) (575)		2,902 237 3,139	15 1 16	0.51%
4 5	Interruptible / Seasonal Contracts Monthly Delivery Commodity Charge  Total Rate M7	10³m³ –	3,949	49	1.2348 3.9255	(30)	7 (220)	(575)	-	3,165	0	0.51%
6 7 8	M9 Large Wholesale Service  Monthly Demand Charge  Monthly Delivery Commodity Charge  Total Rate M9	10³m³/d 10³m³ _ =	3,993 60,750 60,750	891 132 1,023	22.3154 0.2177 1.6844		(111) 0 (111)	(157) (70) (227)		623 62 686	3 0 3	0.51%
9 10	M10 Small Wholesale Service Monthly Delivery Commodity Charge Total Rate M10	10 <sup>3</sup> m³ - =	189 189	13	6.7289		(2)	(5)	- 	5	0	0.51%

- (2)
- EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (t).
  Rate Order, Working Papers, Schedule 7, column (g).
  EB-2017-0278, Appendix A, rates effective October 1, 2017 (excludes Price Adjustments), minus Cap-and-Trade facility-related unit rates per EB-2016-0296, Exhibit 7, Schedule 1, p. 2, column (g) (where applicable).
  EB-2016-0245, Rate Order, Working Papers, Schedule 11, column (b).
  EB-2016-0245, Rate Order, Working Papers, Schedule 10, column (d).
  EB-2015-0245, Rate Order, Working Papers, Schedule 20, p. 1, column (i) + EB-2016-0296, Exhibit 7, Schedule 2, p. 1, column (i).
  Rate Order, Working Papers, Schedule 2, line 8

- (4) (5) (6) (7)
- Rate Order, Working Papers, Schedule 2, line 8.

				Adjustments to 20	18 Base Rates							
Line No.	Particulars	Billing Units	2018 DSM (9) (\$000's)		2018 Parkway Delivery Obligation (11) (\$000's) (m)	2018 Upstream Transportation (12) (\$000's) (n)	Customer Charge Adjustment (\$000's)	Proposed Revenue (\$000's) (p)= sum(h:o)	NAC / LRAM Usage Adjustment (13) (10³m³)	Proposed Forecast Usage (r) = (a + q)	Proposed  Rates (cents / m³) (s) = (p / r)	Rates Rate Change (%) (t)
1 2 3	M7 Special Large Volume Contract Rate Firm Contracts Monthly Demand Charge Monthly Delivery Commodity Charge Total Delivery - Firm M7	10³m³/d 10³m³	843 90 933	748 (1) 747	458 91 548	- - - -	<u> </u>	4,966 418 5,384	(5,410) (5,410)	14,220 115,469 115,469	34.9210 0.3623 4.6628	16.2%
4	Interruptible / Seasonal Contracts  Monthly Delivery Commodity Charge	10³m³	30	(9)	-	-		48	(177)	3,773	1.2692	2.8%
5	Total Rate M7		964	739	548		-	5,432	(5,587)	119,242	4.5554	16.0%
6 7 8	M9 Large Wholesale Service Monthly Demand Charge Monthly Delivery Commodity Charge Total Rate M9	10³m³/d 10³m³	- - -	150 (1) 149	164 47 210			940 109 1,048		3,993 60,750 60,750	23.5397 0.1788 1.7259	2.5%
9	M10 Small Wholesale Service Monthly Delivery Commodity Charge	10³m³	-	3	5	-		14	-	189	7.1737	
10	Total Rate M10			3	5		-	14	_	189	7.1737	6.6%

- Notes:

  (9) Rate Order, Working Papers, Schedule 11, column (b).
  (10) Rate Order, Working Papers, Schedule 10, column (d).
  (11) Rate Order, Working Papers, Schedule 20.
  (12) Rate Order, Working Papers, Schedule 23, column (c).
  (13) Rate Order, Working Papers, Schedule 12, p. 2 and 3, column (c) and Rate Order, Working Papers, Schedule 17, column (a).

							Adjustments to 2	017 Base Rates				
Line No.	Particulars	Billing Units	Current Approved Forecast Usage (1)	Current Approved Revenue (2) (\$000's)	Current Approved Rates (3) (cents / m³)	2017 DSM (4) (\$000's)	2017 Capital Pass-Throughs (5) (\$000's)	2017 Parkway Delivery Obligation (6) (\$000's)	Upstream Transportation (8) (\$000's)	Adjusted Revenue (\$000's)	Price Cap Index (8) 0.51% (\$000's)	Price Cap Index (%)
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h) = (b+d+e+f+g)	(i)	(j)
	T1 Storage and Transportation Storage (\$/GJ's) Demand:								-			-
4	Firm injection / withdrawal	0.1/4/	400.000	740	4.450		00			750	4	
1 2	Union provides deliverability inventory  Customer provides deliverability inventory	GJ/d/mo. GJ/d/mo.	492,360 166,800	718 199	1.459 1.186	-	32 9	-	-	750 207	4	
3	Incremental firm injection right	GJ/d/mo.	100,000	-	1.186	-	- -	-	- -	-	- -	
4	Interruptible	GJ/d/mo.	62,244	77	1.186	-	-	_	-	77	0	
5	Space	GJ/d/mo.	22,396,680	245	0.011	-	16	-	-	261	1	
6	Commodity (Customer Provides)	GJ	2,750,300	21	0.008	-	0	-	-	21	0	
7	Commodity (Union Provides)	GJ	-	-	0.022	-	-	-	-	-	-	
8	Customer supplied fuel	GJ	16,442	54	-	-	-	-	-	54	0	
	Transportation (cents/ m3) Demand											
9	First 28,150 m <sup>3</sup>	10³m³/d/mo	12,448	4,411	35.4376	(854)	(230)	(273)	-	3,055	16	
10	Next 112,720 m <sup>3</sup>	10³m³/d/mo	13,002	3,183	24.4833	(616)	(166)	(197)	-	2,205	11	
4.4	Commodity Firm	4033	450 000	045	0.4000		4	(207)		252	2	
11 12	All Volumes Interruptible	10³m³ 10³m³	452,300 58,934	615 789	0.1360 1.3393	(62)	4 27	(267) (28)	-	352 726	2	
13	Monthly Charges	Meter/mo.	528	1,006	\$1,905.94	(02)	38	(20)	- -	1,045	5	
14	Customer supplied fuel	10 <sup>3</sup> m <sup>3</sup>	2,979	299	-	-	-	(48)	-	251	1	
		_										
15	Total Rate T1	=	511,234	11,618	2.2725	(1,532)	(269)	(812)	-	9,005	46	0.51%
	T2 Storage and Transportation Storage (\$/GJ's) Demand: Firm injection / withdrawal											
16	Union provides deliverability inventory		1,516,920	2,213	1.459	-	101	-	-	2,314	12	
17	Customer provides deliverability inventory	GJ/d/mo.	1,336,556	1,588	1.186	-	73	-	-	1,660	8	
18	Incremental firm injection right	GJ/d/mo.	-	-	1.186	-	-	-	-	-	-	
19 20	Interruptible Space	GJ/d/mo. GJ/d/mo.	415,704 106,645,056	512 1,167	1.186 0.011	-	- 75	-	-	512 1,242	3	
21	Commodity (Customer Provides)	GJ/d/IIIo. GJ	7,869,782	60	0.008	-	1	-	-	61	0	
22	Commodity (Union Provides)	GJ		-	0.022	_	-	-	_	-	-	
23	Customer supplied fuel	GJ	47,061	154	-	-	-	-	-	154	1	
	Transportation (cents/ m3) Demand											
24	First 140,870 m <sup>3</sup>	10³m³/d/mo	49,971	13,215	26.4455	(1,250)	(1,409)	(1,100)	-	9,456	48	
25	All Over 140,870 m³ Commodity Firm	10 <sup>3</sup> m <sup>3</sup> /d/mo	167,088	23,373	13.9884	(2,211)	(2,492)	(1,945)	-	16,725	85	
26	All Volumes	10³m³	4,259,573	1,729	0.0406	_	4	(1,374)	-	359	2	
27	Interruptible	10 <sup>3</sup> m <sup>3</sup>	337,695	3,393	1.0047	(143)	154	(32)	-	3,371	17	
28	Monthly Charges	Meter/mo.	444	2,448	\$5,513.81	-	293	-	-	2,741	14	
29	Customer supplied fuel	10³m³	23,922	2,134	-	-	-	(228)	-	1,906	10	
30	Total Rate T2	_ _	4,597,268	51,985	1.1308	(3,605)	(3,199)	(4,679)		40,502	207	0.51%

- tes:

  (1) EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (t).

  (2) Rate Order, Working Papers, Schedule 7, column (g).

  (3) EB-2017-0278, Appendix A, rates effective October 1, 2017 (excludes Price Adjustments), minus Cap-and-Trade facility-related unit rates per EB-2016-0296, Exhibit 7, Schedule 1, p. 2, column (g) (where applicable).

  (4) EB-2016-0245, Rate Order, Working Papers, Schedule 11, column (b).

  (5) EB-2016-0245, Rate Order, Working Papers, Schedule 10, column (d).

  (6) EB-2015-0245, Rate Order, Working Papers, Schedule 20, p. 1, column (i) + EB-2016-0296, Exhibit 7, Schedule 2, p. 1, column (i).

  (7) Rate Order, Working Papers, Schedule 15, column (f).

  (8) Rate Order, Working Papers, Schedule 2, line 8.

		Adjustments to 2018 Base Rates										
					2018 Parkway	2018			NAC / LRAM			
			2018	2018 Capital	Delivery	Upstream	Customer		Usage		Proposed	Rates
			DSM	Pass-Throughs		Transportation	Charge	Proposed	Adjustment	Proposed		Rate
Line		Billing	(9)	(10)	(11)	(12)	Adjustment	Revenue	(13)	Forecast	Rates	Change
No.	Particulars	Units	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(10 <sup>3</sup> m <sup>3</sup> )	Usage	(cents / m³)	(%)
			(k)	(I)	(m)	(n)	(o)	(p)= sum(h:o)	(q)	(r) = (a + q)	(s) = (p / r)	(t)
	T1 Storage and Transportation											
	Storage (\$/GJ's)											
	Demand:											
	Firm injection / withdrawal											
1	Union provides deliverability inventory	GJ/d/mo.	-	(36)	-	-		718	-	492,360	1.457	
2	Customer provides deliverability inventory	GJ/d/mo.	-	(10)	-	-		198	-	166,800	1.184	
3	Incremental firm injection right	GJ/d/mo.	-	-	-	-		-	-	-	1.184	
4	Interruptible	GJ/d/mo.	-	-	-	-		77	-	62,244	1.184	
5	Space	GJ/d/mo.	-	(21)	-	-		241	-	22,396,680	0.011	
6	Commodity (Customer Provides)	GJ	-	(1)	-	-		21	-	2,750,300	0.008	
7	Commodity (Union Provides)	GJ	-	-	-	-		-	-	-	0.022	
8	Customer supplied fuel	GJ	-	-	-	-		54	-	16,442	-	
	Transportation (conta) m2)											
	Transportation (cents/ m3) Demand											
9	First 28,150 m <sup>3</sup>	10³m³/d/mo	876	892	285	_		- 5,124	_	12,448	41.1636	
10	Next 112,720 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup> /d/mo	632	644	206	-		3,698	-	13,002	28.4393	
10	Commodity	10-111-74/1110	032	044	200	_		3,090	_	13,002	20.4393	
	Firm											
11	All Volumes	10 <sup>3</sup> m <sup>3</sup>	_	(6)	163	-		511	(3,446)	448,854	0.1138	
12	Interruptible	10 <sup>3</sup> m <sup>3</sup>	64	(34)	17	-		777	(449)	58,485	1.3287	
13	Monthly Charges	Meter/mo.	-	(49)	-	-		1,001	-	528	\$1,895.82	
14	Customer supplied fuel	10³m³	-	-	47	-		299	-	2,979	-	
	T / 15 / T/								(0.005)		0.5050	
15	Total Rate T1		1,573	1,378	718			12,719	(3,895)	507,339	2.5070	10.3%
	T2 Storage and Transportation											
	Storage (\$/GJ's)											
	Demand:											
	Firm injection / withdrawal											
16	Union provides deliverability inventory	GJ/d/mo.	-	(116)	-	-		2,210	-	1,516,920	1.457	
17	Customer provides deliverability inventory	GJ/d/mo.	-	(83)	-	-		1,586	-	1,336,556	1.184	
18	Incremental firm injection right	GJ/d/mo.	-	-	-	-		-	-	-	1.184	
19	Interruptible	GJ/d/mo.	-	-	-	-		514	-	415,704	1.184	
20	Space	GJ/d/mo.	-	(99)	-	-		1,149	-	106,645,056	0.011	
21	Commodity (Customer Provides)	GJ	-	(2)	-	-		59	-	7,869,782	0.008	
22	Commodity (Union Provides)	GJ	-	-	-	-		-	-	-	0.022	
23	Customer supplied fuel	GJ	-	-	-	-		155	-	47,061	-	
	Transportation (cents/ m3)											
	Demand											
24	First 140,870 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup> /d/mo	1,267	4,410	1,149	-		16,330	-	49,971	32.6795	
25	All Over 140,870 m <sup>3</sup>	10³m³/d/mo	2,241	7,799	2,032	-		28,883	-	167,088	17.2859	
	Commodity Firm											
26	All Volumes	10³m³	-	(7)	840	_		1,193	(28,152)	4,231,421	0.0282	
20 27	Interruptible	10 <sup>3</sup> m <sup>3</sup>	145	(182)	20	-		3,372	(2,232)	335,463	1.0051	
28	Monthly Charges	Meter/mo.	-	(341)	-	-		2,414	(2,232)	444	\$5,437.16	
29	Customer supplied fuel	10 <sup>3</sup> m <sup>3</sup>	-	-	223	-		2,139	-	23,922	φο, 107.10 -	
	•	-										
30	Total Rate T2		3,653	11,379	4,263			60,004	(30,384)	4,566,884	1.3139	16.2%

- Notes:

  (9) Rate Order, Working Papers, Schedule 11, column (b).

  (10) Rate Order, Working Papers, Schedule 10, column (d).

  (11) Rate Order, Working Papers, Schedule 20.

  (12) Rate Order, Working Papers, Schedule 23, column (c).

  (13) Rate Order, Working Papers, Schedule 12, p. 2 and 3, column (c) and Rate Order, Working Papers, Schedule 17, column (a).

		Adjustments to 2017 Base Rates  Current  Current										
Line No.	<u>Particulars</u>	Billing Units	Current Approved Forecast Usage (1) (a)	Current Approved Revenue (2) (\$000's)	Current Approved Rates (3) (cents / m³) (c)	2017 DSM (4) (\$000's)	2017 Capital Pass-Throughs (5) (\$000's)	2017 Parkway Delivery Obligation (6) (\$000's)	Upstream Transportation (8) (\$000's)	Adjusted Revenue (\$000's) (h) = (b+d+e+f+g)	Price Cap Index (8) 0.51% (\$000's)	Price Cap Index (%) (j)
	T3 Storage (\$/GJ's) Demand: Firm injection / withdrawal											
1	Union provides deliverability inventory	GJ/d/mo.	_	-	1.459	-	_	_	_	-	_	
2	Customer provides deliverability inventory	GJ/d/mo.	679,320	802	1.186	-	42	-	-	843	4	
3	Incremental firm injection right	GJ/d/mo.	-	-	1.186	-	-	-	-	-	-	
4	Interruptible	GJ/d/mo.	-	-	1.186	-	-	-	-	-	-	
5	Space	GJ/d/mo.	36,614,256	400	0.011	-	26	-	-	426	2	
6	Commodity (Customer Provides)	GJ	4,459,672	34	0.008	-	1	-	-	34	0	
7	Commodity (Union Provides)	GJ	-	-	0.022	-	-	-	-	-	-	
8	Customer supplied fuel	GJ	26,668	87	-	-	-	-	-	87	0	
	Transportation (cents/ m3)											
9	Demand	10 <sup>3</sup> m <sup>3</sup> /d/mo	28,200	4,715	16.7213	-	(894)	(1,103)	-	2,718	14	
10	Commodity	10³m³	272,712	301	0.1104	-	Ô	(271)	-	30	0	
11	Monthly Charges	Meter/mo.	12	240	\$19,968.19	-	11	-	-	250	1	
12	Customer supplied fuel	10 <sup>3</sup> m <sup>3</sup>	1,972	189	-	-	-	(44)	-	145	1	
13	Total Rate T3	- -	272,712	6,769	2.4820		(815)	(1,419)	-	4,535	23	0.51%
	Gas Supply Admin Charge			6,723		-	66	-	-	6,789		
14	Total In-franchise			917,819		(58,570)	6,537	(25,117)	(96,236)	744,433	3,762	

- (2)
- EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (t).
  Rate Order, Working Papers, Schedule 7, column (g).
  EB-2017-0278, Appendix A, rates effective October 1, 2017 (excludes Price Adjustments), minus Cap-and-Trade facility-related unit rates per EB-2016-0296, Exhibit 7,

- Schedule 1, p. 2, column (g) (where applicable).

  EB-2016-0245, Rate Order, Working Papers, Schedule 11, column (b).

  EB-2016-0245, Rate Order, Working Papers, Schedule 10, column (d).

  EB-2015-0245, Rate Order, Working Papers, Schedule 20, p. 1, column (i) + EB-2016-0296, Exhibit 7, Schedule 2, p. 1, column (i). (4) (5) (6) (7)
- Rate Order, Working Papers, Schedule 15, column (f).
  Rate Order, Working Papers, Schedule 2, line 8.

			Adjustments to 2018 Base Rates 2018 Parkway 2018									
			2018	2018 Capital	2018 Parkway Delivery	2018 Upstream	Customer		NAC / LRAM Usage		Proposed	Rates
Line No.	Particulars	Billing Units	DSM (9) (\$000's)	Pass-Throughs (10) (\$000's)	Obligation (11) (\$000's)	Transportation (12) (\$000's)	Charge Adjustment (\$000's)	Proposed Revenue (\$000's)	Adjustment (13) (10³m³)	Proposed Forecast Usage	Rates (cents / m³)	Rate Change (%)
			(k)	(1)	(m)	(n)	(o)	(p)= sum(h:o)	(q)	(r) = (a + q)	(s) = (p / r)	(t)
	T3 Storage (\$/GJ's) Demand: Firm injection / withdrawal											
1	Union provides deliverability inventory	GJ/d/mo.	_	-	-	_		_	_	-	1.457	
2	Customer provides deliverability inventory	GJ/d/mo.	-	(48)	_	-		800	-	679,320	1.184	
3	Incremental firm injection right	GJ/d/mo.	-	-	-	-		-	-	-	1.184	
4	Interruptible	GJ/d/mo.	-	-	-	-		-	-	-	1.184	
5	Space	GJ/d/mo.	-	(34)	-	-		394	-	36,614,256	0.011	
6	Commodity (Customer Provides)	GJ	-	(1)	-	-		34	-	4,459,672	0.008	
7	Commodity (Union Provides)	GJ	-	-	-	-		-	-	-	0.022	
8	Customer supplied fuel	GJ	-	-	-	-		88	-	26,668	-	
	Transportation (cents/ m3)											
9	Demand	10³m³/d/mo	-	1,188	1,153	-		5,073	-	28,200	17.9887	
10	Commodity	10 <sup>3</sup> m <sup>3</sup>	-	(1)	166	-		195	-	272,712	0.0717	
11	Monthly Charges	Meter/mo.	-	(13)	-	-		238	-	12	\$19,838.78	
12	Customer supplied fuel	10³m³	-	-	43	-		189	-	1,972	0	
13	Total Rate T3			1,091	1,361			7,011		272,712	2.5708	3.6%
	Gas Supply Admin Charge		-	(100)	-	-	-	6,689				
14	Total In-franchise		63,272	9,560	23,970	96,429	0	941,425				

- Notes:

  (9) Rate Order, Working Papers, Schedule 11, column (b).

  (10) Rate Order, Working Papers, Schedule 10, column (d).

  (11) Rate Order, Working Papers, Schedule 20.

  (12) Rate Order, Working Papers, Schedule 23, column (c).

  (13) Rate Order, Working Papers, Schedule 12, p. 2 and 3, column (c) and Rate Order, Working Papers, Schedule 17, column (a).

						Adjustments to 2017 Base Rates						
			Current	Current	Current		•	2017 Parkway				
			Approved	Approved	Approved		2017 Capital	Delivery			Price Cap	
			Forecast	Revenue	Rates	2017	Pass-Throughs	Obligation	Upstream	Adjusted	Index	Price Cap
Line		Billing	Usage	(2)	(3)	DSM	(4)	(5)	Transportation	Revenue	0.51%	Index
No.	Particulars	Units	(1)	(\$000's)	(\$/ GJ)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(%)
			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h) = (b+d+e+f+g)	(i)	(j)
	M12 Transportation Service											
	<u>Demand:</u>											
	Dawn to Kirkwall											
1	- 12 months	GJ/d/mo	419,318	16,118	2.865	-	(4,402)	-	-	11,716	60	
2	- 10 months	GJ/d/mo	304,563	8,726	2.865	-	(2,383)	-	-	6,343	32	
3	- 2 months	GJ/d/mo	18,365	105	2.865	-	(29)	-	-	76	0	
4	- F24-T - 12 months	GJ/d/mo	49,500	41	0.070	-	0	-	-	41	0	
	Dawn to Parkway											
5	- 12 months	GJ/d/mo	3,920,130	172,578	3.402	-	(67,947)	-	-	104,630	534	
6	- 10 months	GJ/d/mo	65,000	2,211	3.402	-	(607)	-	-	1,604	8	
7	- 3 months	GJ/d/mo	2,000	20	3.402	-	(5)	-	-	15	0	
8	- F24-T - 12 months	GJ/d/mo	307,000	328	0.070	-	0	-	-	328	2	
	M12-X Easterly (between Dawn, Kirkwall and Parkway	)										
9	- 12 months	GJ/d/mo	391,011	15,963	3.402	-	(4,384)	-	-	11,579	59	
	M12-X Westerly (between Dawn, Kirkwall and Parkway	<b>'</b> )										
10	- 12 months	GJ/d/mo	391,011	3,926	0.837	-	(1,110)	-	-	2,815	14	
	Kirkwall to Parkway											
11	- 12 months	GJ/d/mo	138,940	896	0.537	-	(486)	-	-	409	2	
12	- 2 months	GJ/d/mo	174,752	188	0.537	-	(53)	-	-	135	1	
	Fuel and Commodity Charges:											
	Fuel											
13	Easterly - Providing Own Fuel	GJ	705,499,899	23,914		-	-	(652)	-	23,262	119	
14	Westerly - Providing Own Fuel	GJ	5,936,749	50		-	-	-	-	50	0	
15	Total Rate M12		711,436,648	245,065			(81,408)	(652)	-	163,005	831	0.51%

- (1) (2) (3) (4) (5) EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (t).
- Rate Order, Working Papers, Schedule 7, Page 2, column (e).
- EB-2017-0278 Appendix A, rates effective October 1, 2017.
  EB-2016-0245, Rate Order, Working Papers, Schedule 10, columns (d).
  EB-2016-0245, Rate Order, Working Papers, Schedule 20.

				Adjustments to 2	018 Base Rates							
					2018 Parkway					F	Proposed Rates	
Line	Darticulare	Billing	2018 DSM	2018 Capital Pass-Throughs (6)	Delivery Obligation (7)	Add Back Upstream Transportation	Proposed Revenue	Proposed Rates	Demand Adjustment	Usage including	Rates	Rate Change
No.	Particulars	Units	(\$000's) (k)	(\$000's) (I)	(\$000's) (m)	$\frac{(\$000's)}{(n) = (-g)}$	$\frac{(\$000's)}{(o) = sum(h:n)}$	$\frac{(\$/ GJ)}{(p) = (o / a)}$	(GJ/d/mo) (q)	$\frac{\text{Adjustment}}{\text{(r) = (a + q)}}$	$\frac{(\$/ GJ)}{(s) = (o / r)}$	(%) (t)
			(K)	(1)	(111)	(11) = (-9)	(0) = Sum(m.m)	(p) = (0 / a)	(4)	(1) = (a + q)	(S) = (O / I)	(1)
	M12 Transportation Service											
	Demand:											
	Dawn to Kirkwall											
1	- 12 months	GJ/d/mo	-	5,970	-	-	17,746		-	419,318	3.154	
2	- 10 months	GJ/d/mo	-	3,232	-	-	9,607		-	304,563	3.154	
3	- 2 months	GJ/d/mo	-	39	-	-	116		-	18,365	3.154	
4	- F24-T - 12 months	GJ/d/mo	-	(0)	-	-	42		-	49,500	0.070	
	Dawn to Parkway											
5	- 12 months	GJ/d/mo	-	96,781	-	-	201,944		301,735	4,221,865	3.716	
6	- 10 months	GJ/d/mo	-	803	-	-	2,415		-	65,000	3.716	
7	- 3 months	GJ/d/mo	-	7	-	-	22		-	2,000	3.716	
8	- F24-T - 12 months	GJ/d/mo	-	(0)	-	-	330		-	307,000	0.070	
	M12-X Easterly (between Dawn, Kirkwall and Parkway)											
9	- 12 months	GJ/d/mo	-	5,797	-	-	17,435		-	391,011	3.716	
	M12-X Westerly (between Dawn, Kirkwall and Parkway)											
10	- 12 months	GJ/d/mo	-	1,274	-	-	4,103		-	391,011	0.874	
	Kirkwall to Parkway											
11	- 12 months	GJ/d/mo	-	1,001	-	-	1,412		70,712	209,652	0.561	
12	- 2 months	GJ/d/mo	-	61	-	-	196		-	174,752	0.561	
	Fuel and Commodity Charges: Fuel											
13	Easterly - Providing Own Fuel	GJ	-	-	680	-	24,061		-	705,499,899		
14	Westerly - Providing Own Fuel	GJ	-	-	-	-	50		-	5,936,749		
15	Total Rate M12			114,965	680		279,481		372,447	711,436,648		14.0%

## Notes: (6) (7)

<sup>(6)</sup> Rate Order, Working Papers, Schedule 10, column (d).

<sup>(7)</sup> Rate Order, Working Papers, Schedule 20, column (c).

						Adju	ustments to 2017 Bas	se Rates				
Line No.	Particulars	Billing Units	Current Approved Forecast Usage (1) (a)	Current Approved Revenue (2) (\$000's)	Current Approved Rates (3) (\$/ GJ) (c)	2017 DSM (\$000's) (d)	2017 Capital Pass-Throughs (4) (\$000's) (e)	2017 Parkway Delivery Obligation (5) (\$000's)	Upstream Transportation (\$000's) (g)	Adjusted Revenue $(\$000's)$ $(h) = (b+d+e+f+g)$	Price Cap Index (\$000's)	Price Cap Index (%) (j)
	M13 Transportation of Locally Produced Gas											
1	Monthly Fixed Charge	monthly	15	171	\$952.72	-	-	-	_	171	1	
2	Transmission Commodity Charge	GJ	5,934,507	203	0.035	-	5	-	-	208	1	
3	Commodity - Providing Own Fuel	GJ	5,934,507	33	0.006	-	-	-	-	33	0	
4	Total Rate M13		5,934,507	407		-	5	-	-	412	2	0.51%
	M16 Transportation Service											
5	Monthly Fixed Charge	monthly	4	73	\$1,515.67	-	-	-	_	73	0	
6	Transmission Commodity Charge	GJ	6,236,394	217	0.035	-	0	-	_	217	1	
	Charges West of Dawn:		, ,				-	-				
7	Firm Demand Charge	GJ/d	17,846	224	1.045	_	9	-	-	233	1	
8	Fuel & UFG to Dawn	GJ	4,098,775	23	0.006	-	-	-	-	23	0	
9	Fuel & UFG to Pool	GJ	4,098,775	65	0.016	-	-	-	-	65	0	
	Charges East of Dawn:						-	-				
10	Firm Demand Charge	GJ/d	9,067	84	0.770	-	-	-	-	84	0	
11	Fuel & UFG to Dawn	GJ	2,137,619	12	0.006	-	-	-	-	12	0	
12	Fuel & UFG to Pool	GJ	2,137,619	14	0.007			(3)		11	0	
13	Total Rate M16		12,472,788	711			10	(3)		718	4	0.51%

- EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (t). Rate Order, Working Papers, Schedule 7, Page 2, column (e). EB-2017-0278 Appendix A, rates effective October 1, 2017. EB-2016-0245, Rate Order, Working Papers, Schedule 10, columns (d). EB-2016-0245, Rate Order, Working Papers, Schedule 20.
- (1) (2) (3) (4) (5)

			-	Adjustments to 20								
				2018 Capital	2018 Parkway Delivery	Add Back				F	Proposed Rates	
Line No.	Particulars	Billing Units	2018 DSM (\$000's)	Pass-Throughs (6) (\$000's)	Obligation (7) (\$000's)	Upstream Transportation (\$000's)	Proposed Revenue (\$000's)	Proposed Rates (\$/ GJ)	Demand Adjustment (GJ/d/mo)	Usage including Adjustment	Rates (\$/ GJ)	Rate Change (%)
140.	Tarticulais	OTIIG	(k)	(I)	(m)	(n) = (-g)	(o) = sum(h:n)	(p) = (o/a)	(q)	(r) = (a + q)	(s) = (o / r)	(t)
	M13 Transportation of Locally Produced Gas											
1	Monthly Fixed Charge	monthly	-	-	-	-	172		-	15	\$957.58	
2	Transmission Commodity Charge	GJ	-	(2)	-	-	206		-	5,934,507	0.035	
3	Commodity - Providing Own Fuel	GJ				<u> </u>	33			5,934,507	0.006	
4	Total Rate M13		-	(2)		-	412	-	-	5,934,507		1.1%
	M16 Transportation Service											
5	Monthly Fixed Charge	monthly	-	-	_	-	73		_	4	\$1,523.40	
6	Transmission Commodity Charge	GJ	-	(0)	-	-	218		-	6,236,394	0.035	
	Charges West of Dawn:			(-)						-,,		
7	Firm Demand Charge	GJ/d	-	441	-	-	676		-	17,846	\$3.155	
8	Fuel & UFG to Dawn	GJ	_	_	-	-	23		_	4,098,775	0.006	
9	Fuel & UFG to Pool	GJ	-	-	-	-	65		-	4,098,775	0.016	
	Charges East of Dawn:											
10	Firm Demand Charge	GJ/d	-	-	-	-	84		-	9,067	\$0.774	
11	Fuel & UFG to Dawn	GJ	-	-	-	-	12		-	2,137,619	0.006	
12	Fuel & UFG to Pool	GJ		<u> </u>	2	<u> </u>	13			2,137,619	0.006	
13	Total Rate M16			441	2	-	1,165		-	12,472,788		63.7%

## Notes: (6) (7)

Rate Order, Working Papers, Schedule 10, column (d). Rate Order, Working Papers, Schedule 20, column (c).

						Adiu	ustments to 2017 Ba	se Rates				
Line No.	Particulars	Billing Units	Current Approved Forecast Usage (1)	Current Approved Revenue (2) (\$000's)	Current Approved Rates (3) (\$/ GJ)	2017 DSM (\$000's)	2017 Capital Pass-Throughs (4) (\$000's)	2017 Parkway Delivery Obligation (5) (\$000's)	Upstream Transportation (\$000's)	Adjusted Revenue (\$000's)	Price Cap Index (\$000's)	Price Cap Index (%)
INO.	r at ticulats	Office	(a)	(b)	(c)	(d)	(e)	(f)		(b) = (b+d+e+f+g)	(i)	(j)
1	C1 Cross Franchise Transportation Service Storage Service:	GJ		7,665	(6)			(1)				u)
1	Peak Storage (Short-term) Commodity		22,489,337			-	239	-	-	7,904	n/a	
2	Off Peak Storage/ Balancing / Loans Transportation Service: Demand: St.Clair & Dawn / Ojibway & Dawn	GJ		2,500		-	-	-	-	2,500	n/a	
3	- 12 months	GJ/mo	85,460	3,246	1.045	-	45	-	-	3,291	17	
	Parkway to Dawn/Kirkwall	<b>.</b>					(222)					
4 5	<ul><li>- 12 months</li><li>- 3 months</li></ul>	GJ/mo GJ/mo	347,371 54,357	3,488 136	0.837 0.837	-	(986) (39)	-	-	2,501 98	13 0	
6	Kirkwall to Dawn	GJ/mo	-	-	1.475	-	-	-	-	-	-	
_	Dawn to Parkway											
7 8	<ul><li>12 months</li><li>12 months North T-Service</li></ul>	GJ/mo GJ/mo	7,065 30,111	424 1,229	3.402 3.402	-	- (1,229)	-	-	424 -	-	
9	Kirkwall to Parkway	GJ/mo	-	-	0.537	-	-	-	-	-	-	
10	Dawn to Dawn-Vector - 12 months	GJ/mo	92,845	33	0.029	-	-	-	-	33	0	
11	Dawn to Dawn-TCPL - 12 months	GJ/mo	500,000	828	0.138	-	-	-	-	828	4	
	Firm Commodity Easterly Union Providing Fuel											
12	Dawn to Parkway (TCPL / EGT) Providing Own Fuel	GJ	2,423,295	94		-	-	(7)	-	86	0	
13	Dawn to Dawn-TCPL	GJ	5,000,000	85		-	-	-	-	85	0	
14	Dawn to Dawn-Vector	GJ	18,280,703	251		-	-	-	-	251	1	
15	Ojibway to Dawn Westerly - Providing Own Fuel	GJ	9,968,577	169		-	-	-	-	169	1	
16	Parkway to Kirkwall	GJ	-	-		-	-	-	-	-	-	
17	Parkway to Dawn	GJ	3,990,264	53		-	-	-	-	53	0	
18	Short-term Transportation	GJ	177,529,686	11,218		-	48	(206)	-	11,061	n/a	
19	Exchanges			14,918		-	-	-	-	14,918	n/a	
20	Other Transactional			1,067		<del>-</del>	-	-	-	1,067	n/a	
21	Total Rate C1		217,192,525	47,403		-	(1,922)	(213)	-	45,268	40	
22	Total Ex-Franchise			293,587		-	(83,315)	(868)		209,404	877	0.42%

- EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (t). Rate Order, Working Papers, Schedule 7, Page 2, column (e). EB-2017-0278 Appendix A, rates effective October 1, 2017. EB-2016-0245, Rate Order, Working Papers, Schedule 10, columns (d). EB-2016-0245, Rate Order, Working Papers, Schedule 20. (1) (2) (3) (4) (5)

				Adjustment to 20	018 Base Rates							
				-	2018 Parkway					F	Proposed Rates	
				2018 Capital	Delivery	Add Back						
			2018	Pass-Throughs	Obligation	Upstream	Proposed	Proposed	Demand	Usage		Rate
Line		Billing	DSM	(6)	(7)	Transportation	Revenue	Rates	Adjustment	including	Rates	Change
No.	Particulars	Units	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$/ GJ)	(GJ/d/mo)	Adjustment	(\$/ GJ)	(%)
			(k)	(1)	(m)	(n) = (-g)	(o) = sum(h:n)	(p) = (o / a)	(q)	(r) = (a + q)	(s) = (o / r)	(t)
	C1 Cross Franchise Transportation Service											
	Storage Service:											
1	Peak Storage (Short-term)	GJ	-	(293)	-	-	7,611		_	22,489,337		
	Commodity			( /			,-			,,		
2	Off Peak Storage/ Balancing / Loans	GJ	-	-	-	-	2,500		-	-		
	Transportation Service:											
	Demand:											
	St.Clair & Dawn / Ojibway & Dawn											
3	- 12 months	GJ/mo	-	2,115	-	-	5,423		-	85,460	3.155	
	Deviaue to Devia //											
4	Parkway to Dawn/Kirkwall - 12 months	C 1/m n		4 404			2.045			0.47.074	0.074	
4 5	- 12 months	GJ/mo GJ/mo	-	1,131 44	-	-	3,645 143		-	347,371	0.874 0.874	
			-	44	-	-	143		-	54,357		
6	Kirkwall to Dawn	GJ/mo	-	-	-	-	-		-	-	1.542	
	Dawn to Parkway											
7	- 12 months	GJ/mo	-	-	-	-	426		-	7,065	3.716	
8	- 12 months North T-Service	GJ/mo	-	1,565	-	-	1,565		4,979	35,090	3.716	
9	Kirkwall to Parkway	GJ/mo	-	-	-	-	-		-	0	0.561	
	Dawn to Dawn-Vector											
10	- 12 months	GJ/mo	-	-	-	-	33		-	92,845	0.030	
	Dawn to Dawn-TCPL											
11	- 12 months	GJ/mo	-	-	-	-	832		-	500,000	0.139	
	Firm Commodity											
	Easterly											
	Union Providing Fuel											
12	Dawn to Parkway (TCPL / EGT)	GJ	-	-	7	-	94		-	2,423,295		
	Providing Own Fuel											
13	Dawn to Dawn-TCPL	GJ	-	-	-	-	85		-	5,000,000		
14	Dawn to Dawn-Vector	GJ	-	-	-	-	252		-	18,280,703		
15	Ojibway to Dawn	GJ	-	-	-	-	170		-	9,968,577		
4.0	Westerly - Providing Own Fuel											
16	Parkway to Kirkwall	GJ	-	-	-	-	-		-	-		
17	Parkway to Dawn	GJ	-	-	-	-	53		-	3,990,264		
18	Short-term Transportation	GJ	-	107	196	-	11,364		-	177,529,686		
19	Exchanges		-	-	-	-	14,918		-	-		
20	Other Transactional		-	-	-	-	1,067		-	-		
21	Total Rate C1		-	4,670	203	_	50,181		4,979	217,192,525		5.9%
22	Total Ex-Franchise			420.074	005		224 220		277 400			
22	i Olai EX-Franchise		<u> </u>	120,074	885		331,239		377,426			

## Notes: (6) (7)

Rate Order, Working Papers, Schedule 10, column (d). Rate Order, Working Papers, Schedule 20, column (c).

Line No.	Particulars		2017 Current Approved Revenue (2) (\$000s)	Price Cap Index (2) (\$000s)	DSM (2) (\$000s) (d)	Capital Pass-Throughs (2) (\$000s) (e)	Parkway Delivery Obligation (2) (\$000s)	Upstream Transportation (\$000's) (h)	Total Excluding Volume Adjustments (i)	Volume Adjustments (j)	Total Including Volume Adjustments (k)
	North Delivery	<u> </u>									
1 2 3 4	R01	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³) Average rate change (1)	159,704 909,690 17.5559	802 909,690 0.0882 0.5%	1,024 909,690 0.1126 0.6%	(1,461) 909,690 (0.1606) -0.9%	909,690 - 0.0%	909,690 - 0.0%	160,069 909,690 17.5960 0.2%	(23,350) 0.4636 2.6%	160,069 886,340 18.0596 2.9%
5 6 7 8	R10	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³) Average rate change (1)	20,666 337,112 6.1303	93 337,112 0.0275 0.4%	142 337,112 0.0422 0.7%	(149) 337,112 (0.0442) -0.7%	337,112 - 0.0%	337,112 - 0.0%	20,752 337,112 6.1558 0.4%	(11,150) 0.2106 3.4%	20,752 325,962 6.3664 3.9%
9 10 11 12	R20	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³) Average rate change (1)	13,580 606,176 2.2403	64 606,176 0.0105 0.5%	39 606,176 0.0065 0.3%	(128) 606,176 (0.0212) -0.9%	- 606,176 - 0.0%	606,176 - 0.0%	13,555 606,176 2.2361 -0.2%	(1,621) 0.0060 0.3%	13,555 604,555 2.2421 0.1%
13 14 15 16	R25	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³) Average rate change (1)	4,340 159,555 2.7201	23 159,555 0.0146 0.5%	159,555 - 0.0%	(43) 159,555 (0.0271) -1.0%	- 159,555 - 0.0%	159,555 - 0.0%	4,320 159,555 2.7076 -0.5%	- - 0.0%	4,320 159,555 2.7076 -0.5%
17 18 19 20	R100	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³) Average rate change (1)	15,230 1,814,867 0.8392	71 1,814,867 0.0039 0.5%	13 1,814,867 0.0007 0.1%	(113) 1,814,867 (0.0062) -0.7%	- 1,814,867 - 0.0%	1,814,867 - 0.0%	15,201 1,814,867 0.8376 -0.2%	(762) 0.0004 0.0%	15,201 1,814,105 0.8380 -0.1%

Notes:

(1) Average rate change is compared to column (a).
(2) Rate Order, Working Paper, Schedule 3.

Line No.	Particulars		2017 Current Approved Revenue (2) (\$000s)	Price Cap Index (2) (\$000s) (b)	DSM (2) (\$000s) (d)	Capital Pass-Throughs (2) (\$000s) (e)	Parkway Delivery Obligation (2) (\$000s)	Upstream Transportation (\$000's) (h)	Total Excluding Volume Adjustments (i)	Volume Adjustments (j)	Total Including Volume Adjustments (k)
	South Delivery	& Storage									
1 2 3	M1 - Delivery	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³)	389,338 2,897,179 13.4385	1,848 2,897,179 0.0638	2,825 2,897,179 0.0975	3,138 2,897,179 0.1083	(276) 2,897,179 (0.0095)	2,897,179 -	396,873 2,897,179 13.6986	(88,884) 0.4336	396,873 2,808,296 14.1322
4 5 6	M1 - Storage	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³)	20,724 2,897,179 0.7153	114 2,897,179 0.0039	2,897,179 -	(257) 2,897,179 (0.0089)	- 2,897,179 -	- 2,897,179 -	20,580 2,897,179 0.7104	(88,884) 0.0225	20,580 2,808,296 0.7328
7 8 9	M1	Revenue (\$000s) Total Average rate (cents / m³) Average rate change (1)	410,061 14.1538	1,962 0.0677 0.5%	2,825 0.0975 0.7%	2,881 0.0994 0.7%	(276) (0.0095) -0.1%	- - 0.0%	417,453 14.4089 1.8%	0.4560 3.2%	417,453 14.8650 5.0%
10 11 12	M2 - Delivery	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³)	54,348 1,127,028 4.8223	198 1,127,028 0.0176	451 1,127,028 0.0400	1,912 1,127,028 0.1696	(106) 1,127,028 (0.0094)	- 1,127,028 -	56,803 1,127,028 5.0401	(47,291) 0.2208	56,803 1,079,737 5.2609
13 14 15	M2 - Storage	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³)	7,046 1,127,028 0.6252	39 1,127,028 0.0034	- 1,127,028 -	(88) 1,127,028 (0.0078)	- 1,127,028 -	- 1,127,028 -	6,997 1,127,028 0.6209	(47,291) 0.0272	6,997 1,079,737 0.6481
16 17 18	M2	Revenue (\$000s) Total Average rate (cents / m³) Average rate change (1)	61,395 5.4475	237 0.0210 0.4%	451 0.0400 0.7%	1,824 0.1619 3.0%	(106) (0.0094) -0.2%	- - 0.0%	63,801 5.6610 3.9%	0.2479 4.6%	63,801 5.9089 8.5%
19 20 21 22	M4	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³) Average rate change (1)	14,995 349,263 4.2933	54 349,263 0.0155 0.4%	46 349,263 0.0131 0.3%	1,551 349,263 0.4440 10.3%	(72) 349,263 (0.0207) -0.5%	349,263 - 0.0%	16,573 349,263 4.7451 10.5%	(10,047) 0.1405 3.3%	16,573 339,216 4.8857 13.8%
23 24 25 26	M5	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³) Average rate change (1)	13,634 465,451 2.9291	53 465,451 0.0114 0.4%	49 465,451 0.0105 0.4%	(94) 465,451 (0.0203) -0.7%	(82) 465,451 (0.0177) -0.6%	465,451 - 0.0%	13,559 465,451 2.9131 -0.5%	(15,362) 0.0994 3.4%	13,559 450,088 3.0125 2.8%

<sup>(1)</sup> Average rate change is compared to column (a).(2) Rate Order, Working Paper, Schedule 3.

Line No.	Particulars		2017 Current Approved Revenue (2) (\$000s) (a)	Price Cap Index (2) (\$000s)	DSM (2) (\$000s) (d)	Capital Pass-Throughs (2) (\$000s) (e)	Parkway Delivery Obligation (2) (\$000s)	Upstream Transportation (\$000's) (h)	Total Excluding Volume Adjustments (i)	Volume Adjustments (j)	Total Including Volume Adjustments (k)
	0 11 5 11		(4)	(5)	(4)	(5)	(-7	(,	(-)	d/	(.,)
	South Deliver	y & Storage (cont.)									
1	M7	Revenue (\$000s)	4,900	16	24	519	(27)	-	5,432		5,432
2		Volumes (10 <sup>3</sup> m <sup>3</sup> )	124,828	124,828	124,828	124,828	124,828	124,828	124,828	(5,587)	119,242
3		Average rate (cents / m³)	3.9255	0.0129	0.0189	0.4155	(0.0213)	-	4.3515	0.2039	4.5554
4		Average rate change (1)		0.3%	0.5%	10.6%	-0.5%	0.0%	10.9%	5.2%	16.0%
5	M9	Revenue (\$000s)	1,023	3	-	38	(17)	_	1,048		1,048
6	-	Volumes (10 <sup>3</sup> m <sup>3</sup> )	60,750	60,750	60,750	60,750	60,750	60,750	60,750	-	60,750
7		Average rate (cents / m³)	1.6844	0.0058	-	0.0633	(0.0275)	-	1.7259	-	1.7259
8		Average rate change (1)		0.3%	0.0%	3.8%	-1.6%	0.0%	2.5%	0.0%	2.5%
9	M10	Revenue (\$000s)	13	0	_	1	0	_	14		14
10		Volumes (10 <sup>3</sup> m <sup>3</sup> )	189	189	189	189	189	189	189	-	189
11		Average rate (cents / m³)	6.7289	0.0142	-	0.3549	0.0756	-	7.1737	-	7.1737
12		Average rate change (1)		0.2%	0.0%	5.3%	1.1%	0.0%	6.6%	0.0%	6.6%
13	T1	Revenue (\$000s)	11,618	46	41	1,110	(95)	_	12,719		12,719
14		Volumes (10 <sup>3</sup> m <sup>3</sup> )	511,234	511,234	511,234	511,234	511,234	511,234	511,234	(3,895)	507,339
15		Average rate (cents / m³)	2.2725	0.0090	0.0079	0.2171	(0.0185)	-	2.4879	0.0191	2.5070
16		Average rate change (1)		0.4%	0.3%	9.6%	-0.8%	0.0%	9.5%	0.8%	10.3%
17	T2	Revenue (\$000s)	51,985	207	49	8,180	(415)	-	60,004		60,004
18		Volumes (10³m³)	4,597,268	4,597,268	4,597,268	4,597,268	4,597,268	4,597,268	4,597,268	(30,384)	4,566,884
19		Average rate (cents / m³)	1.1308	0.0045	0.0011	0.1779	(0.0090)	-	1.3052	0.0087	1.3139
20		Average rate change (1)		0.4%	0.1%	15.7%	-0.8%	0.0%	15.4%	0.8%	16.2%
21	Т3	Revenue (\$000s)	6,769	23	_	276	(57)	_	7,011		7,011
22		Volumes (10 <sup>3</sup> m <sup>3</sup> )	272,712	272,712	272,712	272,712	272,712	272,712	272,712	-	272,712
23		Average rate (cents / m³)	2.4820	0.0085	-	0.1013	(0.0209)	-	2.5708	-	2.5708
24	latas	Average rate change (1)		0.3%	0.0%	4.1%	-0.8%	0.0%	3.6%	0.0%	3.6%

<sup>(1)</sup> Average rate change is compared to column (a).(2) Rate Order, Working Paper, Schedule 3.

Line No.	Particulars		2017 Current Approved Revenue (2) (\$000s)	Price Cap Index (2) (\$000s) (b)	DSM (2) (\$000s) (d)	Capital Pass-Throughs (2) (\$000s) (e)	Parkway Delivery Obligation (2) (\$000s)	Upstream Transportation (\$000's) (h)	Total Excluding Volume Adjustments (i)	Volume Adjustments (j)	Total Including Volume Adjustments (k)
	North Transp	portation & Storage									
1 2 3 4	R01	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³) Average rate change (1)	86,683 909,690 9.5289	78 909,690 0.0086 0.1%	909,690 - 0.0%	1,311 909,690 0.1442 1.5%	(0) 909,690 (0.0000) 0.0%	179 909,690 0.0197 0.2%	88,251 909,690 9.7012 1.8%	(23,350) 0.2556 2.7%	88,251 886,340 9.9568 4.5%
5 6 7 8	R10	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³) Average rate change (1)	25,473 337,112 7.5561	22 337,112 0.0066 0.1%	337,112 - 0.0%	341 337,112 0.1012 1.3%	(0) 337,112 (0.0000) 0.0%	37 337,112 0.0111 0.1%	25,873 337,112 7.6750 1.6%	(11,150) 0.2625 3.5%	25,873 325,962 7.9375 5.0%
9 10 11 12	R20	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³) Average rate change (1)	7,995 121,935 6.5571	7 121,935 0.0055 0.1%	121,935 - 0.0%	87 121,935 0.0711 1.1%	0 121,935 0.0000 0.0%	(6) 121,935 (0.0051) -0.1%	8,083 121,935 6.6286 1.1%	- - 0.0%	8,083 121,935 6.6286 1.1%
13 14 15 16	R25	Revenue (\$000s) Volumes (10³m³) Average rate (cents / m³) Average rate change (1)	696 42,913 1.6229	0 42,913 0.0002 0.0%	42,913 - 0.0%	(2) 42,913 (0.0053) -0.3%	- 42,913 - 0.0%	(17) 42,913 (0.0394) -2.4%	677 42,913 1.5784 -2.7%	- - 0.0%	677 42,913 1.5784 -2.7%
17 18	R100	Revenue (\$000s) Change (1)	336	1 0.2%	0.0%	5 1.5%	(0) 0.0%	(0) 0.0%	342 1.6%	0.0%	342 1.6%
	Ex-Franchise	<u>e</u>									
19 20	M12	Revenue (\$000s) Change (1)	245,065	831 0.3%	0.0%	33,557 13.7%	28 0.0%	- 0.0%	279,481 14.0%	- 0.0%	279,481 14.0%
21 22	M13	Revenue (\$000s) Change (1)	407	2 0.5%	0.0%	2 0.6%	0.0%	- 0.0%	412 1.1%	- 0.0%	412 1.1%
23 24	M16	Revenue (\$000s) Change (1)	711	4 0.5%	0.0%	451 63.4%	(1) -0.1%	- 0.0%	1,165 63.7%	- 0.0%	1,165 63.7%
25 26	C1	Revenue (\$000s) Change (1)	47,403	40 0.1%	0.0%	2,748 5.8%	(10) 0.0%	0.0%	50,181 5.9%	0.0%	50,181 5.9%
27		Gas Supply Admin	6,723			(35)			6,689		6,689
28		Totals	1,211,406	4,639	4,702	52,855	(1,130)	193	1,272,665		1,272,665

Notes:
(1) Average rate change is compared to column (a).
(2) Rate Order, Working Paper, Schedule 3.

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#### UNION GAS LIMITED Union North

#### Percentage Change in Average Unit Price Effective January 1, 2018

Line No.	Particulars (cents/m³)	Rate Class	Current Rates (1) (cents / m³) (a)	Proposed Rates (2) (cents / m³) (b)	Rate Change (c) = (b - a)	Percent Change (3) (%) (d) = (c / a)
	Small Volume General Service	01				
1	Delivery	01	17.5559	18.0596	0.5037	2.9%
2	Gas Supply Transportation		4.1150	4.1353	0.0203	0.5%
3	Storage		5.3358	5.6319	0.2961	5.5%
4	Total		27.0067	27.8268	0.8201	3.0%
	Large Volume General Service	10				
5	Delivery		6.1303	6.3664	0.2361	3.9%
6	Gas Supply Transportation		3.5376	3.5489	0.0113	0.3%
7	Storage		3.9512	4.1973	0.2461	6.2%
8	Total		13.6191	14.1126	0.4935	3.6%
	Madium Valura Firm Comica	20				
9	Medium Volume Firm Service Delivery	20	2.2403	2.2421	0.0018	0.1%
10	Gas Supply Transportation		6.5571	6.6286	0.0715	1.1%
11	Total		8.7974	8.8707	0.0713	0.8%
	Total		0.7374	0.0707	0.0733	0.070
	Large Volume High Load Factor	100				
12	Delivery		0.8392	0.8380	(0.0012)	-0.1%
	Large Volume Interruptible	25				
13	Delivery		2.7201	2.7076	(0.0125)	-0.5%

- Rate Order, Working Papers, Schedule 4, column (c). Rate Order, Working Papers, Schedule 4, column (s).
- (2)
- (3) Excludes Gas Supply Commodity related costs.

Filed: 2017-09-26 EB-2017-0087 Rate Order Working Papers Schedule 6 Page 2 of 2

#### **UNION GAS LIMITED**

## Union South Percentage Change in Average Unit Price <u>Effective January 1, 2018</u>

Line No.	Particulars (cents/m³)	Rate Class	Current Rates (1) (cents / m³)	Proposed Rates (2) (cents / m³)	Rate Change	Percent Change (3) (%)
			(a)	(b)	(c) = (b - a)	(d) = (c / a)
	General Service	M1				
1	Delivery	IVII	13.4385	14.1322	0.6937	5.2%
2	Storage		0.7153	0.7328	0.0175	2.4%
3	Total		14.1538	14.8650	0.7112	5.0%
_	General Service	M2				
4	Delivery		4.8223	5.2609	0.4386	9.1%
5	Storage		0.6252	0.6481	0.0229	3.7%
6	Total		5.4475	5.9090	0.4615	8.5%
	Firm Contract Commercial / Industrial	M4				
7	Delivery	171-7	4.2933	4.8857	0.5924	13.8%
	•					
	Firm Contract Commercial / Industrial	M5 (F)				
8	Delivery		3.6220	3.8461	0.2241	6.2%
	Interruptible Contract Commercial / Industrial	M5 (I)				
9	Delivery		2.9059	2.9845	0.0786	2.7%
	F: 0 : 11	(5)				
10	Firm Special Large Volume Contract	M7 (F)	4.0135	4.6628	0.6493	16.2%
10	Delivery		4.0133	4.0020	0.0493	10.2%
	Interruptible Special Large Volume Contract	M7 (I)				
11	Delivery	1417 (1)	1.2348	1.2692	0.0344	2.8%
	,					
	Large Wholesale Service	M9				
12	Delivery		1.6844	1.7259	0.0415	2.5%
				_		
4.0	Small Wholesale Service	M10				
13	Delivery		6.7289	7.1737	0.4448	6.6%
	Storage and Transportation	T1 (F/I)				
14	Delivery	11 (F/1)	2.2725	2.5070	0.2345	10.3%
15	Total Delivery excluding fuel		2.2035	2.4374	0.2339	10.6%
	· · · · · · · · · · · · · · · · · · ·					
	Storage and Transportation	T2 (F/I)				
16	Delivery	, ,	1.1308	1.3139	0.1831	16.2%
17	Total Delivery excluding fuel		1.0810	1.2637	0.1827	16.9%
4.0	Storage and Transportation Distributor	Т3				
18	Delivery		2.4820	2.5708	0.0888	3.6%

- (1) Rate Order, Working Papers, Schedule 4, column (c).
- (2) Rate Order, Working Papers, Schedule 4, column (s).
- (3) Excludes Gas Supply Commodity related costs.

#### **UNION GAS LIMITED** Summary of Approved 2017 Revenue Changes

		2017 Revenue		Updated 2017				
Line No.	Particulars (\$000's)	EB-2016-0245 2017 Rates (1)	EB-2016-0296 PDCI Update (2)	EB-2016-0334 Jan 2017 QRAM (3)	EB-2017-0089 Apr 2017 QRAM (4)	EB-2017-0185 Jul 2017 QRAM (5)	EB-2017-0278 Oct 2017 QRAM (6)	Revenue for EB-2017-0087
	North Delivery	(a)	(b)	(c)	(d)	(e)	(f)	(g) = (a+b+c+d+e+f)
1	Rate 01	161,111	-	(778)	(43)	117	(703)	159,704
2	Rate 10	21,091	-	(235)	(13)	35	(212)	20,666
3	Rate 20	13,723	-	(79)	(4)	12	(72)	13,580
4	Rate 25	4,340	-	-	-	-	-	4,340
5	Rate 100	15,237	-	(3)	(0)	0	(3)	15,230
6	Total In-Franchise North Delivery	215,502		(1,096)	(61)	165	(990)	213,520
	South Delivery & Storage							
7	Rate M1	412,278	355	(1,423)	(79)	215	(1,286)	410,061
8	Rate M2	62,135	126	(479)	(27)	72	(433)	61,395
9	Rate M4	15,211	57	(151)	(8)	23	(137)	14,995
10	Rate M5A	13,941	41	(193)	(11)	29	(174)	13,634
11	Rate M7	4,979	23	(56)	(3)	8	(51)	4,900
12	Rate M9	1,055	12	(24)	(1)	4	(22)	1,023
13	Rate M10	13	0	(0)	(0)	0	(0)	13
14	Rate T1	11,611	58	(28)	(2)	4	(25)	11,618
15	Rate T2	51,863	275	(85)	(6)	12	(76)	51,985
16	Rate T3	6,715	53	-	-	-	-	6,769
17	Total In-Franchise South Delivery and Storage	579,802	1,000	(2,438)	(137)	367	(2,203)	576,392
18	Total In-franchise Delivery	795,303	1,000	(3,534)	(198)	531	(3,193)	789,912

- (1) EB-2016-0245, Rate Order, Working Papers, Schedule 3.
  (2) EB-2016-0296, Exhibit 7, Schedule 2, p. 1, column (i).
  (3) EB-2016-0334, Tab 2, Schedule 3, column (g) & EB-2016-0334, Tab 2, Schedule 2, p. 1, column (a).
  (4) EB-2017-0089, Tab 2, Schedule 3, column (g) & EB-2017-0089, Tab 2, Schedule 2, p. 1, column (a).
  (5) EB-2017-0185, Tab 2, Schedule 3, column (g) & EB-2017-0185, Tab 2, Schedule 2, p. 1, column (a).
  (6) EB-2017-0278, Tab 2, Schedule 3, column (g) & EB-2017-0278, Tab 2, Schedule 2, p. 1, column (a).

#### **UNION GAS LIMITED** Summary of Approved 2017 Revenue Changes

		2017 Revenue	2017 Revenue Changes								
Line		EB-2016-0245	EB-2016-0296	EB-2016-0334	EB-2017-0089	EB-2017-0185	EB-2017-0278	Revenue for			
No.	Particulars (\$000's)	2017 Rates (1)	PDCI Update (2)	Jan 2017 QRAM (3)	Apr 2017 QRAM (4)	Jul 2017 QRAM (5)	Oct 2017 QRAM (6)	EB-2017-0087			
	North Transportation & Storage	(a)	(b)	(c)	(d)	(e)	<b>(f)</b>	(g) = (a+b+c+d+e+f)			
1	Rate 01	85,815	-	71	1,035	(23)	(214)	86,683			
2	Rate 10	25,221	-	25	309	(7)	(76)	25,473			
3	Rate 20	7,914	-	11	106	(3)	(33)	7,995			
4	Rate 25	688	-	2	7	4	(5)	696			
5	Rate 100	334	-	0	2	0	(0)	336			
6	Total Northern Transportation and Storage	119,972		109	1,460	(29)	(329)	121,184			
7	Gas Supply Admin Charge	6,723		-				6,723			
8	Total In-Franchise	921,999	1,000	(3,425)	1,262	502	(3,522)	917,819			
	Ex-Franchise										
9	Rate M12	245,065	-	-	-	-	-	245,065			
10	Rate M13	420	-	(7)	(1)	1	(6)	407			
11	Rate M16	755	-	(23)	(2)	4	(21)	711			
12	Rate C1	47,403	-	-	-	-	-	47,403			
13	Total Ex-Franchise	293,643		(30)	(2)	5	(27)	293,587			
14	Total Union Gas	1,215,642	1,000	(3,455)	1,260	507	(3,549)	1,211,406			

- Notes:
  (1) EB-2016-0245, Rate Order, Working Papers, Schedule 3.
  (2) EB-2016-0296, Exhibit 7, Schedule 2, p. 1, column (i).
  (3) EB-2016-0334, Tab 2, Schedule 3, column (g) & EB-2016-0334, Tab 2, Schedule 2, p. 1, column (a).
  (4) EB-2017-0089, Tab 2, Schedule 3, column (g) & EB-2017-0089, Tab 2, Schedule 2, p. 1, column (a).
- (5) EB-2017-0185, Tab 2, Schedule 3, column (g) & EB-2017-0185, Tab 2, Schedule 2, p. 1, column (a).
- (6) EB-2017-0278, Tab 2, Schedule 3, column (g) & EB-2017-0278, Tab 2, Schedule 2, p. 1, column (a).

#### UNION GAS LIMITED Union South General Service Customer Bill Impacts

Rate M1 - Residential Rate M2 - Commercial

		(Annu	al Consumption of 2,20	00 m³)	(Annu	al Consumption of 73,00	00 m³)
Line No.	Particulars	EB-2017-0278     Approved     01-Oct-17     Total     Bill (\$) (1)     (a)	EB-2017-0087 Proposed 01-Jan-18 Total Bill (\$) (1) (b)	Impact (\$) (c) = (b) - (a)	EB-2017-0278 Approved 01-Oct-17 Total Bill (\$) (1) (d)	EB-2017-0087 Proposed 01-Jan-18 Total Bill (\$) (1) (e)	Impact (\$) (f) = (e) - (d)
		(a)	(b)	(c) = (b) - (a)	(u)	( <del>e</del> )	(1) = (e) - (u)
	Delivery Charges						
1	Monthly Charge	252.00	252.00	-	840.00	840.00	-
	Delivery Commodity Charge						
2	Cap-and-Trade Customer-Related Charge	73.00	73.00	-	2,422.23	2,422.23	-
3	Other Delivery Commodity	97.83	107.09	9.26	3,321.75	3,633.85	312.10
4	Storage Services	15.75	16.11	0.36	456.38	473.11	16.73
5	Total Delivery Charge	438.58	448.20	9.62	7,040.36	7,369.19	328.83
	Supply Charges						
6	Transportation to Union	-	-	-	-	-	-
7	Commodity	302.10	302.08	(0.02)	10,023.78	10,023.12	(0.66)
8	Total Gas Supply Charge	302.10	302.08	(0.02)	10,023.78	10,023.12	(0.66)
	Total Bill						
9	Including Cap-and-Trade Customer-Related Charge	740.68	750.28	9.60	17,064.14	17,392.31	328.17
10	Excluding Cap-and-Trade Customer-Related Charge	667.68	677.28	9.60	14,641.91	14,970.08	328.17
	<u>Impacts</u>						
11	Sales Service			9.60			328.17
12	Direct Purchase			9.62			328.83
13	Commodity Bill Impact			(0.0%) (2)			(0.0%) (2)
	Total Bill Impact						
14	Including Cap-and-Trade Customer-Related Charge			1.3%			1.9%
15	Excluding Cap-and-Trade Customer-Related Charge			1.4%			2.2%
-	3			* *			· <del>·</del>

Notes:

(1) Excludes temporary charges/(credits) and prospective recovery.

(2) Commodity bill impact reflects the impact of the gas commodity bill change divided by the current approved gas commodity bill shown at line 7.

#### UNION GAS LIMITED Union North General Service Customer Bill Impacts

Union North West Zone Rate 01 - Residential

Union North East Zone Rate 01 - Residential

			Rate 01 - Residential				
			ual Consumption of 2,200	) m³)		ual Consumption of 2,200	m³)
		EB-2017-0278	EB-2017-0087		EB-2017-0278	EB-2017-0087	
		Approved	Proposed		Approved	Proposed	
Line		01-Oct-17	01-Jan-18	Impact	01-Oct-17	01-Jan-18	Impact
No.	Particulars	Total Bill (\$) (1)	Total Bill (\$) (1)	(\$)	Total Bill (\$) (1)	Total Bill (\$) (1)	(\$)
		(a)	(b)	(c) = (b) - (a)	(d)	(e)	(f) = (e) - (d)
	Delivery Charges						
1	Monthly Charge	252.00	252.00	-	252.00	252.00	-
	Delivery Commodity Charge						
2	Cap-and-Trade Customer-Related Charge	73.00	73.00	-	73.00	73.00	-
3	Other Delivery Commodity	198.05	204.21	6.16	198.05	204.21	6.16
4	Total Delivery Charge	523.05	529.21	6.16	523.05	529.21	6.16
	Supply Charges						
5	Transportation to Union	150.89	150.91	0.02	66.02	66.62	0.60
6	Storage Services	45.19	49.78	4.59	146.73	154.02	7.29
7	Subtotal	196.08	200.69	4.61	212.75	220.64	7.89
8	Commodity	228.36	228.34	(0.02)	308.29	308.27	(0.02)
9	Total Gas Supply Charge	424.44	429.03	4.59	521.04	528.91	7.87
	Total Bill						
10	Including Cap-and-Trade Customer-Related Charge	947.49	958.24	10.75	1,044.09	1,058.12	14.03
11	Excluding Cap-and-Trade Customer-Related Charge	874.49	885.24	10.75	971.09	985.12	14.03
	<u>Impacts</u>						
12	Sales Service			10.75			14.03
13	Direct Purchase			10.77			14.05
14	Commodity Bill Impact			(0.0%) (2)			(0.0%) (2)
	Total Bill Impact						
15	Including Cap-and-Trade Customer-Related Charge			1.1%			1.3%
16	Excluding Cap-and-Trade Customer-Related Charge			1.2%			1.4%

Notes:

(1) Excludes temporary charges/(credits).

(2) Commodity bill impact reflects the impact of the gas commodity bill change divided by the current approved gas commodity bill shown at line 8.

#### UNION GAS LIMITED Union North General Service Customer Bill Impacts

		(Annu	Union North West 10 - Commercial / Industal Consumption of 93,000		(Annua	Union North East Rate 10 - Commercial / Industrial (Annual Consumption of 93,000 m³)			
Line No.	Particulars	EB-2017-0278 Approved 01-Oct-17 Total Bill (\$) (1)	EB-2017-0087 Proposed 01-Jan-18 Total Bill (\$) (1)	Impact (\$)	EB-2017-0278 Approved 01-Oct-17 Total Bill (\$) (1)	EB-2017-0087 Proposed 01-Jan-18 Total Bill (\$) (1)	Impact (\$)		
		(a)	(b)	(c) = (b) - (a)	(d)	(e)	(f) = (e) - (d)		
	Delivery Charges								
1	Monthly Charge	840.00	840.00	_	840.00	840.00	_		
	Delivery Commodity Charge	0+0.00	040.00		040.00	040.00			
2	Cap-and-Trade Customer-Related Charge	3,085.83	3,085.83	-	3,085.83	3,085.83	-		
3	Other Delivery Commodity	5,892.85	6,075.61	182.76	5,892.85	6,075.61	182.76		
4	Total Delivery Charge	9,818.68	10,001.44	182.76	9,818.68	10,001.44	182.76		
_	Supply Charges	5 505 04	5 505 04	0.00	0.500.00	0.500.40	40.77		
5 6	Transportation to Union	5,585.01 1,435.63	5,585.21 1,587.14	0.20	2,568.66 4,378.24	2,582.43 4,631.50	13.77		
6 7	Storage Services Subtotal	7,020.64	7,172.35	<u>151.51</u> 151.71	6,946.90	7,213.93	<u>253.26</u> 267.03		
,	Subtotal	7,020.04	7,172.33	131.71	0,940.90	7,210.90	207.03		
8	Commodity	9,652.93	9,652.09	(0.84)	13,032.65	13,031.81	(0.84)		
9	Total Gas Supply Charge	16,673.57	16,824.44	150.87	19,979.55	20,245.74	266.19		
40	Total Bill	20, 400, 05	20,025,00	222.62	20.700.22	20 247 40	440.05		
10	Including Cap-and-Trade Customer-Related Charge	26,492.25	26,825.88	333.63	29,798.23	30,247.18	448.95		
11	Excluding Cap-and-Trade Customer-Related Charge	23,406.42	23,740.05	333.63	26,712.40	27,161.35	448.95		
	3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -								
	<u>Impacts</u>								
12	Sales Service			333.63			448.95		
13	Direct Purchase			334.47			449.79		
14	Commodity Bill Impact			(0.0%) (2)			(0.0%) (2)		
	Total Bill Impact								
15	Including Cap-and-Trade Customer-Related Charge			1.3%			1.5%		
16	Excluding Cap-and-Trade Customer-Related Charge			1.4%			1.7%		

Notes:

(1) Excludes temporary charges/(credits).

(2) Commodity bill impact reflects the impact of the gas commodity bill change divided by the current approved gas commodity bill shown at line 8.

### **UNION GAS LIMITED** Calculation of Sales Service and Direct Purchase Bill Impacts for Typical Small and Large Customers - Union North

			Excluding Ca	p-and-Trade Cu	ustomer-Relate	d Charge		Including Cap-and-Trade Customer-Related Charge (2)						
		Approved - EB-:	2017-0278 (1)		Proposed - E	B-2017-0087	_	Approved - EB-	-2017-0278 (1)		Proposed - EB	3-2017-0087		
		Total		Total	-	Total Bill	Bill	Total		Total	-	Total Bill	Bill	
Line		Bill	Unit Rate	Bill	Unit Rate	Change	Impact	Bill	Unit Rate	Bill	Unit Rate	Change	Impact	
No.	Particulars	(\$)	(cents/m <sup>3</sup> )	(\$)	(cents/m <sup>3</sup> )	(\$)	(%)	(\$)	(cents/m <sup>3</sup> )	(\$)	(cents/m <sup>3</sup> )	(\$)	(%)	
		(a)	(b)	(c)	(d)	(e) = (c - a)	(f) = (e / a)	(g)	(h)	(i)	(j)	(k) = (I - g)	(I) = (k / g)	
	Small Rate 01													
1	Delivery Charges	450	20.4568	456	20.7368	6.16	1.4%	523	23.7750	529	24.0550	6.16	1.2%	
2	Gas Supply Charges	521	23.6836	529	24.0414	7.87	1.5%	521	23.6836	529	24.0414	7.87	1.5%	
3	Total Bill	971	44.1405	985	44.7782	14.03	1.4%	1,044	47.4586	1,058	48.0964	14.03	1.3%	
4	Sales Service Impact					14.03	1.4%					14.03	1.3%	
5	Bundled-T (Direct Purcha	ase) Impact				14.05	1.9%					14.05	1.9%	
	Small Rate 10													
6	Delivery Charges	4,754	7.9228	4,896	8.1606	143	3.0%	6,745	11.2409	6,887	11.4787	143	2.1%	
7	Gas Supply Charges	12,890	21.4834	13,062	21.7696	172	1.3%	12,890	21.4834	13,062	21.7696	172	1.3%	
8	Total Bill	17,644	29.4062	17,958	29.9302	314	1.8%	19,635	32.7243	19,949	33.2483	314	1.6%	
9	Sales Service Impact					314	1.8%					314	1.6%	
10	Bundled-T (Direct Purcha	ase) Impact				315	3.4%					315	2.8%	
	Large Rate 10													
11	Delivery Charges	15,608	6.2430	16,181	6.4725	574	3.7%	23,903	9.5611	24,476	9.7906	574	2.4%	
12	Gas Supply Charges	53,709	21.4834	54,424	21.7696	715	1.3%	53,709	21.4834	54,424	21.7696	715	1.3%	
13	Total Bill	69,316	27.7264	70,605	28.2421	1,289	1.9%	77,611	31.0445	78,900	31.5602	1,289	1.7%	
14	Sales Service Impact					1,289	1.9%					1,289	1.7%	
15	Bundled-T (Direct Purcha	ase) Impact				1,291	3.0%					1,291	3.0%	
	Small Rate 20													
16	Delivery Charges	75,201	2.5067	74,905	2.4968	(296)	-0.4%	174,744	5.8248	174,448	5.8149	(296)	-0.2%	
17	Gas Supply Charges	547,733	18.2578	548,828	18.2943	1,095	0.2%	547,733	18.2578	548,828	18.2943	1,095	0.2%	
18	Total Bill	622,935	20.7645	623,733	20.7911	798	0.1%	722,478	24.0826	723,276	24.1092	798	0.1%	
19	Sales Service Impact					798	0.1%					798	0.1%	
20	Bundled-T (Direct Purcha	ase) Impact				825	0.3%					825	0.3%	
	Large Rate 20													
21	Delivery Charges	291,824	1.9455	291,515	1.9434	(309)	-0.1%	789,539	5.2636	789,230	5.2615	(309)	0.0%	
22	Gas Supply Charges	2,639,659	17.5977	2,644,331	17.6289	4,672	0.2%	2,639,659	17.5977	2,644,331	17.6289	4,672	0.2%	
23	Total Bill	2,931,483	19.5432	2,935,846	19.5723	4,363	0.1%	3,429,198	22.8613	3,433,561	22.8904	4,363	0.1%	
24	Sales Service Impact					4,363	0.1%					4,363	0.1%	
25	Bundled-T (Direct Purcha	ase) Impact				4,498	0.5%					4,498	0.3%	

- (1) Reflects approved rates per October 2017 QRAM (EB-2017-0278), Appendix A.
  (2) Bill impacts including Cap-and-Trade Customer-Related Charge are applicable to customers for whom Union is required to fulfill Cap-and-Trade obligations.

### UNION GAS LIMITED Calculation of Sales Service and Direct Purchase Bill Impacts for Typical Small and Large Customers - Union North

	Excluding Cap-and-Trade Customer-Related								Including Cap-	and-Trade Custo	II Unit Rate Change Impact (cents/m³) (\$) (%)					
		Approved - EB-	2017-0278 (1)	-	Proposed - E	B-2017-0087		Approved - EB	-2017-0278 (1)		Proposed - El	B-2017-0087				
		Total		Total		Total Bill	Bill	Total		Total		Total Bill	Bill			
Line		Bill	Unit Rate	Bill	Unit Rate	Change	Impact	Bill	Unit Rate	Bill	Unit Rate	Change	Impact			
No.	Particulars	(\$)	(cents/m <sup>3</sup> )	(\$)	(cents/m <sup>3</sup> )	(\$)	(%)	(\$)	(cents/m <sup>3</sup> )	(\$)	(cents/m <sup>3</sup> )	(\$)	(%)			
		(a)	(b)	(c)	(d)	(e) = (c - a)	(f) = (e / a)	(g)	(h)	(i)	(j)					
	Average Rate 25															
1	Delivery Charges	61,803	2.7166	61,519	2.7041	(284)	-0.5%	137,289	6.0347	137,006	6.0222	(284)	-0.2%			
2	Gas Supply Charges	347,172	15.2603	346,139	15.2149	(1,033)	-0.3%	347,172	15.2603	346,139	15.2149	(1,033)	-0.3%			
3	Total Bill	408,975	17.9769	407,658	17.9190	(1,317)	-0.3%	484,461	21.2950	483,145	21.2371	(1,317)	-0.3%			
4	Sales Service Impact					(1,317)	-0.3%					(1,317)	-0.3%			
5	T-Service (Direct Purchas	se) Impact				(284)	-0.5%					(284)	-0.2%			
	Small Rate 100															
6	Delivery Charges	257,308	0.9530	256,601	0.9504	(706)	-0.3%	1,153,195	4.2711	1,152,488	4.2685	(706)	-0.1%			
7	Gas Supply Charges	6,634,970	24.5740	6,622,014	24.5260	(12,956)	-0.2%	6,634,970	24.5740	6,622,014	24.5260	(12,956)	-0.2%			
8	Total Bill	6,892,277	25.5270	6,878,615	25.4764	(13,662)	-0.2%	7,788,164	28.8451	7,774,502	28.7945	(13,662)	-0.2%			
9	Sales Service Impact					(13,662)	-0.2%					(13,662)	-0.2%			
10	T-Service (Direct Purchas	se) Impact				(706)	-0.3%					(706)	-0.1%			
	Large Rate 100															
11	Delivery Charges	2,086,720	0.8695	2,083,604	0.8682	(3,115)	-0.1%	10,050,160	4.1876	10,047,044	4.1863	(3,115)	0.0%			
12	Gas Supply Charges	57,829,168	24.0955	57,718,951	24.0496	(110,217)	-0.2%	57,829,168	24.0955	57,718,951	24.0496	(110,217)	-0.2%			
13	Total Bill	59,915,888	24.9650	59,802,555	24.9177	(113,333)	-0.2%	67,879,328	28.2831	67,765,995	28.2358	(113,333)	-0.2%			
14	Sales Service Impact					(113,333)	-0.2%					(113,333)	-0.2%			
15	T-Service (Direct Purchas	se) Impact				(3,115)	-0.1%					(3,115)	0.0%			

<sup>(1)</sup> Reflects approved rates per October 2017 QRAM (EB-2017-0278), Appendix A.
(2) Bill impacts including Cap-and-Trade Customer-Related Charge are applicable to customers for whom Union is required to fulfill Cap-and-Trade obligations.

## UNION GAS LIMITED Calculation of Sales Service and Direct Purchase Bill Impacts for Typical Small and Large Customers - Union South

Excluding Cap-and-Trade Customer-Related Charge Including Cap-and-Trade Customer-Related Charge (2) Proposed - EB-2017-0087 Approved - EB-2017-0278 (1) Approved - EB-2017-0278 (1) Proposed - EB-2017-0087 Total Bill Bill Total Bill Bill Total Total Total Total Line Bill Unit Rate Bill **Unit Rate** Change Impact Bill **Unit Rate** Bill Unit Rate Change Impact (\$) No. Particulars (cents/m<sup>3</sup>) (\$) (cents/m<sup>3</sup>) (\$) (\$) (cents/m<sup>3</sup>) (\$) (cents/m<sup>3</sup>) (%) (e) = (c - a)(f) = (e/a)(a) (b) (c) (d) (g) (h) (i) (j) (k) = (I - g)(I) = (k / g)Small Rate M1 9.62 2.6% 439 20.3727 9.62 2.2% 366 16.6173 375 17.0545 19.9355 448 **Delivery Charges** (0.02)302 0.0% 302 13.7318 302 13.7309 0.0% 2 Gas Supply Charges 302 13.7318 13.7309 (0.02)668 30.3491 677 30.7855 1.4% 741 33.6673 750 34.1036 3 Total Bill 9.60 9.60 1.3% 9.60 1.4% 4 Sales Service Impact 9.60 1.3% 5 **Direct Purchase Impact** 9.62 2.6% 9.62 2.2% Small Rate M2 6 **Delivery Charges** 3,957 6.5942 4,227 7.0445 270 6.8% 5,947 9.9123 6,218 10.3626 270 4.5% Gas Supply Charges 8,239 13.7312 8,238 13.7303 0.0% 8,239 13.7312 8,238 13.7303 0.0% 7 (1) (1) 8 Total Bill 12.195 20.3254 12.465 20.7748 270 2.2% 14.186 23.6435 14.456 24.0929 270 1.9% 270 270 9 2.2% 1.9% Sales Service Impact 270 270 6.8% 4.5% 10 **Direct Purchase Impact** Large Rate M2 13,289 14,393 5.7570 1,103 8.3% 21,585 8.6339 22,688 9.0751 1,103 5.1% 11 **Delivery Charges** 5.3158 0.0% 12 Gas Supply Charges 34,328 13.7312 34,326 13.7303 0.0% 34,328 13.7312 34,326 13.7303 (2) (2)Total Bill 47,617 19.0470 48,718 19.4873 1,101 2.3% 55,913 22.3651 57,014 22.8054 1,101 13 2.0% 14 Sales Service Impact 1,101 2.3% 1,101 2.0% **Direct Purchase Impact** 1,103 8.3% 1,103 5.1% 15 Small Rate M4 5.1320 5,015 11.2% 9.0232 5,015 6.8% 16 **Delivery Charges** 44,905 49,920 5.7051 73,939 8.4501 78,953 13.7303 120,148 13.7312 120,140 17 Gas Supply Charges 120,148 13.7312 120,140 (8) 0.0% 13.7303 0.0% 18 Total Bill 165,053 18.8632 170,060 19.4354 5,007 3.0% 194,087 22.1813 199,093 22.7535 5,007 2.6% 3.0% 2.6% 19 5,007 5,007 Sales Service Impact 20 **Direct Purchase Impact** 5,015 11.2% 5,015 6.8% Large Rate M4 340,127 2.8344 383,449 3.1954 43,323 12.7% 738,299 6.1525 781,621 6.5135 43,323 5.9% 21 **Delivery Charges** 22 Gas Supply Charges 1,647,744 13.7312 1,647,636 13.7303 (108)0.0% 1,647,744 13.7312 1,647,636 13.7303 (108)0.0% 1,987,871 16.9257 43,215 2,386,043 19.8837 2,429,257 23 Total Bill 16.5656 2,031,085 2.2% 20.2438 43,215 1.8% 24 43,215 Sales Service Impact 2.2% 43,215 1.8% 25 **Direct Purchase Impact** 43,323 12.7% 43,323 5.9%

<sup>(1)</sup> Reflects approved rates per October 2017 QRAM (EB-2017-0278), Appendix A.

<sup>(2)</sup> Bill impacts including Cap-and-Trade Customer-Related Charge are applicable to customers for whom Union is required to fulfill Cap-and-Trade obligations.

### UNION GAS LIMITED Calculation of Sales Service and Direct Purchase Bill Impacts for Typical Small and Large Customers - Union South

			Excluding Cap-and-Trade Customer-Related Charge						Including Cap-and-Trade Customer-Related Charge (2)				
		Approved - EB-	2017-0278 (1)	•	Proposed - E	B-2017-0087		Approved - EB-	-2017-0278 (1)		Proposed - El	3-2017-0087	
		Total		Total	-	Total Bill	Bill	Total		Total		Total Bill	Bill
Line		Bill	Unit Rate	Bill	Unit Rate	Change	Impact	Bill	Unit Rate	Bill	Unit Rate	Change	Impact
No.	Particulars	(\$)	(cents/m <sup>3</sup> )	(\$)	(cents/m <sup>3</sup> )	(\$)	(%)	(\$)	(cents/m <sup>3</sup> )	(\$)	(cents/m <sup>3</sup> )	(\$)	(%)
		(a)	(b)	(c)	(d)	(e) = (c - a)	(f) = (e / a)	(g)	(h)	(i)	(j)	(k) = (l - g)	(I) = (k / g)
	Small Rate M5												
1	Delivery Charges	32,519	3.9417	33,010	4.0012	491	1.5%	59,893	7.2598	60,384	7.3193	491	0.8%
2	Gas Supply Charges	113,282	13.7312	113,275	13.7303	(7)	0.0%	113,282	13.7312	113,275	13.7303	(7)	0.0%
3	Total Bill	145,801	17.6729	146,285	17.7315	484	0.3%	173,176	20.9910	173,659	21.0496	484	0.3%
4	Sales Service Impact					484	0.3%					484	0.3%
5	Direct Purchase Impact					491	1.5%					491	0.8%
	Large Rate M5												
6	Delivery Charges	186,216	2.8649	190,918	2.9372	4,702	2.5%	401,893	6.1830	406,595	6.2553	4,702	1.2%
7	Gas Supply Charges	892,528	13.7312	892,470	13.7303	(59)	0.0%	892,528	13.7312	892,470	13.7303	(59)	0.0%
8	Total Bill	1,078,744	16.5961	1,083,388	16.6675	4,643	0.4%	1,294,421	19.9142	1,299,064	19.9856	4,643	0.4%
9	Sales Service Impact					4,643	0.4%					4,643	0.4%
10	Direct Purchase Impact					4,702	2.5%					4,702	1.2%
	Small Rate M7												
11	Delivery Charges	760,123	2.1115	832,232	2.3118	72,109	9.5%	1,954,639	5.4296	2,026,748	5.6299	72,109	3.7%
12	Gas Supply Charges	4,943,232	13.7312	4,942,908	13.7303	(324)	0.0%	4,943,232	13.7312	4,942,908	13.7303	(324)	0.0%
13	Total Bill	5,703,355	15.8427	5,775,140	16.0421	71,785	1.3%	6,897,871	19.1608	6,969,656	19.3602	71,785	1.0%
14	Sales Service Impact					71,785	1.3%					71,785	1.0%
15	Direct Purchase Impact					72,109	9.5%					72,109	3.7%
	Large Rate M7												
16	Delivery Charges	2,879,617	5.5377	3,220,546	6.1934	340,929	11.8%	4,605,029	8.8558	4,945,958	9.5115	340,929	7.4%
17	Gas Supply Charges	7,140,224	13.7312	7,139,756	13.7303	(468)	0.0%	7,140,224	13.7312	7,139,756	13.7303	(468)	0.0%
18	Total Bill	10,019,841	19.2689	10,360,302	19.9237	340,461	3.4%	11,745,253	22.5870	12,085,714	23.2418	340,461	2.9%
19	Sales Service Impact					340,461	3.4%					340,461	2.9%
20	Direct Purchase İmpact					340,929	11.8%					340,929	7.4%

Notes:
(1) Reflects approved rates per October 2017 QRAM (EB-2017-0278), Appendix A.

<sup>(2)</sup> Bill impacts including Cap-and-Trade Customer-Related Charge are applicable to customers for whom Union is required to fulfill Cap-and-Trade obligations.

# UNION GAS LIMITED Calculation of Sales Service and Direct Purchase Bill Impacts for Typical Small and Large Customers - Union South

Excluding Cap-and-Trade Customer-Related Charge Including Cap-and-Trade Customer-Related Charge (2) Proposed - EB-2017-0087 Approved - EB-2017-0278 (1) Approved - EB-2017-0278 (1) Proposed - EB-2017-0087 Bill Total Bill Bill Total Total Total Bill Total Total Unit Rate Line Bill Unit Rate Bill **Unit Rate** Change Impact Bill Bill **Unit Rate** Change Impact No. Particulars (\$) (cents/m<sup>3</sup>) (\$) (cents/m<sup>3</sup>) (\$) (\$) (cents/m<sup>3</sup>) (\$) (cents/m<sup>3</sup>) (%) (k) = (I - g)(e) = (c - a)(a) (b) (c) (d) (g) (h) (i) (I) = (k / g)(f) = (e / a)(j) Small Rate M9 (3) **Delivery Charges** 167.989 2.4171 173.577 2.4975 5,588 3.3% 167.989 2.4171 173,577 2.4975 5,588 3.3% 2 Gas Supply Charges 954,318 13.7312 954,256 13.7303 (63)0.0% 954,318 13.7312 954,256 13.7303 (63)0.0% Total Bill 1,122,307 16.1483 1,127,833 16.2278 5,526 0.5% 1,122,307 16.1483 1,127,833 16.2278 5,526 0.5% 3 0.5% 4 Sales Service Impact 5,526 5,526 0.5% 5,588 5 **Direct Purchase Impact** 5,588 3.3% 3.3% Large Rate M9 (3) 6 **Delivery Charges** 499,078 2.4734 515,925 2.5569 16,847 3.4% 499,078 2.4734 515,925 2.5569 16,847 3.4% Gas Supply Charges 2,770,682 13.7312 2,770,500 13.7303 (182)0.0% 2,770,682 13.7312 2,770,500 13.7303 (182)0.0% 7 8 Total Bill 3,269,759 16.2046 3,286,425 16.2872 16,666 0.5% 3,269,759 16.2046 3,286,425 16.2872 16,666 0.5% 16,666 0.5% 16,666 0.5% 9 Sales Service Impact 10 **Direct Purchase Impact** 16,847 3.4% 16,847 3.4% Average Rate M10 (3) 6.7547 6,804 420 6.6% 6.7547 6,804 420 6.6% 11 **Delivery Charges** 6,383 7.1995 6,383 7.1995 12,975 12,976 13.7303 13.7312 13.7303 12 Gas Supply Charges 13.7312 (1) 0.0% 12,976 12,975 (1) 0.0% 20.9298 20.4859 20.9298 13 Total Bill 19,359 20.4859 19,779 419 2.2% 19,359 19,779 419 2.2% 419 2.2% 419 2.2% 14 Sales Service Impact **Direct Purchase Impact** 420 6.6% 420 6.6% 15 Small Rate T1 143,882 1.9090 159,781 2.1200 15,899 11.0% 393,968 5.2271 409,866 5.4381 15,899 4.0% 16 **Delivery Charges** 13.7303 13.7312 13.7303 17 Gas Supply Charges 1,034,921 13.7312 1,034,853 (68)0.0% 1,034,921 1,034,853 (68)0.0% Total Bill 1,178,803 15.6402 1,194,634 15.8503 15,831 1.3% 1,428,888 18.9583 1,444,719 19.1684 15,831 1.1% 18 19 Sales Service Impact 15,831 1.3% 15,831 1.1% 20 **Direct Purchase Impact** 11.0% 15,899 4.0% 15,899 Average Rate T1 21 **Delivery Charges** 220,763 1.9087 247,196 2.1373 26,433 12.0% 604,533 5.2268 630,965 5.4554 26,433 4.4% 1,588,142 Gas Supply Charges 1,588,038 13.7303 1,588,142 13.7312 1,588,038 13.7303 0.0% 22 13.7312 (104)0.0% (104)23 Total Bill 15.6399 1,835,234 15.8676 18.9580 1.2% 1.808.905 26,328 1.5% 2,192,675 2,219,003 19.1857 26,328 24 26,328 1.5% 26,328 1.2% Sales Service Impact 25 26,433 12.0% **Direct Purchase Impact** 26,433 4.4%

- (1) Reflects approved rates per October 2017 QRAM (EB-2017-0278), Appendix A.
- (2) Bill impacts including Cap-and-Trade Customer-Related Charge are applicable to customers for whom Union is required to fulfill Cap-and-Trade obligations.
- (3) The customer-related Cap-and-Trade rates are not applicable to Rate M9, Rate M10, and Rate T3 as there are no customers in these rate calsses covered by Union's compliance obligation.

# UNION GAS LIMITED Calculation of Sales Service and Direct Purchase Bill Impacts for Typical Small and Large Customers - Union South

Excluding Cap-and-Trade Customer-Related Charge Including Cap-and-Trade Customer-Related Charge (2) Approved - EB-2017-0278 (1) Approved - EB-2017-0278 (1) Proposed - EB-2017-0087 Proposed - EB-2017-0087 Bill Total Bill Bill Total Total Total Bill Total Total Line Bill Unit Rate Bill **Unit Rate** Change Impact Bill **Unit Rate** Bill **Unit Rate** Change Impact No. Particulars (\$) (cents/m<sup>3</sup>) (\$) (cents/m<sup>3</sup>) (\$) (\$) (cents/m<sup>3</sup>) (\$) (cents/m<sup>3</sup>) (%) (a) (b) (c) (d)  $\overline{(e)} = (c - a)$ (g) (h) (i) (k) = (I - g)(I) = (k / g)(f) = (e / a)(j) Large Rate T1 **Delivery Charges** 489.756 1.9113 553,063 2.1584 63.307 12.9% 1,339,989 5.2294 1.403.296 5.4765 63.307 4.7% 2 Gas Supply Charges 3,518,494 13.7312 3,518,263 13.7303 (231)0.0% 3,518,494 13.7312 3,518,263 13.7303 (231)0.0% Total Bill 4,008,250 15.6425 4,071,326 15.8887 63,076 1.6% 4,858,483 18.9606 4,921,559 19.2068 63,076 1.3% 3 4 Sales Service Impact 63,076 1.6% 63,076 1.3% 5 **Direct Purchase Impact** 63,307 12.9% 63,307 4.7% Small Rate T2 6 **Delivery Charges** 626,553 1.0574 743,109 1.2541 116,555 18.6% 2,592,727 4.3755 2,709,282 4.5722 116,555 4.5% Gas Supply Charges 8,136,560 13.7312 8,136,027 13.7303 (533)0.0% 8,136,560 13.7312 8,136,027 13.7303 (533)0.0% 7 8 Total Bill 8,763,113 14.7886 8,879,135 14.9844 116,022 1.3% 10,729,287 18.1067 10,845,309 18.3025 116,022 1.1% 116,022 1.3% 116.022 1.1% 9 Sales Service Impact 10 **Direct Purchase Impact** 116,555 18.6% 116,555 4.5% Average Rate T2 288,917 19.2% 4.0779 288,917 3.6% 11 **Delivery Charges** 1,502,783 0.7598 1,791,700 0.9059 8,065,648 8,354,565 4.2240 13.7303 12 Gas Supply Charges 27,158,920 13.7312 27,157,140 13.7303 (1,780)0.0% 27,158,920 13.7312 27,157,140 (1,780)0.0% 28,948,840 287,137 17.8091 17.9543 13 Total Bill 28,661,703 14.4910 14.6362 1.0% 35,224,568 35,511,705 287,137 0.8% 1.0% 0.8% 287,137 287,137 14 Sales Service Impact **Direct Purchase Impact** 288,917 19.2% 288,917 3.6% 15 Large Rate T2 2,483,891 0.6712 2,961,560 0.8002 477,669 19.2% 14,763,815 3.9893 15,241,484 4.1183 477,669 3.2% 16 **Delivery Charges** 50,814,330 50,817,661 13.7312 50,814,330 13.7303 17 Gas Supply Charges 50.817.661 13.7312 13.7303 (3,331)0.0% (3,331)0.0% Total Bill 53,301,552 14.4024 53,775,890 14.5305 0.9% 65,581,475 17.7205 66,055,814 17.8486 0.7% 18 474,338 474,338 19 Sales Service Impact 474,338 0.9% 474,338 0.7% 20 **Direct Purchase Impact** 477,669 19.2% 477,669 3.2% Large Rate T3 (3) 21 **Delivery Charges** 5,320,186 1.9508 5,570,501 2.0426 250,314 4.7% 5,320,186 1.9508 5,570,501 2.0426 250,314 4.7% Gas Supply Charges 37,446,630 37,446,630 13.7303 0.0% 22 13.7312 37,444,176 13.7303 (2,454)0.0% 13.7312 37,444,176 (2,454)15.6820 23 Total Bill 42.766.816 42,766,816 43,014,676 247,860 43,014,676 15.7729 247,860 0.6% 15.6820 15.7729 0.6% 24 247,860 0.6% 247,860 0.6% Sales Service Impact 25 250,314 **Direct Purchase Impact** 4.7% 250,314 4.7%

- (1) Reflects approved rates per October 2017 QRAM (EB-2017-0278), Appendix A.
- (2) Bill impacts including Cap-and-Trade Customer-Related Charge are applicable to customers for whom Union is required to fulfill Cap-and-Trade obligations.
- (3) The customer-related Cap-and-Trade rates are not applicable to Rate M9, Rate M10, and Rate T3 as there are no customers in these rate calsses covered by Union's compliance obligation.

Filed: 2017-09-26 EB-2017-0087 Rate Order Working Papers Schedule 10 Page 1 of 2

#### **UNION GAS LIMITED**

#### Summary of 2018 Capital Pass-Through Adjustments

Related to Parkway Projects, Burlington - Oakville Pipeline, 2016 Dawn Parkway, 2017 Dawn Parkway, and Panhandle Reinforcement

Line	Double and (COOOs)	Delivery	Transportation	Ctorono	Total
No.	Particulars (\$000s)	Delivery (a)	Transportation (b)	Storage	$\frac{\text{Total}}{\text{(d) = (a + b + c)}}$
		(a)	(b)	(c)	$(\mathbf{u}) = (\mathbf{a} + \mathbf{b} + \mathbf{c})$
	Union North In-franchise				
1	Rate 01	(8,971)	104	5,977	(2,890)
2	Rate 10	(1,090)	(3)	1,564	472
3	Rate 20	(911)	(13)	418	(506)
4	Rate 25	(285)	(6)	-	(291)
5	Rate 100	(778)	(4)	29	(752)
6	Total Union North In-Franchise	(12,034)	77	7,989	(3,968)
	Union South In-franchise				
7	Rate M1	(3,290)	-	(1,907)	(5,197)
8	Rate M2	3,437	-	(650)	2,787
9	Rate M4	2,086	-	(116)	1,970
10	Rate M5A	(569)	-	(102)	(671)
11	Rate M7	782	-	(43)	739
12	Rate M9	165	-	(15)	149
13	Rate M10	3	-	(0)	3
14	Rate T1	1,446	-	(68)	1,378
15	Rate T2	11,679	-	(300)	11,379
16	Rate T3	1,174	-	(83)	1,091
17	Total Union South In-franchise	16,915		(3,286)	13,628
	Ex-franchise				
18	Excess Utility Space	-	(44)	(249)	(293)
19	Rate M12	-	116,666	-	116,666
20	Rate M13	-	(2)	-	(2)
21	Rate M16	-	441	-	441
22	Rate C1	-	3,261	-	3,261
23	Total Ex-franchise	-	120,322	(249)	120,074
24	Total (line 6 + line 17 + line 23)	4,880	120,400	4,454	129,734
25	Gas Supply Admin				(100)
26	Total In-franchise and Ex-franchise (1)				129,633

<sup>(1)</sup> Sum of projects from EB-2012-0433/EB-2013-0074 Parkway Projects, EB-2014-0182 Burlington Oakville, EB-2014-0261 Dawn Parkway 2016 Expansion, EB-2015-0200 2017 Dawn Parkway Project, and EB-2016-0186 Panhandle Reinforcement.

## <u>UNION GAS LIMITED</u> Summary of 2018 Capital Pass-Through Adjustments

Related to Parkway Projects, Burlington - Oakville Pipeline, 2016 Dawn Parkway, 2017 Dawn Parkway, and Panhandle Reinforcement

Line No.	Particulars (\$000s)	Parkway Projects (1) (a)	BOP (2)	2016 D-P Expansion (3) (c)	2017 D-P Expansion (4) (d)	Panhandle Reinforcement (5) (e)	$\frac{\text{Total}}{\text{(f)} = (a + b + c + d + e)}$
	Union North In-franchise						
1	Rate 01	1,208	(694)	(54)	(2,409)	(941)	(2,890)
2	Rate 10	543	(100)	265	(105)	(131)	472
3	Rate 20	44	(71)	(79)	(301)	(99)	(506)
4	Rate 25	(49)	(20)	(68)	(126)	(29)	(291)
5	Rate 100	(113)	(56)	(174)	(332)	(77)	(752)
6	Total Union North In-Franchise	1,633	(942)	(110)	(3,272)	(1,277)	(3,968)
	Union South In-franchise						
7	Rate M1	(2,491)	3,530	(2,157)	(5,993)	1,915	(5,197)
8	Rate M2	(13)	1,486	306	(85)	1,092	2,787
9	Rate M4	3	495	113	10	1,348	1,970
10	Rate M5A	(121)	(40)	(159)	(309)	(43)	(671)
11	Rate M7	20	181	75	48	415	739
12	Rate M9	15	61	38	37	(2)	149
13	Rate M10	0	2	1	1	(0)	3
14	Rate T1	(32)	431	17	(66)	1,029	1,378
15	Rate T2	25	3,291	403	118	7,542	11,379
16	Rate T3	115	423	275	286	(7)	1,091
17	Total Union South In-franchise	(2,478)	9,859	(1,090)	(5,952)	13,290	13,628
	Ex-franchise						
18	Excess Utility Space	(51)	(22)	(74)	(110)	(35)	(293)
19	Rate M12	34,597	(361)	30,535	52,085	(191)	116,666
20	Rate M13	(1)	2	(1)	(2)	0	(2)
21	Rate M16	(2)	(0)	(3)	(5)	451	441
22	Rate C1	(30)	(3)	1,012	(56)	2,338	3,261
23	Total Ex-franchise	34,514	(384)	31,469	51,911	2,564	120,074
24	Total (line 6 + line 17 + line 23)	33,668	8,533	30,269	42,687	14,577	129,734
25	Gas Supply Admin	(29)	(2)	(18)	(48)	(3)	(100)
26	Total In-franchise and Ex-franchise	33,639	8,531	30,251	42,639	14,574	129,633

- (1) EB-2012-0433, Schedule 12-6 Updated and EB-2013-0074, Schedule 10-2. Projects were combined in the cost study for a consolidated allocation of \$33.6M to rate classes.
- (2) EB-2014-0182, Exhibit A, Tab 9, Schedule 9.
- (3) EB-2014-0261, Settlement Agreement, Appendix 3, Schedule 6, updated for C1 North T-Service \$1.042M allocation adjustment between Rate 20 and Rate C1.
- (4) EB-2015-0200, Exhibit A, Tab 10, Schedule 5 Updated.
  (5) Rate Order, Appendix G, p. 2, column (c).

Filed: 2017-09-26 EB-2017-0087 Rate Order Working Papers Schedule 11

## <u>UNION GAS LIMITED</u> 2017 and 2018 DSM Budget Allocation by Rate Class

Line No.	Particulars (\$000s) <u>Union North</u>	Board-Approved 2017 DSM Budget (1) (a)	Board-Approved 2018 DSM Budget (b)	Change (c) = (b - a)
1	Rate 01	8,100	9,124	1,024
2	Rate 10	2,951	3,093	142
3	Rate 20	1,734	1,773	39
4	Rate 100	1,882	1,895	13
5	Total Union North	14,667	15,885	1,219
	Union South			
6	Rate M1	21,550	24,375	2,825
7	Rate M2	9,992	10,442	451
8	Rate M4	2,696	2,742	46
9	Rate M5	3,589	3,638	49
10	Rate M7	940	964	24
11	Rate T1	1,532	1,573	41
12	Rate T2	3,605	3,653	49
13	Total Union South	43,903	47,387	3,484
14	Total Union (line 5 + line 13) (2)	58,570	63,272	4,702

- (1) EB-2016-0245, Rate Order, Working Papers, Schedule 11, column (b).
- (2) EB-2015-0029, Decision and Order, p.56.

Filed: 2017-09-26 EB-2017-0087 Rate Order Working Papers Schedule 12 Page 1 of 3

#### **UNION GAS LIMITED** Calculation of 2018 NAC Target Percentage Change to General Service Rate Classes

Line No.	Particulars (m³)	2015 Actual NAC (1)(2) (a)	2016 Actual NAC (1)(3) (b)	NAC Variance (c) = (b - a)	2018 NAC
1	Rate 01	2,844	2,771	(73)	-2.6%
2	Rate 10	164,329	158,894	(5,435)	-3.3%
3	Rate M1	2,738	2,654	(84)	-3.1%
4	Rate M2	166,297	159,319	(6,978)	-4.2%

- NAC based on 2013 Board-approved 50:50 weather normal methodology.
   2015 actual NAC calculated using 2017 weather normal.
   2016 actual NAC calculated using 2018 weather normal.

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#### **UNION GAS LIMITED** Calculation of 2018 NAC Target Percentage Change Volumetric Adjustments to Union North General Service Rate Classes

Line No.	Particulars (10³m³)	Approved 2017 Billing Units (1) (a)	2018 NAC Target % Change (2) (b)	Change in Billing Units (c) = (a x b)	Proposed 2018 Billing Units $(d) = (a + c)$
	Rate 01 Delivery				
1	First 100 m <sup>3</sup>	268,242	-2.6%	(6,885)	261,357
2	Next 200 m <sup>3</sup>	304,582	-2.6%	(7,818)	296,764
3	Next 200 m <sup>3</sup>	132,871	-2.6%	(3,411)	129,460
4	Next 500 m <sup>3</sup>	90,752	-2.6%	(2,329)	88,423
5	All Over 100 m <sup>3</sup>	113,243	-2.6%	(2,907)	110,336
6	Total Rate 01 Delivery	909,690		(23,350)	886,340
	Rate 01 Storage				
7	Union North West	262,839	-2.6%	(6,747)	256,092
8	Union North East	646,851	-2.6%	(16,603)	630,247
9	Total Rate 01 Storage	909,690		(23,350)	886,340
	Rate 10 Delivery				
10	First 1,000 m <sup>3</sup>	24,725	-3.3%	(818)	23,907
11	Next 9,000 m <sup>3</sup>	133,487	-3.3%	(4,415)	129,072
12	Next 20,000 m <sup>3</sup>	84,909	-3.3%	(2,808)	82,100
13	Next 70,000 m <sup>3</sup>	64,380	-3.3%	(2,129)	62,251
14	All Over 100,000 m <sup>3</sup>	29,612	-3.3%	(979)	28,632
15	Total Rate 10	337,112		(11,150)	325,962
	Rate 10 Storage				
16	Union North West	80,615	-3.3%	(2,666)	77,949
17	Union North East	256,497	-3.3%	(8,483)	248,013
18	Total Rate 10 Storage	337,112		(11,150)	325,962

Notes:
(1) EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (t).
(2) Rate Order, Working Papers, Schedule 12, p.1, column (d).

Filed: 2017-09-26 EB-2017-0087 Rate Order Working Papers Schedule 12 Page 3 of 3

# UNION GAS LIMITED Calculation of 2018 NAC Target Percentage Change Volumetric Adjustments to Union South General Service Rate Classes

Line No.	Particulars (10³m³)	Approved 2017 Billing Units (1) (a)	2018 NAC Target % Change (2) (b)	Change in Billing Units (c) = (a x b)	Proposed 2018 Billing Units  (d) = (a + c)
	Rate M1 Delivery				
1	First 100 m <sup>3</sup>	872,593	-3.1%	(26,771)	845,823
2	Next 150 m <sup>3</sup>	774,838	-3.1%	(23,772)	751,066
3	All Over 250 m <sup>3</sup>	1,249,748	-3.1%	(38,341)	1,211,407
4	Total Rate M1 Delivery	2,897,179		(88,884)	2,808,296
5	Rate M1 Storage	2,897,179	-3.1%	(88,884)	2,808,296
	Rate M2 Delivery				
6	First 1,000 m <sup>3</sup>	61,283	-4.2%	(2,571)	58,711
7	Next 6,000 m <sup>3</sup>	298,234	-4.2%	(12,514)	285,720
8	Next 13,000 m <sup>3</sup>	336,990	-4.2%	(14,140)	322,850
9	All Over 20,000 m <sup>3</sup>	430,521	-4.2%	(18,065)	412,456
10	Total Rate M2 Delivery	1,127,028		(47,291)	1,079,737
11	Rate M2 Storage	1,127,028	-4.2%	(47,291)	1,079,737

#### <u>Notes</u>

<sup>(1)</sup> EB-2016-0245, Rate Order, Working Papers, Schedule 4, column (t).

<sup>(2)</sup> Rate Order, Working Papers, Schedule 12, p.1, column (d).

# <u>UNION GAS LIMITED</u> Summary of S&T Transactional Margin Included In 2018 In-Franchise Rates

Line No.	Particulars (\$000s)	Total Revenue (1) (a)	Allocated Cost (2) (b)	Total Margin (c) = (a - b)	Shareholder Portion of Margin (d) = (c) * 10%	Margin Included in 2013 In-Franchise Rates (e) = (c - d)	Margin Included in 2018 In-Franchise Rates (f)	Variance (g) = (f - e)
	Long-Term Transportation							
1	M12 Long-term Transportation	120,604	125,384	(4,781)				
2	M12-X	13,896	11,623	2,272				
3	F24-T	359	359	0				
4	M12 Fuel	22,674	22,673	1				
5	C1 Long-term Transportation	6,954	1,669	5,286				
6	C1 Fuel	626	632	(6)				
7	M13	411	211	200				
8	M16	736	451	286				
9	Heritage Pool M16 Transmission Charge (3)			56				
10	Total Long-Term Transportation	166,260	163,002	3,314		3,314	3,314	-
	Short-Term Transportation							
11	Short-term Transportation	11,067	5,843	5,224				
12	Other Transactional	1,067	-	1,067				
13	Total Short-Term Transportation	12,134	5,843	6,291		6,291	6,291	-
	Short-term Storage and Other Balancing Services Acct. 179-70							
14	Short Term Peak Storage Services	7,883	5,626	2,257				
15	Less: Non-utility System Integrity Costs (4)	-	(300)	300				
16	Off Peak Storage/Balancing/Loans Services	2,500		2,500				
17	Total Short-term Storage and Other Balancing Services	10,383	5,327	5,056	506	4,551	4,551	
18	Total S&T Transactional Margin Included in Rates	188,777	174,171	14,661	506	14,156	14,156	-

- Notes:

  (1) EB-2011-0210, Rate Order, Working Papers, Schedule 14, p. 9 11, column (g).

  (2) EB-2011-0210, Rate Order, Working Papers, Schedule 14, p. 9 11, column (e).

  (3) EB-2011-0210, Rate Order, Working Papers, Schedule 39, line 4.

  (4) Excludes the non-utility portion of system integrity costs of \$0.300 million as per EB-2011-0210 Board Decision.

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### <u>UNION GAS LIMITED</u> <u>Summary of Gas Supply Optimization Margin</u>

Line No.	Particulars (\$000s)	Total Revenue (1) (a)	Allocated Cost (b)	Total	Portion of Margin $(d) = (c) * 10\%$	Margin in 2013 Gas Supply Rates (e) = (c - d)	Margin in 2018 Gas Supply Rates (f)	<u>Variance</u> (g) = (f - e)
	Exchanges (2)							
1	Base Exchanges	9,118	-	9,118	912	8,206	8,206	-
2	FT-RAM Related Exchanges	5,800	-	5,800	580	5,220	5,220	-
3	Total Exchanges Revenue	14,918		14,918	1,492	13,426	13,426	

- (1) EB-2011-0210, Rate Order, Working Papers, Schedule 14, p.11, line 18, column (g).
- (2) EB-2011-0210, Board Decision, p.40.

## <u>UNION GAS LIMITED</u> 2018 Gas Supply Optimization Margin - Allocation of Ratepayer Portion and Calculation of Unit Rates

Line No.	Rate Class	Union North FT Demand Allocation Units TRANSALLO (\$000s)	Union North Margin (\$000s) (b)	Union South Landed Supply Allocation Units S_SUPPLYVOL (10³m³) (c)	Union South Margin (\$000s) (d)	Total Margin (\$000s) (1) (e) = (b + d)	Billing Units (10 <sup>3</sup> m <sup>3</sup> ) (2) (f)	2018 Unit Rate (cents/m³) (g) = (e / f)
1	Rate 01	65,876	(3,920)			(3,920)	926,963	(0.4229)
2	Rate 10	22,548	(1,342)			(1,342)	343,530	(0.3906)
3	Rate 20	8,016	(477)			(477) (3)		
4	Rate 100	-	-			-	-	-
5	Rate 25	1,961	(117)			(117)	42,913	(0.2720)
6	Total Union North	98,400	(5,856)			(5,856)		
7	Rate M1			2,271,443	(6,415)	(6,415)	2,271,443	(0.2824)
8	Rate M2			378,137	(1,068)	(1,068)	378,137	(0.2824)
9	Rate M4			16,855	(48)	(48)	16,855	(0.2824)
10	Rate M5 - Firm			226	(1)	(1)	226	(0.2824)
11	Rate M5 - Int			13,906	(39)	(39)	13,906	(0.2824)
12	Rate M10			48	(0)	(0)	48	(0.2824)
13	Total Union South			2,680,616	(7,571)	(7,571)	2,680,616	
14	Total Exchanges Revenue					(13,426)		

- (1) EB-2011-0210, Rate Order, Working Papers, Schedule 43, line 3, column (e).
- (2) Union North transportation billing units per Rate Order, Working Papers, Schedule 4, column (r). Union South billing units are 2013 Board-approved Sales volumes per EB-2011-0210.
- (3) Rate 20 margin with be refunded 60% in the Gas Supply Demand Charge and 40% in the Commodity Transportation 1 Charge. The Rate 20 unit rates are calculated below:

Margin Allocated to Gas Supply Demand Charge (\$000s)	(286)
Total Gas Supply Demand Billing Units (10³m³)	6,873
Unit Rate (cents/m³)	(4.1642)
Margin Allocated to Commodity Transportation Charge 1 (\$000s)	(191)
Total Commodity Transportation 1 Billing Units (103m3)	73,456
Unit Rate (cents/m³)	(0.2597)

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## <u>UNION GAS LIMITED</u> <u>Allocation of Long-term and Short-term Transportation-related S&T Margin to Union North and Union South</u>

Line No.	Particulars (\$000s)	Design Day Demand (10 <sup>3</sup> m <sup>3</sup> /d) (1) (a)	Easterly Flow Volume (10 <sup>3</sup> m <sup>3</sup> /d) (2) (b)	Available Capacity $(10^{3} \text{m}^{3}/\text{d})$ $(c) = (a - b)$	Distance (km) (d)	Available Capacity - Distance (10 <sup>3</sup> m <sup>3</sup> /d x km) (e) = (c x d)	Allocated Proportion (%) (f)	Allocated Proportion (\$000s)
1	<u>Union North</u> North In-fran	6,956	938	6,018	228.94	1,377,858	37%	3,513
	Union South	<u> </u>		<u> </u>				<u> </u>
2	South: In-fran	43,674	21,874	21,800	82.15	1,790,897	48%	4,566
3	St. Clair	2,833	1,419	1,414	29.40	41,571	1%	106
4	Ojibway	9,619	4,818	4,801	116.05	557,186	15%	1,420
5	Total Union South	56,126	28,111	28,015		2,389,654	63%	6,092
6	Total Union North and Union South	63,082	29,048	34,034		3,767,512	100%	9,605 (3)

- (1) EB-2011-0210, Exhibit G3, Tab 5, Schedule 23, p.8, line 5, Union North, updated for EB-2011-0210 Board Decision. EB-2011-0210, Exhibit G3, Tab 5, Schedule 23, p.8, line 2, South In-fran, updated for EB-2011-0210 Board Decision. EB-2011-0210, Exhibit G3, Tab 5, Schedule 23, p.9, line 4, St. Clair-Ojibway, updated for EB-2011-0210 Board Decision.
- (2) Easterly annual volumes on Dawn to Parkway for Union North and Union South are 342,196 10<sup>3</sup>m<sup>3</sup> and 10,260,364 10<sup>3</sup>m<sup>3</sup> respectively divided by 365.
- (3) EB-2011-0210, Rate Order, Working Papers, Schedule 40, line 10 + line 13, column (e).

# UNION GAS LIMITED Total Upstream Transportation Costs in Union North Rates Effective January 1, 2018

Line No.	Particulars (\$000s)	Upstream Transportation Costs per EB-2016-0245 (a)	January-17 QRAM Update (2) (b)	April-17 QRAM Update (3) (c)	July-17 QRAM Update (4) (d)	October-17 QRAM Update (5) (e)	Upstream Transportation Costs per EB-2017-0278 (f) = sum(a:e)
		()	()	(-)	()	(-)	(-)
1	Rate 01 Delivery Rates	1,836	-	-	-	-	1,836
_	Transportation Rates				()	(==)	
2 3	Union North West Union North East	17,969 17,840	25 33	398 293	(21) (11)	(56) (86)	18,315 18,069
	Storage Rates						
4	Union North West	1,300	(1)	16	3 7	(30)	1,289
5	Union North East	28,656	13	327	/	(43)	28,959
6	Rate 10 Delivery Rates	485	-	-	-	-	485
	Transportation Rates						
7	Union North West	4,838	8	108	(6)	(17)	4,931
8	Union North East	6,549	13	108	(4)	(34)	6,632
9	Storage Rates Union North West	305	(0)	4	1	(0)	301
9 10	Union North East	7,956	(0) 5	90	3	(9) (17)	8,037
		,,,,,,				(11)	-,
11	Rate 20 Delivery Rates	132	_			_	132
"	-	132	-	-	-	-	132
12	Gas Supply Demand Union North West	1,391.06	3	25	(2)	(9)	1,408
13	Union North East	1,605	4	25	(0)	(11)	1,623
	Commodity Transportation 1						
14	Union North West	927	1	21	(1)	(5)	944
15	Union North East	1,070	2	22	(0)	(6)	1,089
40	Bundled Storage	4.000		40			4.000
16 17	Demand Commodity	1,269 14	- 1	13 (0)	- 0	(3)	1,282 12
.,	Commodity		,	(0)	Ü	(0)	
40	Rate 25						
18	Delivery Rates	-	-	-	-	-	-
19	Transportation Rates	672	2	7	4	(5)	681
20	Storage Rates	-	-	-	-	-	-
21	Rate 100 Delivery Rates	9	-	-	-	-	9
	Gas Supply Demand						
22	Union North West	-	-	-	-	-	-
23	Union North East	-	-	-	-	-	-
	Commodity Transportation 1						
24 25	Union North West Union North East	-	-	-	-	-	-
20		_	_	-	_	-	_
26	Bundled Storage Demand	199	-	2	_	-	201
27	Commodity	2	0	(0)	0	(0)	2
28	Total Union North	95,025 (1)	109	1,460	(29)	(329)	96,236
20	. Ottal Official Mortal	00,020 (1)	, 103	1,700	(23)	(020)	50,250

<sup>(1)</sup> EB-2015-0181, Exhibit A, Tab 2, Appendix A, Schedule 1, p.2, column (h), line 22, updated for October 2016 QRAM and net of Gas Supply Optimization Credit per EB-2016-0245, Rate Order, Working Papers, Schedule 23, p. 1, column (f) and column (h).

<sup>(2)</sup> EB-2016-0334, Tab 2, Schedule 2, p.3.

<sup>(3)</sup> EB-2017-0089, Tab 2, Schedule 2, p.3.

<sup>(4)</sup> EB-2017-0185, Tab 2, Schedule 2, p.3.

<sup>(5)</sup> EB-2017-0278, Tab 2, Schedule 2, p.3.

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## <u>UNION GAS LIMITED</u> <u>Calculation of 2018 Gas Supply Administration Charge</u>

Line No.	Particulars	2017 Approved EB-2017-0278 (a)	2018 Capital Pass- Throughs (3) (b)	2018 Proposed EB-2017-0087 (c) = (a + b)
1	Costs (\$000s)	6,723 (1)	(35)	6,689
2	2013 Approved Sales Volumes (103m3) (2)	3,533,863		3,533,863
3	Gas Supply Admin Charge Unit Rate (cents/m³) (4)	0.1902		0.1893

- (1) EB-2016-0245, Rate Order, Working Papers, Schedule 16, column (c), line 1.
- (2) EB-2011-0210, Rate Order, Working Papers, Schedule 14, column (a).
- (3) Rate Order, Working Papers, Schedule 3, p.2, line 7, column (d) + column (k).
- (4) line 1 / line 2 x 100.

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# <u>UNION GAS LIMITED</u> Lost Revenue Adjustment Mechanism ("LRAM") <u>Volume Adjustment for 2018 Rate Calculations</u>

		2016 Pre-Audit		
		Full Year Impact	Customer	Total
Line		DSM Volumes	Rate Class	Volume Adjustment
No.	Particulars (10 <sup>3</sup> m <sup>3</sup> )	by Rate Class	Adjustment (1)	by Rate Class
		(a)	(b)	(c) = (a + b)
	Union South			
1	Rate M4	(9,648)	(399)	(10,047)
2	Rate M5	(8,574)	(6,788)	(15,362)
3	Rate M7	(12,774)	7,187	(5,587)
4	Rate T1	(3,895)	-	(3,895)
5	Rate T2	(30,384)	-	(30,384)
6	Total Union South	(65,275)	-	(65,275)
	<u>Union North</u>			
7	Rate 20	(1,623)	1	(1,621)
8	Rate 100	(761)	(1)	(762)
9	Total Union North	(2,384)		(2,384)
10	Total (line 6 + line 9)	(67,658)		(67,658)

<sup>(1)</sup> To attribute the Rate M7 and Rate 20 LRAM volumes adjustments to Rate M4, Rate M5, and Rate 100 based on the rate class of the customer in 2013 Board-approved volumes.

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## UNION GAS LIMITED

Union North
Calculation of Supplemental Service Charges Commissioning and Decommissioning Rates

<u>Effective January 1, 2018</u>

Line No.	Particulars	Union North West	Union North East
		(a)	(b)
	Rate 20 - At 50% Load Factor		
	Delivery (cents / m³)		
1	Monthly Demand (1)	28.6438	28.6438
2	Line 1 x 12 months	343.7256	343.7256
3	Line 2 / 365 days	0.9417	0.9417
4	Line 3 @ 50% Load Factor	1.8834	1.8834
5 6	Delivery Commodity Charge (1) Total Delivery Commissioning and Decommissioning	<u>0.5406</u> 2.4240	0.5406 2.4240
O	Total Delivery Commissioning and Decommissioning	2.4240	2.4240
	Gas Supply (cents / m³)		
7	Monthly Demand (1)	57.2684	50.9054
8	Gas Supply Demand - Price Adjustment (1)	-	·
9	(Line 7 + Line 8) x 12 months	687.2208	610.8648
10	Line 9 / 365 days Line 10 @ 50% Load Factor	1.8828	1.6736
11	Line 10 @ 50% Load Factor	3.7656	3.3472
12	Commodity Transportation 1 (1)	3.6224	2.6450
13	Commodity Transportation 1 - Price Adjustment	(0.0966)	(0.0650)
14	(Line 12 + Line 13) x (4/5)	2.8206	2.0640
15	Commodity Transportation 2 (1)	_	_
16	Line 15 * (1/5)		
47	Total Commodity Transportation	0.5000	F 4440
17	Charge for Commissioning and Decommissioning Rate	6.5862	5.4112
	Rate 100 - At 70% Load Factor		
	Delivery (cents / m³)		
18	Monthly Demand (2)	15.0839	15.0839
19	Line 18 x 12 months	181.0068	181.0068
20	Line 19 / 365 days	0.4959	0.4959
21	Line 20 @ 70% Load Factor	0.7084	0.7084
22 23	Commodity Charge (2) Total Delivery Commissioning and Decommissioning	<u> </u>	0.2200 0.9284
23	Total Delivery Commissioning and Decommissioning	0.9264	0.9204
	Gas Supply (cents / m³)		
24	Monthly Demand (2)	112.9067	160.8218
25	Line 24 x 12 months	1,354.8800	1,929.8614
26	Line 25 / 365 days	3.7120	5.2873
27	Line 26 @ 70% Load Factor	5.3029	7.5533
28	Commodity Transportation 1 (2)	6.3364	9.2013
29	Line 28 * (3/7)	2.7156	3.9434
30	Commodity Transportation 2 (2)	_	_
31	Line 30 * (4/7)	<del></del>	-
22	Total Commodity Transportation Charge for Commissioning and Decommissioning Rate	0.0405	11 4067
32	Charge for Commissioning and Decommissioning Rate	8.0185	11.4967

- Notes:
  (1) Appendix A, p.3.
  (2) Appendix A, p.4.

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#### UNION GAS LIMITED **Union South** Calculation of Supplemental Service Charges Effective January 1, 2018

Line No.	Particulars		cents / m³	\$ / GJ
INO.	Failiculais		(a)	(b)
	Minimum Annual Gas Supply Commodity Charge - Rate M4, Rate M5A		(a)	(b)
1	Compressor Fuel			
2	Transportation Tolls		-	
3	Administration Charge		0.1893	
4	Minimum annual gas supply commodity charge		0.1893	0.049
4	willimin annual gas supply commounty charge		0.1693	0.049
	Gas Supply Commodity Charges			
5	Commodity Cost of Gas		13.8234	
6	FT Transportation Commodity		-	
7	FT Fuel		-	
8	Total Gas Supply Commodity Charge		13.8234	3.549
	Firm Gas Supply Service Monthly Demand Charge			
9	FT Demand Charge		234.8691	60.300
	Firm Backstop Gas:			
	Demand:			
10	Monthly space charge	0.0428		
11	Units required (1)	43		
12	Number of months	12	22.1080 (a)	
	Inventory carrying costs:			
13	Sales WACOG	13.7303		
14	Overrun storage withdrawal	0.3389		
15		14.0692		
16	Units required (m³)	43		
17	Pre-tax return (%)	8.170%	49.4264 (b)	
18	Annual demand charge		71.5344 (a) + (b)	)
19	Number of months		12	
20	Monthly demand charge		5.9612	1.530
	Commodity:			
21	Sales WACOG		13.7303	
22	Overrun storage withdrawal		0.3389	
23	Rate T1 - Overrun transportation		1.5117	
24	Rate T1 - Cap-and-Trade Facility-Related charge		0.0167	
25	Commodity charge		15.5976	4.005

Notes:
(1) Each unit of added delivery requires 43 m³ of additional inventory.

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#### UNION GAS LIMITED **Union South** Calculation of Supplemental Service Charges

## Effective January 1, 2018

Line			
No.	Particulars	cents / m³	\$ / GJ
	Description Filtrate Desireton One	(a)	(b)
4	Reasonable Efforts Backstop Gas:	5.4407	
1	Rate M1 - Block 1 delivery rate	5.1107	
2	Rate M1 - Storage rate	0.7328	
3	Rate M1 - Cap-and-Trade Facility-Related charge	0.0297	
4	Sales WACOG	13.7303	
5	Total	19.6035	5.033
	Supplemental Inventory:		
6	Sales WACOG	13.7303	
7	Injection commodity	0.1530	
8	Space charge (p.2, line 10 x 12)	0.5141	
9		14.3974	3.696
	Carrying costs (1/2 year)		
10	(line 9 x p.2, line 17) / 2	0.5881	
11	Total (line 9 + line 10)	14.9856	3.847
	Supplemental Gas Sales:		
12	Supplemental inventory	14.9856	
13	Overrun storage withdrawal	0.3389	
14	Rate T1 - Overrun transportation	1.5117	
15	Rate T1 - Cap-and-Trade Facility-Related charge	0.0167	
16	Total	16.8528	
	Failure to Deliver:		
17	Rate M1 - Block 1 delivery rate	5.1107	
18	Rate M1 - Storage rate	0.7328	
19	Rate M1 - Cap-and-Trade Facility-Related charge	0.0297	0.008
20	Failure to Deliver Adjustment	5.1708	1.328
21	Failure to Deliver Charge	11.0440	2.835
	Parkway Delivery Commitment Incentive ("PDCI")		
22	Rate M12 Dawn to Parkway demand rate (1)		3.716
23	Line 22 x 12 months		44.5920
24	Line 23 / 365 days		0.122
25	Rate M12 average Dawn to Parkway (TCPL / EGT) fuel rate (2)		0.028
26 26	Rate M12 Dawn to Parkway Cap-and-Trade Facility-Related Charge (3)		0.028
27	Total (line 24 + line 25+ line 26)	_	(0.159)
۷,	Total fille 27 + fille 20+ fille 20)	_	(0.159)

- Notes:
  (1) Appendix A, p.14, line 2, column (c).
  (2) Rate Order, Appendix B, Rate M12 Rate Schedule C, p.1, average of Dawn to Parkway (TCPL / EGT) monthly fuel rates.
  (3) Appendix A, p.14, line 10, column (c).

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## UNION GAS LIMITED

**Union South** 

Calculation of Supplemental Service Charges Calculation of Minimum & Maximum Charges

<u>Effective January 1, 2018</u>

No.	Particulars		cents / m³
	Minimum Charges		(a)
	Rate M4 (F)	Minimum annual delivery commodity charge:	
1	(, )	Monthly delivery commodity charge (Rate M4 1st Block)	1.5791
2		Cap-and-Trade Facility-Related Charge	0.0280
3		Gas Supply Admin Charge	0.1893
4		Minimum annual delivery commodity charge	1.7964
	Rate M4 (I) / M5	Minimum annual delivery commodity charge:	
5		Monthly delivery commodity charge (Rate M5 1st Block)	3.0395
6		Cap-and-Trade Facility-Related Charge	0.0249
7		Gas Supply Admin Charge	0.1893
8		Minimum annual delivery commodity charge	3.2537
	Maximum Charges		
	Rate 25 Interruptible		
9		Average Rate 10 Firm Delivery Charge	5.8375
10		Percent of Average Firm Delivery Price	90%
		Rate 25 Maximum interruptible delivery commodity	
11		charge _	5.2538
	Rate M7 Interruptible	Maximum interruptible delivery commodity charge:	
12	reate iiii iiiteiraptibie	Rate M7 firm commodity charge	0.3623
13		Rate M7 firm demand charge commoditized at a Load Factor of 18.69%	6.1436
14		Rate M7 maximum interruptible charge	6.5059
15	Rate T1 Interruptible	Maximum interruptible delivery commodity charge	6.5059
16	Rate T2 Interruptible	Maximum interruptible delivery commodity charge	6.5059
16	Rate T2 Interruptible  Rate M7 - Commissioning and	_	6.50
47	Delivery (cents / m³)		24.024
17	Monthly Demand (1)	O mandha)	34.9210
18	Annual Demand (line 17 x 1)	,	419.0520
19	Daily Demand (line 18 / 365		1.1481
20	@ Class Average Firm Load		4.3005
21	Delivery Commodity Charge	(1)	0.3623
22	Delivery - Price Adjustment	-	-
23	Total Delivery Commissionir	ng and Decommissioning (line 20 + line 21 + line 22)	4.6628

Notes:
(1) Appendix A, p.9.

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# UNION GAS LIMITED Union South Calculation of Supplemental Service Charges Effective January 1, 2018

Line No.	_Particulars	Union Supplies Fuel	Customer Supplies Fuel
		(a)	(b)
	Rate T1 / Rate T2 / Rate T3 - At 100% Load Factor		
	Authorized Storage Overrun (\$ / GJ)		
1	Monthly Demand (1)	1.457	1.457
2	Annual Demand (line 1 x 12 months)	17.484	17.484
3	Daily Demand (line 2 / 365 days)	0.048	0.048
4	@ 100% Load Factor	0.048	0.048
5	Commodity Charge (2)	0.039	0.008
6	Total Storage Overrun (line 4 + line 5)	0.087	0.056
	Rate T1 - At 100% Load Factor		
	Authorized Transportation Overrun (cents / m³)		
7	Monthly Demand (3)	41.1636	41.1636
8	Annual Demand (line 7 x 12 months)	493.9632	493.9632
9	Daily Demand (line 8 / 365 days)	1.3533	1.3533
10	@ 100% Load Factor	1.3533	1.3533
11	Commodity Charge (4)	0.1584	0.1138
12	Total Transportation Overrun (line 10 + line 11)	1.5117	1.4671
	Rate T2 - At 100% Load Factor		
40	Authorized Transportation Overrun (cents / m³)	00.0705	00.0705
13	Monthly Demand (5)	32.6795	32.6795
14 15	Annual Demand (line 13 x 12 months) Daily Demand (line 14 / 365 days)	392.1540 1.0744	392.1540 1.0744
16	@ 100% Load Factor	1.0744	1.0744
17	Commodity Charge (6)	0.0690	0.0282
18	Total Transportation Overrun (line 16 + line 17)	1.1434	1.1026
	Rate T3 - At 100% Load Factor		
	Authorized Transportation Overrun (cents / m³)		
19	Monthly Demand (7)	17.9887	17.9887
20	Annual Demand (line 19 x 12 months)	215.8644	215.8644
21	Daily Demand (line 20 / 365 days)	0.5914	0.5914
22	@ 100% Load Factor	0.5914	0.5914
23 24	Commodity Charge (8) Total Transportation Overrun (line 22 + line 23)	<u> </u>	0.0717 0.6631
۷4	Total Transportation Overruin (iiiie 22 + iiiie 25)	0.7201	0.0031

- (1) Appendix A, p.10.
- (2) Column (a) calculated as WACOG / Heat Value \* Overrun Fuel Ratio + Injection Commodity = \$138.234 /10³m³ / 38.95 GJ/10³m³ \* 0.881% + \$0.008/GJ.
- (3) Appendix A, p.10.
- (4) Column (a) calculated as WACOG / 10 \* Transportation Fuel Ratio + Firm Commodity Transport = \$138.234 /10³m³ / 10 \* 0.323% + 0.1138 cents/m³.
- (5) Appendix A, p.11.
- (6) Column (a) calculated as WACOG / 10 \* Transportation Fuel Ratio + Firm Commodity Transport = \$138.234 /10³m³ / 10 \* 0.295% + 0.0282 cents/m³.
- (7) Appendix A, p.12.
- (8) Column (a) calculated as WACOG / 10 \* Transportation Fuel Ratio + Firm Commodity Transport = \$138.234 /10³m³ / 10 \* 0.412% + 0.0717 cents/m³.

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## **UNION GAS LIMITED**

#### Union South

# Calculation of Union Supplied Fuel Rates for In-Franchise Semi-Unbundled Rate T1, Rate T2 and Rate T3 <u>Effective January 1, 2018</u>

5       All Volumes       0.1584       0.113         6       Interruptible Transportation Commodity Charge - Maximum       6.5059       6.461         Rate T2 Transportation Service (cents/m³)         7       Dawn Price as per EB-2017-0087       13.8234         8       2018 Fuel Ratio as per EB-2017-0087       0.295%         9       Fuel Rate (line 7 x line 8)       0.0408         10       Firm Transportation Commodity Charge       0.0282       0.028         11       All Volumes       0.0690       0.028         12       Interruptible Transportation Commodity Charge - Maximum       6.5059       6.465         Rate T3 Transportation Service (cents/m³)         13       Dawn Price as per EB-2017-0087       13.8234         14       2018 Fuel Ratio as per EB-2017-0087       0.412%         15       Fuel Rate (line 13 x line 14)       0.0570         16       Firm Transportation Commodity Charge       0.071         17       All Volumes       0.071         Rate T1, Rate T2 & Rate T3 Storage Service (\$/GJ)         18       Dawn Price as per EB-2017-0087       3.549         20       Fuel Rate (line 18 x line 19)       0.014         21       Storage Commodity Charge       0.	Line No.	Particulars	Union Supplies Fuel	Customer Supplies Fuel
Dawn Price as per EB-2017-0087   13.8234   2.018 Fuel Ratio as per EB-2017-0087   0.323%   5.018 Fuel Ratio (in pt x line 2)   0.0446   0.1138   0.138   0.13			(a)	(b)
2 2018 Fuel Ratio (as per EB-2017-0087 0.323% 0.1138 0.115		Rate T1 Transportation Service (cents/m³)		
2 2018 Fuel Ratio (as per EB-2017-0087 0.323% 0.1138 0.115	1	Dawn Price as per EB-2017-0087	13.8234	
Fuel Rate   (line 1 x line 2)   0.0446   0.1138   0.113   0.				
Firm Transportation Commodity Charge				
All Volumes				0.1138
Rate T2 Transportation Service (cents/m²)   7		·		0.1138
7         Dawn Price as per EB-2017-0087         13.8234           8         2018 Fuel Ratio as per EB-2017-0087         0.295%           9         Fuel Rate (line 7 x line 8)         0.0082         0.0282           10         Firm Transportation Commodity Charge         0.0690         0.0282           11         All Volumes         0.0690         0.0281           12         Interruptible Transportation Commodity Charge - Maximum         6.5059         6.465           Rate T3 Transportation Service (cents/m³)           13         Dawn Price as per EB-2017-0087         13.8234           14         2018 Fuel Ratio as per EB-2017-0087         0.412%           15         Fuel Rate (line 13 x line 14)         0.0570         0.071           16         Firm Transportation Commodity Charge         0.0717         0.071           17         All Volumes         0.0717         0.071           Rate T1, Rate T2 & Rate T3 Storage Service (\$/GJ)         3.549         0.002           18         Dawn Price as per EB-2017-0087         3.549         0.002           21         Storage Commodity Charge         0.008         0.00           22         All Volumes         0.002         0.002           23         Customer provides	6	Interruptible Transportation Commodity Charge - Maximum	6.5059	6.4613
8 2018 Fuel Ratio as per EB-2017-0087 9 Fuel Rate (line 7 x line 8) 10 Firm Transportation Commodity Charge		Rate T2 Transportation Service (cents/m³)		
8 2018 Fuel Ratio as per EB-2017-0087 9 Fuel Rate (line 7 x line 8) 10 Firm Transportation Commodity Charge	7	Dawn Price as per FR-2017-0087	13 8234	
Fuel Rate   (line 7 x line 8)   0.0408   0.0282   0.028   0.0282   0.0282   0.0282   0.0282   0.0282   0.0282   0.0282   0.0282   0.0690   0.0282   0.0690   0.0282   0.0690   0.0282   0.0690   0.0282   0.0690   0.0282   0.0690   0.0282   0.0690   0.0282   0.0690   0.0282   0.0690   0.0690   0.0282   0.0690				
Firm Transportation Commodity Charge				
All Volumes   0.0690   0.028				0.0202
Interruptible Transportation Commodity Charge - Maximum   6.5059   6.465     Rate T3 Transportation Service (cents/m²)		·		0.0282
Rate T3 Transportation Service (cents/m³)   13.8234   14.2018 Fuel Ratio as per EB-2017-0087   0.412%   15.2018 Fuel Rate (line 13 x line 14)   0.0570   0.0717   0.0718   16.2018 Fuel Rate (line 13 x line 14)   0.0570   0.0717   0.0718   17.2018   18.2018   19.2018   19.2018   19.2018 Fuel Rate T2 & Rate T3 Storage Service (\$/GJ)   18.				
13	12	Interruptible Transportation Commodity Charge - Maximum	6.5059	6.4651
14       2018 Fuel Rate (line 13 x line 14)       0.0570         15       Fuel Rate (line 13 x line 14)       0.0570         16       Firm Transportation Commodity Charge       0.0717       0.071         17       All Volumes       0.1287       0.071         Rate T1, Rate T2 & Rate T3 Storage Service (\$/GJ)         18       Dawn Price as per EB-2017-0087       3.549         19       2018 Fuel Ratio as per EB-2017-0087       0.408%         20       Fuel Rate (line 18 x line 19)       0.014         21       Storage Commodity Charge       0.008       0.002         2       All Volumes       0.022       0.00         Rate T1, Rate T2 & Rate T3 Annual Firm Injection/Withdrawal Right       \$/GJ         Linventory Carrying Costs         24       Space       75,177,124 (2)         25       Inventory Percentage       20%         26       Inventory (line 24 x line 25)       15,035,425         27       Dawn Price as per EB-2017-0087       3.549         28       ICC %       8.2%         29       Inventory Carrying Costs (line 26 * line 27 * line 28 / 1000)       4,360         30       Deliverability Demand Allocation Units       1,332,764 (3) <t< td=""><td></td><td>Rate T3 Transportation Service (cents/m³)</td><td></td><td></td></t<>		Rate T3 Transportation Service (cents/m³)		
Fuel Rate   (line 13 x line 14)   0.0570   0.0710   1.071117   1.07117   1	13	Dawn Price as per EB-2017-0087	13.8234	
Firm Transportation Commodity Charge   0.0717   0.071     All Volumes   0.1287   0.071     Rate T1, Rate T2 & Rate T3 Storage Service (\$/GJ)	14	2018 Fuel Ratio as per EB-2017-0087	0.412%	
Rate T1, Rate T2 & Rate T3 Storage Service (\$/GJ)	15	Fuel Rate (line 13 x line 14)	0.0570	
Rate T1, Rate T2 & Rate T3 Storage Service (\$/GJ)	16	Firm Transportation Commodity Charge	0.0717	0.0717
18	17		0.1287	0.0717
19       2018 Fuel Ratio as per EB-2017-0087       0.408%         20       Fuel Rate (line 18 x line 19)       0.014         21       Storage Commodity Charge       0.008       0.002         22       All Volumes       0.022       0.00         Rate T1, Rate T2 & Rate T3 Annual Firm Injection/Withdrawal Right       \$ / GJ         23       Customer provides deliverability Inventory Rate       1.184 (1)         Inventory Carrying Costs         24       Space       75,177,124 (2)         25       Inventory Percentage       20%         26       Inventory (line 24 x line 25)       15,035,425         27       Dawn Price as per EB-2017-0087       3.549         28       ICC %       8.2%         29       Inventory Carrying Costs (line 26 * line 27 * line 28 / 1000)       4,360         30       Deliverability Demand Allocation Units       1,332,764 (3)         31       Line 29 / line 30 x 1000 / 12       0.273		Rate T1, Rate T2 & Rate T3 Storage Service (\$/GJ)		
19       2018 Fuel Ratio as per EB-2017-0087       0.408%         20       Fuel Rate (line 18 x line 19)       0.014         21       Storage Commodity Charge       0.008       0.002         22       All Volumes       0.022       0.00         Rate T1, Rate T2 & Rate T3 Annual Firm Injection/Withdrawal Right       \$ / GJ         23       Customer provides deliverability Inventory Rate       1.184 (1)         Inventory Carrying Costs         24       Space       75,177,124 (2)         25       Inventory Percentage       20%         26       Inventory (line 24 x line 25)       15,035,425         27       Dawn Price as per EB-2017-0087       3.549         28       ICC %       8.2%         29       Inventory Carrying Costs (line 26 * line 27 * line 28 / 1000)       4,360         30       Deliverability Demand Allocation Units       1,332,764 (3)         31       Line 29 / line 30 x 1000 / 12       0.273	18	Dawn Price as per FR-2017-0087	3 549	
Fuel Rate (line 18 x line 19)   0.014   0.008   0.000     Storage Commodity Charge   0.002   0.000     Rate T1, Rate T2 & Rate T3 Annual Firm Injection/Withdrawal Right   \$ / GJ     (a)   (a)		2018 Fuel Ratio as per FR-2017-0087		
Storage Commodity Charge   0.008   0.002   0.000     All Volumes   7.002   0.000     Rate T1, Rate T2 & Rate T3 Annual Firm Injection/Withdrawal Right   \$ / GJ (a)     Customer provides deliverability Inventory Rate   1.184 (1)     Inventory Carrying Costs   75,177,124 (2)     Space   75,177,124 (2)     Space   20%     Inventory Percentage   20%     Inventory (line 24 x line 25)   15,035,425     Dawn Price as per EB-2017-0087   3.549     ICC %   8.2%     Inventory Carrying Costs (line 26 * line 27 * line 28 / 1000)   4,360     30 Deliverability Demand Allocation Units   1,332,764 (3)     Storage Commodity Code				
All Volumes       0.002         Rate T1, Rate T2 & Rate T3 Annual Firm Injection/Withdrawal Right       \$ / GJ         23       Customer provides deliverability Inventory Rate       1.184 (1)         Inventory Carrying Costs       75,177,124 (2)         24       Space       75,177,124 (2)         25       Inventory Percentage       20%         26       Inventory (line 24 x line 25)       15,035,425         27       Dawn Price as per EB-2017-0087       3.549         28       ICC %       8.2%         29       Inventory Carrying Costs (line 26 * line 27 * line 28 / 1000)       4,360         30       Deliverability Demand Allocation Units       1,332,764 (3)         31       Line 29 / line 30 x 1000 / 12       0.273				0.008
Customer provides deliverability Inventory Rate   1.184 (1)		·		0.008
Customer provides deliverability Inventory Rate   1.184 (1)				
23 Customer provides deliverability Inventory Rate 1.184 (1)  Inventory Carrying Costs  24 Space 75,177,124 (2) 25 Inventory Percentage 20% 26 Inventory (line 24 x line 25) 15,035,425  27 Dawn Price as per EB-2017-0087 3.549 28 ICC % 8.2% 29 Inventory Carrying Costs (line 26 * line 27 * line 28 / 1000) 4,360  30 Deliverability Demand Allocation Units 1,332,764 (3)  Line 29 / line 30 x 1000 / 12 0.273		Rate T1, Rate T2 & Rate T3 Annual Firm Injection/Withdrawal Right		
Inventory Carrying Costs  24			(a)	
24       Space       75,177,124 (2)         25       Inventory Percentage       20%         26       Inventory (line 24 x line 25)       15,035,425         27       Dawn Price as per EB-2017-0087       3.549         28       ICC %       8.2%         29       Inventory Carrying Costs (line 26 * line 27 * line 28 / 1000)       4,360         30       Deliverability Demand Allocation Units       1,332,764 (3)         31       Line 29 / line 30 x 1000 / 12       0.273	23	Customer provides deliverability Inventory Rate	1.184 (1)	
24       Space       75,177,124 (2)         25       Inventory Percentage       20%         26       Inventory (line 24 x line 25)       15,035,425         27       Dawn Price as per EB-2017-0087       3.549         28       ICC %       8.2%         29       Inventory Carrying Costs (line 26 * line 27 * line 28 / 1000)       4,360         30       Deliverability Demand Allocation Units       1,332,764 (3)         31       Line 29 / line 30 x 1000 / 12       0.273		Inventory Carrying Costs		
25       Inventory Percentage       20%         26       Inventory (line 24 x line 25)       15,035,425         27       Dawn Price as per EB-2017-0087       3.549         28       ICC %       8.2%         29       Inventory Carrying Costs (line 26 * line 27 * line 28 / 1000)       4,360         30       Deliverability Demand Allocation Units       1,332,764 (3)         31       Line 29 / line 30 x 1000 / 12       0.273	24		75,177,124 (2)	
27       Dawn Price as per EB-2017-0087       3.549         28       ICC %       8.2%         29       Inventory Carrying Costs (line 26 * line 27 * line 28 / 1000)       4,360         30       Deliverability Demand Allocation Units       1,332,764 (3)         31       Line 29 / line 30 x 1000 / 12       0.273	25	Inventory Percentage	20%	
28       ICC %       8.2%         29       Inventory Carrying Costs (line 26 * line 27 * line 28 / 1000)       4,360         30       Deliverability Demand Allocation Units       1,332,764 (3)         31       Line 29 / line 30 x 1000 / 12       0.273	26	Inventory (line 24 x line 25)	15,035,425	
28       ICC %       8.2%         29       Inventory Carrying Costs (line 26 * line 27 * line 28 / 1000)       4,360         30       Deliverability Demand Allocation Units       1,332,764 (3)         31       Line 29 / line 30 x 1000 / 12       0.273	27	Dawn Price as per EB-2017-0087	3.549	
29       Inventory Carrying Costs (line 26 * line 27 * line 28 / 1000)       4,360         30       Deliverability Demand Allocation Units       1,332,764 (3)         31       Line 29 / line 30 x 1000 / 12       0.273				
31 Line 29 / line 30 x 1000 / 12 0.273				
	30	Deliverability Demand Allocation Units	1,332,764 (3)	
Union provides deliverability Inventory as per EB-2017-0087 (line 23 + line 31)  1.457	31	Line 29 / line 30 x 1000 / 12	0.273	
	32	Union provides deliverability Inventory as per EB-2017-0087 (line 23 + line 31)	1.457	

- Notes:

  (1) Rate Order, Working Papers, Schedule 4, p.16, line 2, column (s).

  (2) EB-2011-0210, Rate Order, Working Papers, Schedule 19, p.2, line 8, column (b).

  (3) EB-2011-0210, Rate Order, Working Papers, Schedule 19, p.1, line 5, column (e).

Filed: 2017-09-26 EB-2017-0087 Rate Order Working Papers Schedule 19 Page 1 of 2

#### **UNION GAS LIMITED** Southern Operations Area Bundled Storage Rate Detail Effective January 1, 2018

Line No.	Particulars		Billing Units	2018 Forecast (1) Usage (a)	SSS & SPS (\$000's)	Gas Supply Balancing Costs (\$000's)	Gas in Storage Inventory Carrying Costs(\$000's)(d)	Unbundled Storage Revenue (\$000's) (e) = (b+c+d)	Unbundled Storage Rates (cents/m³) (f) = (e / a)
	Rate M1								
	Monthly deli	very commodity c	harge:						
1	First	100 m³	10³m³	845,823	4,002	-	2,196	6,199	0.7328
2	Next	150 m³	10³m³	751,066	3,554	-	1,950	5,504	0.7328
3	All over	250 m³	10³m³	1,211,407	5,732		3,145	8,878	0.7328
4	Total			2,808,296	13,289 (2)		7,291 (3)	20,580	
	Rate M2								
	Monthly deli	very commodity c	harge:						
5	First	1,000 m <sup>3</sup>	10³m³	58,711	245	-	135	380	0.6481
6	Next	6,000 m <sup>3</sup>	10³m³	285,720	1,193	-	659	1,852	0.6481
7	Next	13,000 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	322,850	1,348	-	745	2,092	0.6481
8	All over	20,000 m <sup>3</sup>	10 <sup>3</sup> m <sup>3</sup>	412,456	1,722		951	2,673	0.6481
9	Total			1,079,737	4,507 (4)	-	2,490 (5)	6,997	

- (1) Rate Order, Working Papers, Schedule 4, p. 10, column (r).
- (2) Rate Order, Working Papers, Schedule 19, p. 2, line 6, column (a).
  (3) Rate Order, Working Papers, Schedule 19, p. 2, line 10, column (a).
- (4) Rate Order, Working Papers, Schedule 19, p. 2, line 6, column (b).
- (5) Rate Order, Working Papers, Schedule 19, p. 2, line 10, column (b).
  (6) Rate Order, Working Papers, Schedule 4, p. 10, column (s).

Filed: 2017-09-26 EB-2017-0087 Rate Order Working Papers Schedule 19 Page 2 of 2

# UNION GAS LIMITED Southern Operations Area Bundled Storage Cost Detail Effective January 1, 2018

Line		Rate	Rate
No.	Particulars (\$000's)	M1	M2
		(a)	(b)
	SSS/SPS		
1	Storage Dehydrator (1)	168	57
2	Storage Ex. Dehydrator (2)	9,565	3,236
3	Storage Space (3)	10,847	3,705
4	Storage	20,580	6,997
5	Less: ICC on Gas in Storage (4)	7,291	2,490
6	Total SSS/SPS	13,289	4,507
	Gas Supply Balancing		
7	Total Gas Supply Balancing		-
	Gas In Storage Inventory Carrying Costs		
8	Gas in Storage (5)	89,246	30,481
9	ICC %	8.2%	8.2%
10	Gas in Storage Inventory Carrying Costs	7,291	2,490

- (1) EB-2011-0210, Rate Order, Working Papers, Schedule 18, p. 2, line 1, updated for PCI and Capital Pass-Throughs per EB-2017-0087.
- (2) EB-2011-0210, Rate Order, Working Papers, Schedule 18, p. 2, line 2, updated for PCI and Capital Pass-Throughs per EB-2017-0087.
- (3) EB-2011-0210, Rate Order, Working Papers, Schedule 18, p. 2, line 3, updated for PCI and Capital Pass-Throughs per EB-2017-0087.
- (4) Per line 10.
- (5) EB-2011-0210, Exhibit G3, Tab 5, Schedule 9, p. 16 of 40, updated for EB-2011-0210 Board Decision.

### **UNION GAS LIMITED**

#### 2018 Rate Adjustment Summary based on

#### Parkway Delivery Obligation (PDO) Reduction Costs and Parkway Delivery Commitment Incentive (PDCI) Costs

Line No. Particulars (\$000)  1 Rate M1 2 Rate M2 3 Rate M4 4 Rate M5 - Firm 5 Rate M5 - Interru 6 Rate M7 - Firm 7 Rate M7 - Interru 8 Rate M9 9 Rate M10 10 Rate T1 - Firm 11 Rate T1 - Interru 12 Rate T2 - Firm 13 Rate T2 - Interru 14 Rate T3	(a) 4,9 1,6 4	Fuel Costs (2) (b) 287	Total PDO Costs $(c) = (a + b)$ $5,222$	Dawn-Parkway Demand Costs (3) (d)	Compressor Fuel Costs (4) (e)	Total PDCI Costs (f) = (d + e)	Dawn-Parkway Demand Costs (g) = (a + d)	Compressor Fuel Costs (h) = (b + e)	Total Costs (i) = (g + h)
1 Rate M1 2 Rate M2 3 Rate M4 4 Rate M5 - Firm 5 Rate M5 - Interru 6 Rate M7 - Firm 7 Rate M7 - Interru 8 Rate M9 9 Rate M10 10 Rate T1 - Firm 11 Rate T1 - Interru 12 Rate T2 - Firm 13 Rate T2 - Interru	(a) 4,9 1,6 4	(b) 287	(c) = (a + b)	(d)	(e)				
2 Rate M2 3 Rate M4 4 Rate M5 - Firm 5 Rate M5 - Interru 6 Rate M7 - Firm 7 Rate M7 - Interru 8 Rate M9 9 Rate M10 10 Rate T1 - Firm 11 Rate T1 - Interru 12 Rate T2 - Firm 13 Rate T2 - Interru	4,9 1,6 4	34 287				(f) = (d + e)	(g) = (a + d)	(h) = (b + e)	(i) = (g + h)
2 Rate M2 3 Rate M4 4 Rate M5 - Firm 5 Rate M5 - Interru 6 Rate M7 - Firm 7 Rate M7 - Interru 8 Rate M9 9 Rate M10 10 Rate T1 - Firm 11 Rate T1 - Interru 12 Rate T2 - Firm 13 Rate T2 - Interru	1,6 4		5,222	5.000					
3 Rate M4 4 Rate M5 - Firm 5 Rate M5 - Interru 6 Rate M7 - Firm 7 Rate M7 - Interru 8 Rate M9 9 Rate M10 10 Rate T1 - Firm 11 Rate T1 - Interru 12 Rate T2 - Firm 13 Rate T2 - Interru	4	58 100	•	5,226	1,109	6,335	10,160	1,397	11,557
4 Rate M5 - Firm 5 Rate M5 - Interru 6 Rate M7 - Firm 7 Rate M7 - Interru 8 Rate M9 9 Rate M10 10 Rate T1 - Firm 11 Rate T1 - Interru 12 Rate T2 - Firm 13 Rate T2 - Interru		102	1,759	1,756	392	2,148	3,413	494	3,908
5 Rate M5 - Interru 6 Rate M7 - Firm 7 Rate M7 - Interru 8 Rate M9 9 Rate M10 10 Rate T1 - Firm 11 Rate T1 - Interru 12 Rate T2 - Firm 13 Rate T2 - Interru		82 46	528	511	179	689	993	225	1,218
6 Rate M7 - Firm 7 Rate M7 - Interru 8 Rate M9 9 Rate M10 10 Rate T1 - Firm 11 Rate T1 - Interru 12 Rate T2 - Firm 13 Rate T2 - Interru		5 1	6	5	5	9	9	6	15
7 Rate M7 - Interru 8 Rate M9 9 Rate M10 10 Rate T1 - Firm 11 Rate T1 - Interru 12 Rate T2 - Firm 13 Rate T2 - Interru		32	32	-	124	124	-	156	156
8 Rate M9 9 Rate M10 10 Rate T1 - Firm 11 Rate T1 - Interru 12 Rate T2 - Firm 13 Rate T2 - Interru	. 2	22 19	241	235	72	307	458	91	548
9 Rate M10 10 Rate T1 - Firm 11 Rate T1 - Interru 12 Rate T2 - Firm 13 Rate T2 - Interru	ruptible -	-	-	-	-	-	-	-	-
<ul> <li>10 Rate T1 - Firm</li> <li>11 Rate T1 - Interru</li> <li>12 Rate T2 - Firm</li> <li>13 Rate T2 - Interru</li> </ul>		79 10	89	84	37	121	164	47	210
<ul><li>11 Rate T1 - Interru</li><li>12 Rate T2 - Firm</li><li>13 Rate T2 - Interru</li></ul>		2 0	2	3	0	3	5	0	5
<ul><li>12 Rate T2 - Firm</li><li>13 Rate T2 - Interru</li></ul>	2	238 42	280	252	163	415	490	205	696
13 Rate T2 - Interru	•	. 4	4	-	17	17	-	22	22
	•	345 217	1,763	1,636	840	2,476	3,182	1,057	4,239
14 Rate T3	•	- 5	5	-	20	20	-	25	25
	5	660 43	603	593	166	759	1,153	209	1,361
15 Total South In-fra	franchise 9,7	<u></u>	10,535	10,300	3,124	13,424	20,027	3,933	23,959
16 Excess Utility Sto	Storage Space .		-	-	-	-	-	-	-
17 Rate C1 - Firm		. 7	7	-	-	-	-	7	7
18 Rate C1 - Interru	ruptible -	. 196	196	-	-	-	-	196	196
19 Rate M12		680	680	-	-	-	-	680	680
20 Rate M13		-	-	-	-	-	-	-	-
21 Rate M16		2	2	<u> </u>	<del>-</del> .	<u> </u>		2	2
22 Total Ex-franchis	ise	885	885					885	885
23 Rate 01		. 7	- 7	_	_	- -	_	7	- 7
24 Rate 10		. 2	2	-	_	_	_	2	2
25 Rate 20	,	. <u>-</u> . 1	1	<u>-</u>	_	-	_	1	1
26 Rate 100		. 0	0	-	_	_	_	0	0
27 Rate 25	, <u>-</u>	· <u> </u>			<u> </u>				
28 Total North In-fra									
29 Total Costs (line	ranchise	11	11			-		11	11

- Rate Order, Working Papers, Schedule 20, p.2, column (g).
- Rate Order, Working Papers, Schedule 20, p.3, column (j).
- (1) (2) (3) (4)
- Rate Order, Working Papers, Schedule 20, p.5, column (b) + Rate Order, Working Papers, Schedule 20, p.6, column (b). Rate Order, Working Papers, Schedule 20, p.5, column (d) + Rate Order, Working Papers, Schedule 20, p.6, column (d).

Filed: 2017-09-26 EB-2017-0087 Rate Order Working Papers Schedule 20 Page 2 of 6

9,726

# <u>UNION GAS LIMITED</u> 2018 Delivery Impacts to Union South In-Franchise customers of M12 Demand Costs Based on 280 TJ per day of M12 Dawn-Parkway capacity and 62 TJ per day of T2 Billing Contract Demand Revenue Credit

2013 Approved Dawn-Parkway Dawn-Parkway Dawn-Parkway Dawn-Parkway Dawn-Parkway T2 BCD Total Design Day **Demand Costs of Demand Costs of Demand Costs of** Revenue Credit of Demand **Demand Costs of** Line Demands (1) 19 TJ/d (3) 62 TJ/d (4) 280 TJ/d 62 TJ/d Costs 200 TJ/d (2)  $(10^3 \text{m}^3/\text{d})$ No. **Particulars** (\$000's) (\$000's) (\$000's) (\$000's) (\$000's) (\$000's) (a) (b) (c) (d) (e) = (b + c + d)(f) = -(d)(g) = (e + f)22,132 420 1 Rate M1 4,514 1,402 6,337 (1,402)4,934 2 Rate M2 7,435 1,517 141 471 2,129 (471)1,658 3 2,162 41 137 619 (137)482 Rate M4 441 4 0 5 Rate M5 Firm 20 4 1 6 (1) 5 Rate M5 Interruptible 6 Rate M7 Firm 997 203 19 63 285 (63)222 7 Rate M7 Interruptible 8 73 7 Rate M9 356 23 102 (23)79 9 Rate M10 11 2 0 3 (1) 2 1 10 20 68 306 (68)238 Rate T1 Firm 1,068 218 11 Rate T1 Interruptible 12 Rate T2 Firm 6,931 1,414 132 439 1,984 (439)1,545 Rate T2 Interruptible 13 14 Rate T3 2,511 512 48 159 719 (159)560

828 (6)

12,490

(2,764)

2,764 (7)

#### Notes:

15

Total

(1) Union South In-franchise Dawn-Parkway Design Day Demand allocation factor per EB-2011-0210, Exhibit G3, Tab 5, Schedule 23, p. 7, line 2, Updated for Board Decision.

8,898 (5)

- (2) Allocated in proportion to column (a). The 200 TJ/d of Dawn-Parkway capacity includes 146 TJ/d per EB-2016-0245, Rate Order, Working Papers, Schedule 20, p. 2, column (b) + incremental Parkway Delivery Obligation shift of 54 TJ/d per Exhibit A, Tab 2, Attachment 1, line 11, column (j).
- (3) Allocated in proportion to column (a). The 19 TJ/d of Dawn-Parkway capacity includes 19 TJ/d per EB-2016-0245, Rate Order, Working Papers, Schedule 20, p. 2, column (c) + incremental Parkway Delivery Obligation shift of 0 TJ/d per Exhibit A, Tab 2, Attachment 1, line 17, column (j).
- (4) Allocated in proportion to column (a). The 62 TJ/d of Dawn-Parkway capacity includes 48 TJ/d per EB-2016-0245, Rate Order, Working Papers, Schedule 20, p. 2, column (d) + incremental Parkway Delivery Obligation shift of 14 TJ/d per Exhibit A, Tab 2, Attachment 1, line 21, column (j).
- (5) Calculated as 200 TJ x \$0.122/GJ/d x 365 = \$8.898 million. Rate represents the M12 Dawn-Parkway demand rate per EB-2017-0087.

43,624

- (6) Calculated as 19 TJ x \$0.122/GJ/d x 365 = \$0.828 million. Rate represents the M12 Dawn-Parkway demand rate per EB-2017-0087.
- (7) Calculated as 62 TJ x \$0.122/GJ/d x 365 = \$2.764 million. Rate represents the M12 Dawn-Parkway demand rate per EB-2017-0087.

## **UNION GAS LIMITED** 2018 Commodity Cost Adjustments based on Parkway Delivery Obligation Reduction of 218 TJ/d and 81 TJ/d of M12 Turnback

			Adjusted Compres	sor Fuel Allocation		2013 Board-Approved Compressor Fuel Allocation					Total
		Dawn Station	D-P Easterly	D-P Westerly	Total	Dawn Station	D-P Easterly	D-P Westerly	Total		Compressor
Line		Compressor Fuel	Compressor Fuel	Compressor Fuel	Compressor Fuel	Compressor Fuel	Compressor Fuel	Compressor Fuel	Compressor Fuel	Difference	Fuel Cost (1)
No.	Particulars	(GJ)	(GJ)	(GJ)	(GJ)	(GJ)	(GJ)	(GJ)	(GJ)	(GJ)	(\$000's)
	-	(a)	(b)	(c)	(d) = (a + b + c)	(e)	(f)	(g)	(h) = (e + f + g)	(i) = (d - h)	(j)=(i x 3.549/1000)
1	Rate M1	74,915	81,364	-	156,280	37,867	37,469	-	75,337	80,943	287
2	Rate M2	26,504	28,786	-	55,290	13,397	13,256	-	26,653	28,637	102
3	Rate M4	12,081	13,121	-	25,203	6,107	6,042	-	12,149	13,053	46
4	Rate M5 - Firm	308	335	-	643	156	154	-	310	333	1
5	Rate M5 - Interruptible	8,375	9,096	-	17,471	4,233	4,189	-	8,422	9,049	32
6	Rate M7 - Firm	4,860	5,279	-	10,139	2,457	2,431	-	4,888	5,251	19
7	Rate M7 - Interruptible	-	-	-	-	-	-	-	-	-	-
8	Rate M9	2,495	2,710	-	5,205	1,261	1,248	-	2,509	2,696	10
9	Rate M10	8	8	-	16	4	4	-	8	8	0
10	Rate T1 - Firm	11,006	11,954	-	22,960	5,563	5,505	-	11,068	11,892	42
11	Rate T1 - Interruptible	1,173	1,274	-	2,447	593	587	-	1,179	1,267	4
12	Rate T2 - Firm	56,695	61,575	-	118,270	28,658	28,356	-	57,014	61,257	217
13	Rate T2 - Interruptible	1,332	1,447	-	2,779	673	666	-	1,340	1,439	5
14	Rate T3	11,202	12,166		23,368	5,662	5,603	-	11,265	12,103	43
15	Total South In-franchise	210,955	229,114	-	440,069	106,631	105,510	_	212,141	227,928	809
16	Excess Utility Storage Space	-	-	-	-	-	-	-	-	-	-
17	Rate C1 - Firm	35,342	11,076	5,691	52,110	35,316	10,023	4,718	50,057	2,052	7
18	Rate C1 - Interruptible	227,077	575,059	-	802,136	226,118	520,843	-	746,960	55,175	196
19	Rate M12	1,133,586	2,673,664	1,221	3,808,470	1,135,933	2,479,902	1,009	3,616,843	191,627	680
20	Rate M13	-	-	-	-	-	-	-	-	-	-
21	Rate M16	145	434	-	580		-	-	<u> </u>	580	2
22	Total Ex-franchise	1,396,150	3,260,233	6,912	4,663,295	1,397,366	3,010,768	5,726	4,413,861	249,435	885
23	Rate 01	28,852	29,524	-	58,375	28,728	27,573	-	56,300	2,075	7
24	Rate 10	9,081	9,293	-	18,374	9,042	8,679	-	17,721	653	2
25	Rate 20	3,226	3,301	_	6,527	3,212	3,083	_	6,295	232	1
26	Rate 100	102	105	_	207	102	98	-	200	7	0
27	Rate 25	-	-	-	<u>-</u>		-	-	<u> </u>	-	
28	Total North In-franchise	41,262	42,222	-	83,484	41,084	39,432	-	80,516	2,968	11
29	Total (line 15 + line 22 + line 28)	1,648,367	3,531,570	6,912	5,186,849	1,545,082	3,155,710	5,726	4,706,518	480,331	1,705

Notes:
(1) Compressor fuel cost based on Oct 2017 QRAM Dawn Reference Price of \$3.549/GJ per EB-2017-0278.

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## <u>UNION GAS LIMITED</u> <u>Estimated Fuel Impact of the Parkway Delivery Obligated Reduction</u>

Line			Allocatio	n of Fuel (Upda	ated for PDO)		A	Allocation of F	uel (as filed in	EB-2011-0210	0)	
No.	Particulars (GJ)	Dawn	Lobo	Bright	Parkway	Total	Dawn	Lobo	Bright	Parkway	Total	Difference
	· · ·	(a)	(b)	(c)	(d)	(e) = $(a+b+c+d)$	(f)	(g)	(h)	(i)	(j) = (f+g+h+i)	(k) = (e - j)
1	M12 Easterly	1,133,586	665,880	798,741	1,209,042	3,807,250	1,135,933	644,630	772,860	1,062,411	3,615,834	191,415
2	M12 Westerly	-	-	-	1,221	1,221	-	-	-	1,009	1,009	212
3	C1 LT Easterly	3,382	2,077	2,490	6,509	14,458	3,356	2,017	2,413	5,593	13,379	1,079
4	C1 ST Easterly	227,077	122,287	149,110	303,661	802,136	226,118	116,353	141,989	262,500	746,960	55,175
5	C1 LT Westerly	-	· <u>-</u>	-	5,691	5,691	-	-	-	4,718	4,718	973
6	C1 ST Westerly	-	-	-	-	-	-	-	-	-	· <u>-</u>	-
7	M16 to Pool	145	434	-	_	580	_	-	-	-	-	580
8	Infranchise - North	41,262	17,233	24,990	_	83,484	41,084	15,975	23,457	-	80,516	2,968
9	Infranchise - South	210,955	100,900	128,214	_	440,069	106,631	46,265	59,245	-	212,141	227,928
10	Total	1,616,407	908,812	1,103,546	1,526,124	5,154,888	1,513,121	825,240	999,964	1,336,232	4,674,557	480,331

- (1) Sales of Dawn to Parkway transportation services were reduced by 81 TJ per day.
- (2) Compressor throughput was adjusted to account for a shift of 219 TJ of delivered supply from Parkway to Dawn and 81 TJ/d of M12 turnback.
- (3) Compressor fuel costs increased to reflect the change in flows outlined in note (2).
- (4) Based on contract quantities from 2013 Rates filing.
- (5) Allocation of fuel is consistent with YCR formula in the current M12 Rate Schedule.
- (6) The total fuel excludes C1 Dawn to Dawn-Vector and C1 Dawn to Dawn-TCPL fuel of 31,960 GJ.

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## <u>UNION GAS LIMITED</u> Derivation of the 2018 Sales Service PDCI Costs

		Demand	Costs	Commodi	ty Costs	
Line No.	Particulars	2013 Approved Dawn-Parkway Design Day Demands (1) (10 <sup>3</sup> m <sup>3</sup> /d) (a)	11 TJ Sales Service Demand Costs (2) (\$000's)	2013 Approved Delivery Volumes East of Dawn (4) (10 <sup>3</sup> m <sup>3</sup> ) (c)	11 TJ Sales Service Fuel and UFG Costs (5) (\$000's)	Total Sales Service PDCI Costs (\$000's) (e) = (b + d)
	D . W	00.400	0.40	4 000 050		004
1	Rate M1	22,132	249	1,823,853	53	301
2	Rate M2	7,435	83	645,259	19	102
3	Rate M4	2,162	24	294,126	9	33
4	Rate M5 Firm	20	0	7,501	0	0
5	Rate M5 Interruptible	-	-	203,891	6	6
6	Rate M7 Firm	997	11	118,324	3	15
7	Rate M7 Interruptible	-	-	-	-	-
8	Rate M9	356	4	60,750	2	6
9	Rate M10	11	0	189	0	0
10	Rate T1 Firm	1,068	12	267,950	8	20
11	Rate T1 Interruptible	-	-	28,552	1	1
12	Rate T2 Firm	6,931	78	1,380,265	40	118
13	Rate T2 Interruptible	-	-	32,431	1	1
14	Rate T3	2,511	28	272,712	8	36
15	Total	43,624	490 (3)	5,135,803	149_ (6	638

- (1) Union South In-franchise Dawn-Parkway Design Day Demand allocation factor per EB-2011-0210, Exhibit G3, Tab 5, Schedule 23, p. 7, line 2, Updated for Board Decision.
- (2) Allocated in proportion to column (a). Parkway Delivery Obligation of 11 TJ/d as per Exhibit A, Tab 2, Attachment 1, line 24, column (j).
- (3) Calculated as 11 TJ x \$0.122/GJ/d x 365 = \$0.490 million. Rate represents the M12 Dawn-Parkway demand rate per EB-2017-0087.
- (4) Union South in-franchise volumes east of Dawn per EB-2011-0210, Exhibit G3, Tab 5, Schedule 21, pp. 13 & 14, Updated for Board Decision.
- (5) Allocated in proportion to column (c).
- (6) Calculated as 11 TJ x \$0.037/GJ/d x 365 = \$0.149 million. Rate represents the average Dawn-Parkway (TCPL / EGT) fuel and commodity rate per EB-2017-0087 Rate M12 Schedule 'C'.

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## <u>UNION GAS LIMITED</u> Derivation of the 2018 Direct Purchase (DP) PDCI Costs

		Demand Co	osts	Commodity	Costs	
Line No.	Particulars	2013 Approved Dawn-Parkway Design Day Demands (1) (10 <sup>3</sup> m <sup>3</sup> /d)	220 TJ DP Demand Costs (2) (\$000's)	2013 Approved Delivery Volumes East of Dawn (4) (10 <sup>3</sup> m <sup>3</sup> )	220 TJ DP Fuel and UFG Costs (5) (\$000's)	Total DP PDCI Costs (\$000's)
		(a)	(b)	(c)	(d)	(e) = (b+d)
1	Rate M1	22,132	4,977	1,823,853	1,057	6,034
2	Rate M2	7,435	1,672	645,259	374	2,046
3	Rate M4	2,162	486	294,126	170	657
4	Rate M5 Firm	20	5	7,501	4	9
5	Rate M5 Interruptible	-	-	203,891	118	118
6	Rate M7 Firm	997	224	118,324	69	293
7	Rate M7 Interruptible	-	-	-	-	-
8	Rate M9	356	80	60,750	35	115
9	Rate M10	11	2	189	0	3
10	Rate T1 Firm	1,068	240	267,950	155	396
11	Rate T1 Interruptible	-	-	28,552	17	17
12	Rate T2 Firm	6,931	1,559	1,380,265	800	2,358
13	Rate T2 Interruptible	-	-	32,431	19	19
14	Rate T3	2,511	565	272,712	158	723
15	Total	43,624	9,811 (3)	5,135,803	2,975 (6)	12,786

- (1) Union South In-franchise Dawn-Parkway Design Day Demand Allocation Factor per EB-2011-0210, Exhibit G3, Tab 5, Schedule 23, p. 7, line 2, Updated for Board Decision.
- (2) Allocated in proportion to column (a). Parkway Delivery Obligation of 220 TJ/d as per Exhibit A, Tab 2, Attachment 1, line 12, column (j) + line 18, column (j), adjusted by 8 TJ/d to reflect customer's with different summer and winter Parkway Delivery Obligations.
- (3) Calculated as 220 TJ x \$0.122/GJ/d x 365 = \$9.811 million. Rate represents the M12 Dawn-Parkway demand rate per EB-2017-0087.
- (4) Union South in-franchise volumes east of Dawn per EB-2011-0210, Exhibit G3, Tab 5, Schedule 21, pp. 13 & 14, Updated for Board Decision.
- (5) Allocated in proportion to column (c).
- (6) Calculated as 220 TJ x \$0.037/GJ/d x 365 = \$2.975 million. Rate represents the average Dawn-Parkway (TCPL / EGT) fuel and commodity rate per EB-2017-0087 Rate M12 Schedule 'C'.

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### UNION GAS LIMITED

#### Continuity of M12 Monthly Transportation Fuel Ratios and Rates including Parkway Delivery Obligation (PDO) Pass-through Firm or Interruptible Transportation Commodity Effective January 1, 2018

VT1 Easterly

24 March

0.418

0.002

0.420

0.029

0.449

0.016

0.157

0.001

0.158

0.158

0.006

0.157

0.001

0.158

0.158

0.006

VT1 Easterly Dawn to Kirkwall, Lisgar,

			VT1 Ea	asterly					Dawn to Kirk	wall, Lisgar,								
		Da	awn to Parkwa	y (TCPL / E	GT)				Parkway (C	onsumers)					M12-X W	/esterly		
			With Dawn C	compression	, 1				With Dawn C	ompression					Kirkwall t	o Dawn		
	2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018	
	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018
Line	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)		(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate
No. Particulars		(%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)
	(a)	(b)	(c) = (a+b)	(d)	(e) = (c+d)	(f)	(g)	(h)	(i) = (g+h)	(j)	(k) = (i+j)	(I)	(m)	(n)	(0) = (m+n)	(p)	(q) = (o+p)	(r)
1 April	0.825	0.004	0.829	0.050	0.879	0.031	0.548	0.003	0.550	(0.004)	0.546	0.019	0.157	0.001	0.158	_	0.158	0.006
2 May	0.583	0.003	0.586	0.040		0.022	0.369	0.002		0.002	0.373	0.013	0.157	0.001	0.158	_	0.158	0.006
3 June	0.476	0.002		0.044		0.019	0.267	0.001	0.268	0.002	0.275	0.010	0.157	0.001	0.158	_	0.158	0.006
4 July	0.464	0.002		0.042		0.018	0.255	0.001	0.256	0.007	0.262	0.009	0.157	0.001	0.158	_	0.158	0.006
	0.365	0.002		0.042		0.018	0.255	0.001	0.250	(0.000)	0.202	0.009	0.157	0.001	0.158	_	0.158	0.006
									0.159							-		
		0.002		0.037	0.401	0.014	0.158	0.001		(0.000)	0.159	0.006	0.157	0.001	0.158	-	0.158	0.006
7 October	0.716	0.004	0.720	0.030	0.750	0.027	0.476	0.002	0.479	(0.018)	0.461	0.016	0.157	0.001	0.158	-	0.158	0.006
8 November	0.863	0.004	0.868	0.026	0.894	0.032	0.621	0.003	0.624	0.001	0.624	0.022	0.157	0.001	0.158	-	0.158	0.006
9 December	0.971	0.005	0.976	0.036	1.012	0.036	0.722	0.004	0.726	0.017	0.743	0.026	0.157	0.001	0.158	-	0.158	0.006
10 January	1.116	0.006		0.044		0.041	0.854	0.004		0.023	0.882	0.031	0.157	0.001	0.158	_	0.158	0.006
11 February	1.062	0.005	1.067	0.040		0.039	0.808	0.004	0.812	0.019	0.831	0.029	0.157	0.001	0.158	_	0.158	0.006
12 March	1.000	0.005		0.028		0.037	0.739	0.004	0.743	(0.001)	0.742	0.026	0.157	0.001	0.158	_	0.158	0.006
		Kir	M12-X E kwall to Parkw		FGT)				M12-X E Kirkwall to Parkway (C	o Lisgar,					M12-X W Parkway to Ki		n	
	2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018	
	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018
	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate
	(%)	(%)	(%)	(%)	(11101.11 00)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(11101.11100)	(\$/GJ)
	(a)	(b)	(c) = (a+b)	(d)	(e) = (c+d)	(φ/O3) (f)	(g)	(h)	(i) = (g+h)	(j)	(k) = (i+j)	(ψ/C3)	(m)	(n)	(0) = (m+n)	(p)	(q) = (0+p)	(r)
13 April	0.434	0.002	0.437	0.054	0.491	0.017	0.157	0.001	0.158	_	0.158	0.006	0.276	0.001	0.277	0.024	0.301	0.011
14 May	0.371	0.002		0.034		0.017	0.157	0.001	0.158	-	0.158	0.006	0.276	0.001	0.277	0.024	0.301	0.011
15 June	0.367	0.002		0.038	0.406	0.013	0.157	0.001	0.158	-	0.158	0.006	0.276	0.001	0.277	0.024	0.301	0.011
		0.002		0.037		0.014	0.157	0.001	0.158	-	0.158	0.006	0.276	0.001	0.277	0.024	0.301	0.011
	0.366																	
17 August	0.364	0.002		0.038		0.014	0.157	0.001	0.158	-	0.158	0.006	0.276	0.001	0.277	0.024	0.301	0.011
18 Septembe		0.002		0.037	0.400	0.014	0.157	0.001	0.158	-	0.158	0.006	0.276	0.001	0.277	0.024	0.301	0.011
19 October	0.398	0.002	0.400	0.048	0.448	0.016	0.157	0.001	0.158	-	0.158	0.006	0.276	0.001	0.277	0.024	0.301	0.011
20 November		0.002		0.025		0.015	0.157	0.001	0.158	-	0.158	0.006	0.157	0.001	0.158	-	0.158	0.006
21 December		0.002		0.019		0.015	0.157	0.001	0.158	-	0.158	0.006	0.157	0.001	0.158	-	0.158	0.006
22 January	0.420	0.002		0.020		0.016	0.157	0.001	0.158	-	0.158	0.006	0.157	0.001	0.158	-	0.158	0.006
23 February	0.411	0.002	0.413	0.021	0.434	0.015	0.157	0.001	0.158	-	0.158	0.006	0.157	0.001	0.158	-	0.158	0.006

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# <u>UNION GAS LIMITED</u> Continuity of M12 Monthly Transportation Authorized Overrun Fuel Ratios and Rates including Parkway Delivery Obligation (PDO) Pass-through Firm or Interruptible Transportation Commodity <u>Effective January 1, 2018</u>

	VT1 Easterly
VT1 Easterly	Dawn to Kirkwall, Lisgar,
awn to Parkway (TCPL / EGT)	Parkway (Consumers)
With Dawn Compression	With Dawn Compression

		Da	awn to Parkwa	y (TCPL / E	GT)				Parkway (C	onsumers)					M12-X V	Vesterly		
			With Dawn C	Compression					With Dawn C	Compression					Kirkwall t	to Dawn		
	2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018	
	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018
Line	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate
No. Particulars	(%)	(%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)
	(a)	(b)	(c) = (a+b)	(d)	(e) = (c+d)	(f)	(g)	(h)	(i) = (g+h)	(j)	(k) = (i+j)	(I)	(m)	(n)	(o) = (m+n)	(p)	(q) = (o+p)	(r)
1 April	1.442	0.007	1.449	0.050	1.499	0.175	1.165	0.006	1.171	(0.004)	1.166	0.164	0.774	0.004	0.778	-	0.778	0.179
2 May	1.200	0.006	1.206	0.040	1.246	0.166	0.986	0.005	0.991	0.002	0.993	0.157	0.774	0.004	0.778	-	0.778	0.179
3 June	1.093	0.006	1.099	0.044	1.143	0.163	0.884	0.005	0.888	0.007	0.895	0.154	0.774	0.004	0.778	-	0.778	0.179
4 July	1.080	0.006	1.086	0.042	1.128	0.162	0.871	0.004	0.876	0.007	0.882	0.153	0.774	0.004	0.778	-	0.778	0.179
5 August	0.982	0.005	0.987	0.038	1.025	0.159	0.775	0.004	0.779	(0.000)	0.779	0.150	0.774	0.004	0.778	-	0.778	0.179
6 September	0.978	0.005	0.983	0.037	1.021	0.158	0.775	0.004	0.779	(0.000)	0.779	0.150	0.774	0.004	0.778	-	0.778	0.179
7 October	1.333	0.007	1.340	0.030	1.371	0.171	1.093	0.006	1.099	(0.018)	1.081	0.161	0.774	0.004	0.778	-	0.778	0.179
8 November	1.480	0.008	1.488	0.026	1.514	0.176	1.237	0.006	1.244	0.001	1.244	0.166	0.774	0.004	0.778	-	0.778	0.179
9 December	1.588	0.008	1.596	0.036	1.632	0.180	1.339	0.007	1.346	0.017	1.363	0.171	0.774	0.004	0.778	-	0.778	0.179
10 January	1.733	0.009	1.742	0.044	1.786	0.186	1.471	0.008	1.478	0.023	1.502	0.175	0.774	0.004	0.778	-	0.778	0.179
11 February	1.679	0.009	1.687	0.040	1.727	0.183	1.425	0.007	1.432	0.019	1.451	0.174	0.774	0.004	0.778	-	0.778	0.179
12 March	1.617	0.008	1.625	0.028	1.653	0.181	1.356	0.007	1.363	(0.001)	1.362	0.171	0.774	0.004	0.778	-	0.778	0.179

										M12-X E	asterly								
				M12-X E	Easterly					Kirkwall to	o Lisgar,					M12-X W	/esterly		
			Kirl	kwall to Parkwa	ay (TCPL / E	EGT)				Parkway (C	onsumers)					Parkway to Ki	rkwall, Dawr	า	
		2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018	
		Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018
		(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate
		(%)	(%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)
		(a)	(b)	(c) = (a+b)	(d)	(e) = (c+d)	(f)	(g)	(h)	(i) = (g+h)	(j)	(k) = (i+j)	(I)	(m)	(n)	(o) = (m+n)	(p)	(d) = (o+b)	(r)
13	April	1.051	0.005	1.057	0.054	1.111	0.190	0.774	0.004	0.778	-	0.778	0.179	0.893	0.005	0.897	0.024	0.921	0.184
14	May	0.988	0.005	0.993	0.038	1.031	0.188	0.774	0.004	0.778	-	0.778	0.179	0.893	0.005	0.897	0.024	0.921	0.184
15	June	0.984	0.005	0.989	0.037	1.026	0.187	0.774	0.004	0.778	-	0.778	0.179	0.893	0.005	0.897	0.024	0.921	0.184
16	July	0.983	0.005	0.988	0.036	1.024	0.187	0.774	0.004	0.778	-	0.778	0.179	0.893	0.005	0.897	0.024	0.921	0.184
17	August	0.981	0.005	0.986	0.038	1.024	0.187	0.774	0.004	0.778	-	0.778	0.179	0.893	0.005	0.897	0.024	0.921	0.184
18	September	0.978	0.005	0.983	0.037	1.020	0.187	0.774	0.004	0.778	-	0.778	0.179	0.893	0.005	0.897	0.024	0.921	0.184
19	October	1.014	0.005	1.020	0.048	1.068	0.189	0.774	0.004	0.778	-	0.778	0.179	0.893	0.005	0.897	0.024	0.921	0.184
20	November	1.017	0.005	1.022	0.025	1.047	0.188	0.774	0.004	0.778	-	0.778	0.179	0.774	0.004	0.778	-	0.778	0.179
21	December	1.024	0.005	1.029	0.019	1.048	0.188	0.774	0.004	0.778	-	0.778	0.179	0.774	0.004	0.778	-	0.778	0.179
22	January	1.036	0.005	1.042	0.020	1.062	0.189	0.774	0.004	0.778	-	0.778	0.179	0.774	0.004	0.778	-	0.778	0.179
23	February	1.028	0.005	1.033	0.021	1.054	0.188	0.774	0.004	0.778	-	0.778	0.179	0.774	0.004	0.778	-	0.778	0.179
24	March	1.035	0.005	1.040	0.029	1.069	0.189	0.774	0.004	0.778	-	0.778	0.179	0.774	0.004	0.778	-	0.778	0.179

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#### UNION GAS LIMITED

Continuity of M13, M16, Monthly Transportation Fuel Ratios and Rates including Parkway Delivery Obligation (PDO) Pass-through
Firm or Interruptible Transportation Commodity

Effective January 1, 2018

Line No.	Particulars	2017 Fuel Ratio (excl. PDO) (%)	PCI Adj Fuel Ratio (%)	M1 Delivery Comn 2018 Fuel Ratio (excl. PDO) (%) (c) = (a+b)		2018 Fuel Ratio (incl. PDO) (%) (e) = (c+d)	2018 Fuel Rate (\$/GJ) (f)	2017 Fuel Ratio (excl. PDO) (%)	Authorized PCI Adj Fuel Ratio (%) (h)	M1 overrun - Deli 2018 Fuel Ratio (excl. PDO) (%) (i) = (g+h)	-	2018 Fuel Ratio (incl. PDO) (%) (k) = (i+j)	2018 Fuel Rate (\$/GJ)
1		0.157	0.001	0.158	-	0.158	0.006	0.157	0.001	0.158	-	0.158	0.144
		2017	PCI Adj		116 les to Dawn PDO Adj	2018		2017	PCI Adj		116 ges to Pool PDO Adj	2018	
		Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018
		(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate
		(%)	(%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)
		(a)	(b)	(c) = (a+b)	(d)	(e) = (c+d)	(f)	(g)	(h)	(i) = (g+h)	(j)	(k) = (i+j)	(I)
2	East	0.157	0.001	0.158	-	0.158	0.006	0.157	0.001	0.158	0.027	0.185	0.006
3	West	0.157	0.001	0.158	-	0.158	0.006	0.447	0.002	0.449	-	0.449	0.016
				zed overrun - I						rized Overrun -			
		2017	PCI Adj	2018	PDO Adj	2018	2040	2017 Fuel Ratio	PCI Adj	2018	PDO Adj	2018	2040
		Fuel Ratio (excl. PDO)	Fuel Ratio	Fuel Ratio (excl. PDO)	Fuel Ratio	Fuel Ratio (incl. PDO)	2018 Fuel Rate	(excl. PDO)	Fuel Ratio	Fuel Ratio (excl. PDO)	Fuel Ratio	Fuel Ratio (incl. PDO)	2018 Fuel Rate
		(exci. PDO) (%)	(%)	(exci. PDO) (%)	(%)	(INCI. PDO) (%)	(\$/GJ)	(exci. PDO) (%)	(%)	(exci. PDO) (%)	(%)	(Incl. PDO) (%)	(\$/GJ)
		(%) (a)	(%) (b)	(c) = (a+b)	(%) (d)	(e) = (c+d)	(f)	( <del>7</del> 6)	(%) (h)	(70) (i) = (g+h)	(%) (j)	(k) = (i+j)	(a/G3)
		(α)	(6)	(0) – (415)	(4)	( <i>o</i> ) – ( <i>o</i> · <i>a</i> )	(1)	(9)	(11)	(1) – (9111)	U)	(14) – (11)	
4	East	0.157	0.001		-	0.158	0.066	0.157	0.001		0.027	0.185	0.032
5	West	0.157	0.001	0.158	-	0.158	0.144	0.447	0.002	0.449	-	0.449	0.120

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## UNION GAS LIMITED

## Continuity of C1 Monthly Transportation Fuel Ratios and Rates including Parkway Delivery Obligation (PDO) Pass-through

## Firm or Interruptible Transportation Commodity

## Effective January 1, 2018

	C1 St. Clair / Dawn									C1 y / Dawn						C1 er / Dawn		
	2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018	
	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018
Line	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate
No. Particulars		(%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)
	(a)	(b)	(c) = (a+b)	(d)	(e) = (c+d)	(f)	(g)	(h)	(i) = (g+h)	(j)	(k) = (i+j)	(I)	(m)	(n)	(o) = (m+n)	(p)	(q) = (o+p)	(r)
1 Summer	0.207	0.001	0.208	-	0.208	0.007	0.447	0.002	0.449	-	0.449	0.016	0.207	0.001	0.208	-	0.208	0.007
2 Winter	0.266	0.001	0.267	-	0.267	0.009	0.303	0.002	0.305	-	0.305	0.011	0.266	0.001	0.267	-	0.267	0.009
			(	C1					(	C1								
				Dawn-TCPL						awn-Vector								
	2017	PCI Adj	2018	PDO Adj	2018	_	2017	PCI Adj	2018	PDO Adj	2018	_						
	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018						
	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate						
	(%)	(%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)						
	(a)	(b)	(c) = (a+b)	(d)	(e) = (c+d)	(f)	(g)	(h)	(i) = (g+h)	(j)	(k) = (i+j)	(1)						
3 Summer	0.157	0.001	0.158	-	0.158	0.006	0.339	0.002	0.341	-	0.341	0.012						
4 Winter	0.351	0.002	0.353	-	0.353	0.013	0.157	0.001	0.158	-	0.158	0.006						
			(	C1					(	C1					(	C1		
				to Kirkwall						to Dawn						to Dawn		
	2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018	
	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018
	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate
	(%)	(%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)
	(a)	(b)	(c) = (a+b)	(d)	(e) = (c+d)	(f)	(g)	(h)	(i) = (g+h)	(j)	(k) = (i+j)	(1)	(m)	(n)	(0) = (m+n)	(p)	(q) = (o+p)	(r)
5 Summer	0.276	0.001	0.277	0.024	0.301	0.011	0.276	0.001	0.277	0.024	0.301	0.011	0.157	0.001	0.158	-	0.158	0.006
6 Winter	0.157	0.001	0.158	-	0.158	0.006	0.157	0.001	0.158	-	0.158	0.006	0.157	0.001	0.158	-	0.158	0.006
				C1 o Kirkwall						C1 rkway (TCPL	)					C1 o Parkway		
	2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018	
	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018
			(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate
	(excl. PDO)	Ratio	(EXCI. FDO)	itatio					,		,		(0/.)					(\$/GJ)
	(excl. PDO) (%)	Ratio (%)	(%)	(%)	(%)	(\$/GJ)	(%)	(%)	(%)	(%)	(%)	(\$/GJ)	( /0)	(%)	(%)	(%)	(%)	(\$/\$3)
						(\$/GJ) (f)	(%) (g)	(%) (h)	(%) (i) = (g+h)	(%) (j)	(%) $(k) = (i+j)$	(a/G3)	(%) (m)	(%) (n)	(o) = (m+n)	(%) (p)	(%) (q) = (o+p)	(r)
7 Summer	(%)	(%)	(%)	(%)	(%) (e) = (c+d)										(o) = (m+n)			

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UNION GAS LIMITED

Continuity of C1 Monthly Transportation Authorized Overrun Fuel Ratios and Rates including Parkway Delivery Obligation (PDO) Pass-through
Firm or Interruptible Transportation Commodity

Effective January 1, 2018

															_			
		Λ . ı+	) horized Overru	C1 up. St. Clair	/ Dawn			Λ.,,	) horized Overru	C1 D. Oiibway	/ Dawn			Λuth	C orized Overrun	C1	r / Dawn	
	2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018		2017	PCI Adj	2018	PDO Adj	2018	
	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018	Fuel Ratio	Fuel	Fuel Ratio	Fuel	Fuel Ratio	2018
Line	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate
No. Particulars	(%)	(%)	(%) (a) = (a+b)	(%)	(%) (a) = (a) d)	(\$/GJ)	(%)	(%)	(%) (i) - (a+b)	(%) (j)	(%) (k) = (i+i)	(\$/GJ)	(%)	(%)	(%) (a) = (m + n)	(%)	(%) (a) - (a+p)	(\$/GJ)
	(a)	(b)	(c) = (a+b)	(d)	(e) = (c+d)	(f)	(g)	(h)	(i) = (g+h)	U)	(k) = (i+j)	(I)	(m)	(n)	(o) = (m+n)	(p)	(q) = (o+p)	(r)
1 Summer	0.207	0.001	0.208	-	0.208	0.111	0.447	0.002	0.449	-	0.449	0.120	0.207	0.001	0.208	-	0.208	0.111
2 Winter	0.266	0.001	0.267	-	0.267	0.113	0.303	0.002	0.305	-	0.305	0.115	0.266	0.001	0.267	-	0.267	0.113
			(	C1					(	21								
	- 0047		rized Overrun				- 0047		rized Overrun -									
	2017 Fuel Ratio	PCI Adj Fuel	2018 Fuel Ratio	PDO Adj Fuel	2018 Fuel Ratio	2018	2017 Fuel Ratio	PCI Adj Fuel	2018 Fuel Ratio	PDO Adj Fuel	2018 Fuel Ratio	2018						
	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate	(excl. PDO)	Ratio	(excl. PDO)	Ratio	(incl. PDO)	Fuel Rate						
	(%)	(%)	(%)	(%)	` (%)	(\$/GJ)	(%)	(%)	(%)	(%)	` (%)	(\$/GJ)						
	(a)	(b)	(c) = (a+b)	(d)	(e) = (c+d)	(f)	(g)	(h)	(i) = (g+h)	(j)	(k) = (i+j)	(I)						
3 Summer	0.157	0.001	0.158	-	0.158	0.006	0.339	0.002	0.341	-	0.341	0.012						
4 Winter	0.351	0.002	0.353	-	0.353	0.013	0.157	0.001	0.158	-	0.158	0.006						
				C1						21						:1		
	2017		orized Overrun	ı - Parkway t			2017		orized Overrur	ı - Parkway t			2017		orized Overrur	n - Kirkwall to		
	2017 Fuel Ratio	PCI Adj	orized Overrun 2018	ı - Parkway t PDO Adj	2018	2018	2017 Fuel Ratio	PCI Adj	orized Overrur 2018	n - Parkway t PDO Adj	2018	2018	2017 Fuel Ratio	PCI Adj	orized Overrur 2018	n - Kirkwall to PDO Adj	2018	2018
	2017 Fuel Ratio (excl. PDO)		orized Overrun	ı - Parkway t		2018 Fuel Rate	2017 Fuel Ratio (excl. PDO)		orized Overrur	ı - Parkway t		2018 Fuel Rate	2017 Fuel Ratio (excl. PDO)		orized Overrur	n - Kirkwall to		2018 Fuel Rate
	Fuel Ratio (excl. PDO) (%)	PCI Adj Fuel Ratio (%)	orized Overrun 2018 Fuel Ratio (excl. PDO) (%)	ı - Parkway t PDO Adj Fuel Ratio (%)	2018 Fuel Ratio (incl. PDO) (%)		Fuel Ratio (excl. PDO) (%)	PCI Adj Fuel Ratio (%)	orized Overrur 2018 Fuel Ratio (excl. PDO) (%)	n - Parkway t PDO Adj Fuel Ratio (%)	2018 Fuel Ratio (incl. PDO) (%)	Fuel Rate (\$/GJ)	Fuel Ratio (excl. PDO) (%)	PCI Adj Fuel Ratio (%)	orized Overrur 2018 Fuel Ratio (excl. PDO) (%)	n - Kirkwall to PDO Adj Fuel Ratio (%)	2018 Fuel Ratio (incl. PDO) (%)	Fuel Rate (\$/GJ)
	Fuel Ratio (excl. PDO)	PCI Adj Fuel Ratio	orized Overrun 2018 Fuel Ratio (excl. PDO)	n - Parkway t PDO Adj Fuel Ratio	2018 Fuel Ratio (incl. PDO)	Fuel Rate	Fuel Ratio (excl. PDO)	PCI Adj Fuel Ratio	orized Overrur 2018 Fuel Ratio (excl. PDO)	n - Parkway t PDO Adj Fuel Ratio	2018 Fuel Ratio (incl. PDO)	Fuel Rate	Fuel Ratio (excl. PDO)	PCI Adj Fuel Ratio	orized Overrur 2018 Fuel Ratio (excl. PDO)	n - Kirkwall to PDO Adj Fuel Ratio	2018 Fuel Ratio (incl. PDO)	Fuel Rate
5 Summer	Fuel Ratio (excl. PDO) (%)	PCI Adj Fuel Ratio (%) (b)	2018 Fuel Ratio (excl. PDO) (%) (c) = (a+b)	PDO Adj PDO Adj Fuel Ratio (%)	2018 Fuel Ratio (incl. PDO) (%) (e) = (c+d)	Fuel Rate (\$/GJ)	Fuel Ratio (excl. PDO) (%) (g)	PCI Adj Fuel Ratio (%) (h)	2018 Fuel Ratio (excl. PDO) (%) (i) = (g+h)	n - Parkway t PDO Adj Fuel Ratio (%)	2018 Fuel Ratio (incl. PDO) (%) (k) = (i+j)	Fuel Rate (\$/GJ) (I)	Fuel Ratio (excl. PDO) (%) (m)	PCI Adj Fuel Ratio (%) (n)	orized Overrur 2018 Fuel Ratio (excl. PDO) (%) (o) = (m+n)	n - Kirkwall to PDO Adj Fuel Ratio (%)	2018 Fuel Ratio (incl. PDO) (%) (q) = (o+p)	Fuel Rate (\$/GJ) (r)
5 Summer 6 Winter	Fuel Ratio (excl. PDO) (%)	PCI Adj Fuel Ratio (%)	orized Overrun 2018 Fuel Ratio (excl. PDO) (%)	ı - Parkway t PDO Adj Fuel Ratio (%)	2018 Fuel Ratio (incl. PDO) (%)	Fuel Rate (\$/GJ) (f)	Fuel Ratio (excl. PDO) (%)	PCI Adj Fuel Ratio (%)	orized Overrur 2018 Fuel Ratio (excl. PDO) (%)	n - Parkway t PDO Adj Fuel Ratio (%)	2018 Fuel Ratio (incl. PDO) (%)	Fuel Rate (\$/GJ)	Fuel Ratio (excl. PDO) (%)	PCI Adj Fuel Ratio (%)	orized Overrur 2018 Fuel Ratio (excl. PDO) (%)	n - Kirkwall to PDO Adj Fuel Ratio (%) (p)	2018 Fuel Ratio (incl. PDO) (%)	Fuel Rate (\$/GJ)
	Fuel Ratio (excl. PDO) (%) (a) 0.893	PCI Adj Fuel Ratio (%) (b)	2018 Fuel Ratio (excl. PDO) (%) (c) = (a+b) 0.897	PDO Adj Fuel Ratio (%) (d)	2018 Fuel Ratio (incl. PDO) (%) (e) = (c+d) 0.921	Fuel Rate (\$/GJ) (f) 0.155	Fuel Ratio (excl. PDO) (%) (g) 0.893	PCI Adj Fuel Ratio (%) (h)	2018 Fuel Ratio (excl. PDO) (%) (i) = (g+h) 0.897	PDO Adj Fuel Ratio (%) (j)	2018 Fuel Ratio (incl. PDO) (%) (k) = (i+j)  0.921	Fuel Rate (\$/GJ) (I) 0.155	Fuel Ratio (excl. PDO) (%) (m)	PCI Adj Fuel Ratio (%) (n)	orized Overrur 2018 Fuel Ratio (excl. PDO) (%) (o) = (m+n) 0.778	n - Kirkwall to PDO Adj Fuel Ratio (%) (p)	2018 Fuel Ratio (incl. PDO) (%) (q) = (0+p) 0.778	Fuel Rate (\$/GJ) (r) 0.078
	Fuel Ratio (excl. PDO) (%) (a) 0.893	PCI Adj Fuel Ratio (%) (b)	2018 Fuel Ratio (excl. PDO) (%) (c) = (a+b)  0.897 0.778	PDO Adj Fuel Ratio (%) (d) 0.024	2018 Fuel Ratio (incl. PDO) (%) (e) = (c+d) 0.921	Fuel Rate (\$/GJ) (f) 0.155	Fuel Ratio (excl. PDO) (%) (g) 0.893	PCI Adj Fuel Ratio (%) (h)	2018 Fuel Ratio (excl. PDO) (%) (i) = (g+h)  0.897 0.778	PDO Adj Fuel Ratio (%) (j) 0.024	2018 Fuel Ratio (incl. PDO) (%) (k) = (i+j)  0.921	Fuel Rate (\$/GJ) (I) 0.155	Fuel Ratio (excl. PDO) (%) (m)	PCI Adj Fuel Ratio (%) (n)	orized Overrur 2018 Fuel Ratio (excl. PDO) (%) (o) = (m+n) 0.778 0.778	n - Kirkwall to PDO Adj Fuel Ratio (%) (p)	2018 Fuel Ratio (incl. PDO) (%) (q) = (0+p) 0.778	Fuel Rate (\$/GJ) (r) 0.078
	Fuel Ratio (excl. PDO) (%) (a) 0.893	PCI Adj Fuel Ratio (%) (b) 0.005 0.004	2018 Fuel Ratio (excl. PDO) (%) (c) = (a+b)  0.897 0.778	PDO Adj Fuel Ratio (%) (d) 0.024	2018 Fuel Ratio (incl. PDO) (%) (e) = (c+d) 0.921 0.778	Fuel Rate (\$/GJ) (f) 0.155	Fuel Ratio (excl. PDO) (%) (g) 0.893	PCI Adj Fuel Ratio (%) (h) 0.005 0.004	2018 Fuel Ratio (excl. PDO) (%) (i) = (g+h)  0.897 0.778	PDO Adj Fuel Ratio (%) (j) 0.024	2018 Fuel Ratio (incl. PDO) (%) (k) = (i+j) 0.921 0.778	Fuel Rate (\$/GJ) (I) 0.155	Fuel Ratio (excl. PDO) (%) (m)	PCI Adj Fuel Ratio (%) (n) 0.004 0.004	orized Overrur 2018 Fuel Ratio (excl. PDO) (%) (o) = (m+n) 0.778	n - Kirkwall to PDO Adj Fuel Ratio (%) (p)	2018 Fuel Ratio (incl. PDO) (%) (q) = (o+p) 0.778 0.778	Fuel Rate (\$/GJ) (r) 0.078
	Fuel Ratio (excl. PDO) (%) (a) 0.893 0.774	PCI Adj Fuel Ratio (%) (b) 0.005 0.004	2018 Fuel Ratio (excl. PDO) (%) (c) = (a+b)  0.897 0.778  horized Overru	PDO Adj Fuel Ratio (%) (d) 0.024 - C1 un - Dawn to	2018 Fuel Ratio (incl. PDO) (%) (e) = (c+d) 0.921 0.778  Kirkwall 2018	Fuel Rate (\$/GJ) (f) 0.155 0.150	Fuel Ratio (excl. PDO) (%) (g) 0.893 0.774	PCI Adj Fuel Ratio (%) (h) 0.005 0.004 Authoriz	2018 Fuel Ratio (excl. PDO) (%) (i) = (g+h) 0.897 0.778	PDO Adj Fuel Ratio (%) (j) 0.024 - C1 Dawn to Park PDO Adj	2018 Fuel Ratio (incl. PDO) (%) (k) = (i+j) 0.921 0.778  way (TCPL) 2018	Fuel Rate (\$/GJ) (I) 0.155 0.150	Fuel Ratio (excl. PDO) (%) (m) 0.774 0.774	PCI Adj Fuel Ratio (%) (n) 0.004 0.004	orized Overrur 2018 Fuel Ratio (excl. PDO) (%) (o) = (m+n) 0.778 0.778  crized Overrun	PDO Adj Fuel Ratio (%) (p) Kirkwall to PDO Adj	2018 Fuel Ratio (incl. PDO) (%) (q) = (0+p) 0.778 0.778	Fuel Rate (\$/GJ) (r) 0.078 0.078
	Fuel Ratio (excl. PDO) (%) (a) 0.893 0.774  2017 Fuel Ratio	PCI Adj Fuel Ratio (%) (b) 0.005 0.004 Autl PCI Adj Fuel	corized Overrun  2018  Fuel Ratio (excl. PDO) (%) (c) = (a+b)  0.897 0.778  horized Overru  2018  Fuel Ratio	PDO Adj Fuel Ratio (%) (d) 0.024 - C1 un - Dawn to PDO Adj Fuel	2018 Fuel Ratio (incl. PDO) (%) (e) = (c+d) 0.921 0.778  Kirkwall 2018 Fuel Ratio	Fuel Rate (\$/GJ) (f) 0.155 0.150	Fuel Ratio (excl. PDO) (%) (g) 0.893 0.774	PCI Adj Fuel Ratio (%) (h) 0.005 0.004 Authoriz PCI Adj Fuel	2018 Fuel Ratio (excl. PDO) (%) (i) = (g+h) 0.897 0.778  ced Overrun - E 2018 Fuel Ratio	PDO Adj Fuel Ratio (%) (j) 0.024 - C1 Dawn to Park PDO Adj Fuel	2018 Fuel Ratio (incl. PDO) (%) (k) = (i+j) 0.921 0.778  way (TCPL) 2018 Fuel Ratio	Fuel Rate (\$/GJ) (I) 0.155 0.150	Fuel Ratio (excl. PDO) (%) (m) 0.774 0.774	PCI Adj Fuel Ratio (%) (n) 0.004 0.004 Autho	orized Overrur 2018 Fuel Ratio (excl. PDO) (%) (o) = (m+n) 0.778 0.778  rized Overrun 2018 Fuel Ratio	PDO Adj Fuel Ratio (%) (p) - - - Kirkwall to	2018 Fuel Ratio (incl. PDO) (%) (q) = (0+p) 0.778 0.778 Parkway 2018 Fuel Ratio	Fuel Rate (\$/GJ) (r) 0.078 0.078
	Fuel Ratio (excl. PDO) (%) (a) 0.893 0.774  2017 Fuel Ratio (excl. PDO)	PCI Adj Fuel Ratio (%) (b) 0.005 0.004 Autl PCI Adj Fuel Ratio	corized Overrun 2018 Fuel Ratio (excl. PDO) (%) (c) = (a+b) 0.897 0.778  horized Overru 2018 Fuel Ratio (excl. PDO)	PDO Adj Fuel Ratio (%) (d) 0.024 - C1 un - Dawn to PDO Adj Fuel Ratio	2018 Fuel Ratio (incl. PDO) (%) (e) = (c+d) 0.921 0.778  Kirkwall 2018 Fuel Ratio (incl. PDO)	Fuel Rate (\$/GJ) (f) 0.155 0.150 2018 Fuel Rate	Fuel Ratio (excl. PDO) (%) (g) 0.893 0.774  2017 Fuel Ratio (excl. PDO)	PCI Adj Fuel Ratio (%) (h) 0.005 0.004 Authoriz PCI Adj Fuel Ratio	corized Overrun 2018 Fuel Ratio (excl. PDO) (%) (i) = (g+h) 0.897 0.778  ced Overrun - E 2018 Fuel Ratio (excl. PDO)	Parkway to Pool Adj Fuel Ratio (%) (j) 0.024 - C1 Dawn to Park PDO Adj Fuel Ratio	2018 Fuel Ratio (incl. PDO) (%) (k) = (i+j) 0.921 0.778  way (TCPL) 2018 Fuel Ratio (incl. PDO)	Fuel Rate (\$/GJ) (I) 0.155 0.150 2018 Fuel Rate	Fuel Ratio (excl. PDO) (%) (m)  0.774 0.774  2017 Fuel Ratio (excl. PDO)	PCI Adj Fuel Ratio (%) (n) 0.004 0.004 Autho PCI Adj Fuel Ratio	orized Overrur 2018 Fuel Ratio (excl. PDO) (%) (0) = (m+n) 0.778 0.778  rized Overrun 2018 Fuel Ratio (excl. PDO)	PDO Adj Fuel Ratio (%) (p) Kirkwall to PDO Adj Fuel Ratio	2018 Fuel Ratio (incl. PDO) (%) (q) = (0+p)  0.778 0.778  Parkway 2018 Fuel Ratio (incl. PDO)	Fuel Rate (\$/GJ) (r) 0.078 0.078
	Fuel Ratio (excl. PDO) (%) (a) 0.893 0.774  2017 Fuel Ratio	PCI Adj Fuel Ratio (%) (b) 0.005 0.004 Autl PCI Adj Fuel	corized Overrun  2018  Fuel Ratio (excl. PDO) (%) (c) = (a+b)  0.897 0.778  horized Overru  2018  Fuel Ratio	PDO Adj Fuel Ratio (%) (d) 0.024 - C1 un - Dawn to PDO Adj Fuel	2018 Fuel Ratio (incl. PDO) (%) (e) = (c+d) 0.921 0.778  Kirkwall 2018 Fuel Ratio	Fuel Rate (\$/GJ) (f) 0.155 0.150	Fuel Ratio (excl. PDO) (%) (g) 0.893 0.774	PCI Adj Fuel Ratio (%) (h) 0.005 0.004 Authoriz PCI Adj Fuel	2018 Fuel Ratio (excl. PDO) (%) (i) = (g+h) 0.897 0.778  ced Overrun - E 2018 Fuel Ratio	PDO Adj Fuel Ratio (%) (j) 0.024 - C1 Dawn to Park PDO Adj Fuel	2018 Fuel Ratio (incl. PDO) (%) (k) = (i+j) 0.921 0.778  way (TCPL) 2018 Fuel Ratio	Fuel Rate (\$/GJ) (I) 0.155 0.150	Fuel Ratio (excl. PDO) (%) (m) 0.774 0.774	PCI Adj Fuel Ratio (%) (n) 0.004 0.004 Autho	orized Overrur 2018 Fuel Ratio (excl. PDO) (%) (o) = (m+n) 0.778 0.778  rized Overrun 2018 Fuel Ratio	PDO Adj Fuel Ratio (%) (p) - - - Kirkwall to	2018 Fuel Ratio (incl. PDO) (%) (q) = (0+p) 0.778 0.778 Parkway 2018 Fuel Ratio	Fuel Rate (\$/GJ) (r) 0.078 0.078
6 Winter	Fuel Ratio (excl. PDO) (%) (a)  0.893 0.774  2017 Fuel Ratio (excl. PDO) (%) (a)	PCI Adj Fuel Ratio (%) (b) 0.005 0.004 Autl PCI Adj Fuel Ratio (%)	2018 Fuel Ratio (excl. PDO) (%) (c) = (a+b)  0.897 0.778  horized Overru 2018 Fuel Ratio (excl. PDO) (%) (c) = (a+b)	PDO Adj Fuel Ratio (%) (d)  0.024 -  C1 In - Dawn to PDO Adj Fuel Ratio (%) (d)	2018 Fuel Ratio (incl. PDO) (%) (e) = (c+d)  0.921 0.778  Kirkwall  2018 Fuel Ratio (incl. PDO) (%) (e) = (c+d)	Fuel Rate (\$/GJ) (f) 0.155 0.150 2018 Fuel Rate (\$/GJ) (f)	Fuel Ratio (excl. PDO) (%) (g) 0.893 0.774  2017 Fuel Ratio (excl. PDO) (%) (g)	PCI Adj Fuel Ratio (%) (h) 0.005 0.004 Authoriz PCI Adj Fuel Ratio (%) (h)	2018 Fuel Ratio (excl. PDO) (%) (i) = (g+h)  0.897 0.778  ced Overrun - E 2018 Fuel Ratio (excl. PDO) (%) (i) = (g+h)	PDO Adj Fuel Ratio (%) (j) 0.024 - C1 Dawn to Park PDO Adj Fuel Ratio (%) (j) (j)	2018 Fuel Ratio (incl. PDO) (%) (k) = (i+j) 0.921 0.778  way (TCPL) 2018 Fuel Ratio (incl. PDO) (%) (k) = (i+j)	Puel Rate (\$/GJ) (I) 0.155 0.150 2018 Fuel Rate (\$/GJ) (I)	Fuel Ratio (excl. PDO) (%) (m)  0.774 0.774  2017 Fuel Ratio (excl. PDO) (%) (m)	PCI Adj Fuel Ratio (%) (n) 0.004 0.004 Autho PCI Adj Fuel Ratio (%)	orized Overrur 2018 Fuel Ratio (excl. PDO) (%) (o) = (m+n) 0.778 0.778 0.778  crized Overrun 2018 Fuel Ratio (excl. PDO) (%) (o) = (m+n)	PDO Adj Fuel Ratio (%) (p) Kirkwall to PDO Adj Fuel Ratio (%) (p) (p)	2018 Fuel Ratio (incl. PDO) (%) (q) = (o+p)  0.778 0.778  Parkway 2018 Fuel Ratio (incl. PDO) (%) (q) = (o+p)	Fuel Rate (\$/GJ) (r) 0.078 0.078 2018 Fuel Rate (\$/GJ) (r)
	Fuel Ratio (excl. PDO) (%) (a)  0.893 0.774  2017 Fuel Ratio (excl. PDO) (%)	PCI Adj Fuel Ratio (%) (b) 0.005 0.004 Autl PCI Adj Fuel Ratio (%)	corized Overrun 2018 Fuel Ratio (excl. PDO) (%) (c) = (a+b) 0.897 0.778  chorized Overru 2018 Fuel Ratio (excl. PDO) (%)	PDO Adj Fuel Ratio (%) (d) 0.024 - C1 In - Dawn to PDO Adj Fuel Ratio (%)	2018 Fuel Ratio (incl. PDO) (%) (e) = (c+d) 0.921 0.778  Kirkwall 2018 Fuel Ratio (incl. PDO) (%) (e) = (c+d)	Fuel Rate (\$/GJ) (f) 0.155 0.150 2018 Fuel Rate (\$/GJ)	Fuel Ratio (excl. PDO) (%) (g) 0.893 0.774  2017 Fuel Ratio (excl. PDO) (%)	PCI Adj Fuel Ratio (%) (h) 0.005 0.004 Authoriz PCI Adj Fuel Ratio (%)	orized Overrur 2018 Fuel Ratio (excl. PDO) (%) (i) = (g+h) 0.897 0.778  ced Overrun - E 2018 Fuel Ratio (excl. PDO) (%) (i) = (g+h) 1.164	Parkway to PDO Adj Fuel Ratio (%) (j) 0.024 - C1 Dawn to Park PDO Adj Fuel Ratio (%)	2018 Fuel Ratio (incl. PDO) (%) (k) = (i+j) 0.921 0.778  way (TCPL) 2018 Fuel Ratio (incl. PDO) (%)	(\$/GJ) (I) 0.155 0.150 2018 Fuel Rate (\$/GJ)	Fuel Ratio (excl. PDO) (%) (m)  0.774 0.774  2017 Fuel Ratio (excl. PDO) (%)	PCI Adj Fuel Ratio (%) (n) 0.004 0.004 Autho PCI Adj Fuel Ratio (%)	orized Overrur 2018 Fuel Ratio (excl. PDO) (%) (0) = (m+n) 0.778 0.778  rized Overrun 2018 Fuel Ratio (excl. PDO) (%)	PDO Adj Fuel Ratio (%) (p) Kirkwall to PDO Adj Fuel Ratio (%)	2018 Fuel Ratio (incl. PDO) (%) (q) = (0+p)  0.778 0.778  Parkway 2018 Fuel Ratio (incl. PDO) (%)	Fuel Rate (\$/GJ) (r) 0.078 0.078 2018 Fuel Rate (\$/GJ)

Filed: 2017-09-26 EB-2017-0087 Rate Order Working Papers Schedule 22

#### **UNION GAS LIMITED**

# Continuity of Rate T1, Rate T2, Rate T3 Firm and Interruptible Transportation Fuel Ratios Including the Parkway Delivery Obligation (PDO) Compressor Fuel Volumes Effective January 1, 2018

PCI Adjustment

Incremental 2018

			to 2017	Approved Fuel	Ratios			PDO Fuel	Adjustment		
		2017	Remove	2017	PCI Adj	2018	Incremental				Total 2018
		Fuel Ratio	PDO Adj	Fuel Ratio	Fuel	Fuel Ratio	PDO Fuel	Incremental	Annual	Incremental	Transportation
Line		(incl. PDO)	Fuel Ratio	(excl. PDO)	Ratio	(excl. PDO)	Volumes	Fuel	Delivery Volume	PDO Fuel Ratio	Fuel Ratio
No.	Particulars	(%) (1)	(%) (2)	(%)	(%) (3)	(%)	(GJ) (4)	(10³m³) (5)	(10³m³)	(%)	(%)
		(a)	(b)	(c) = (a + b)	(d)	(e) = (c + d)	(f)	(g) = (f)/HV	(h)	(i) = (g / h)	(j) = (e + i)
1	Rate T1	0.305%	-0.048%	0.257%	0.001%	0.258%	13,159	349	536,730	0.065%	0.323%
2	Rate T2	0.283%	-0.030%	0.254%	0.001%	0.255%	62,696	1,661	4,129,518	0.040%	0.295%
3	Rate T3	0.380%	-0.087%	0.293%	0.001%	0.294%	12.103	321	272.712	0.118%	0.412%

- (1) EB-2016-0245, Rate Order, Working Papers, Schedule 22, column (j).
- (2) EB-2016-0245, Rate Order, Working Papers, Schedule 22, column (i).
- (3) PCI of 0.51% shown at Working Papers, Schedule 1, column (c) applied to column (c) above.
- (4) Rate Order, Working Papers, Schedule 20, p. 3, column (i).
- (5) Conversion to 10<sup>3</sup>m<sup>3</sup> based on a heating value (HV) of 37.75 GJ/10<sup>3</sup>m<sup>3</sup>.

# <u>UNION GAS LIMITED</u> 2018 Gas Supply Plan in Union North Rates <u>Effective January 1, 2018</u>

Line No.	Particulars (\$000s)	Upstream Transportation Costs per EB-2017-0278 (1)	2018 Gas Supply Plan Update Cost Impacts (2)	Upstream Transportation Costs per EB-2017-0087
	Rate 01	(a)	(b)	(c) = (a + b)
1	Delivery Rates	1,836	-	1,836
	Transportation Rates	10.015		10.017
2 3	Union North West Union North East	18,315 18,069	2 176	18,317 18,245
3		10,003	170	10,243
4	Storage Rates Union North West	1,289	2	1,291
5	Union North East	28,959	(1)	28,958
	Rate 10			
6	Delivery Rates	485	-	485
	Transportation Rates			
7	Union North West	4,931	0	4,931
8	Union North East	6,632	37	6,669
	Storage Rates	224		224
9 10	Union North West Union North East	301 8,037	1 (0)	301 8,036
10	Official Notes Last	0,007	(0)	0,000
	Rate 20			
11	Delivery Rates	132	-	132
40	Gas Supply Demand	4 400	0	4 400
12 13	Union North West Union North East	1,408 1,623	0 (4)	1,408 1,619
		.,0=0	( · /	.,0.0
4.4	Commodity Transportation 1	044	0	044
14 15	Union North West Union North East	944 1,089	0 (3)	944 1,086
.0	Bundled Storage	1,000	(0)	1,000
16	Demand	1,282	0	1,282
17	Commodity	12	(0)	12
	Rate 25			
18	Delivery Rates	-	-	-
19	Transportation Rates	681	(17)	664
20	Storage Rates	-	-	-
	Data 100			
21	Rate 100 Delivery Rates	9	-	9
	Gas Supply Demand			
22	Union North West	-	-	-
23	Union North East	-	-	-
	Commodity Transportation 1			
24	Union North West	-	-	-
25	Union North East	-	-	-
	Bundled Storage			
26 27	Demand Commodity	201 2	0 (0)	201 2
۷1	Commodity	2	(0)	2
28	Total	96,236	193	96,429

Notes:
(1) Rate Order, Working Papers, Schedule 15, column (f).
(2) Rate Order, Working Papers, Schedule 23, p. 2, Lines 7, 14, 22, & 29.

# UNION GAS LIMITED <u>Allocation of Union North Transportation and Storage Cost Changes by Zone</u>

Line No.	Particulars (\$000's)	Total	Rate 01	Rate 10	Rate 20	Rate 100	Rate 25
		(a)	(b)	(c)	(d)	(e)	(f)
	Union North West Zone						
	Transportation Demand Costs						
1	EB-2017-0278 October 2017 QRAM	26,406	18,814	5,067	2,395	-	130
2	EB-2017-0087 2018 Rates	26,406	18,814	5,067	2,395	-	130
3	Change in Costs (line 2 - line 1)	(0)	(0)	(0)	(0)	-	-
	Transportation Fuel Costs						
4	EB-2017-0278 October 2017 QRAM	565	379	115	66	-	5
5	EB-2017-0087 2018 Rates	568	381	115	66	-	5
6	Change in Costs (line 5 - line 4)	2	2	0	0	-	-
7	Total Change in Transportation Costs (line 3 + line 6)	2	2	0	0	-	-
	Storage Demand Costs						
8	EB-2017-0278 October 2017 QRAM	1,616	1,244	282	90	-	-
9	EB-2017-0087 2018 Rates	1,616	1,244	282	90	-	
10	Change in Costs (line 9 - line 8)	(0)	(0)	(0)	(0)	-	-
	Storage Fuel Costs						
11	EB-2017-0278 October 2017 QRAM	246	166	50	30	-	-
12	EB-2017-0087 2018 Rates	249	168	51	30	-	-
13	Change in Costs (line 12 - line 11)	3	2	1	0	-	-
14	Total Change in Storage Costs (line 10 + line 13)	3	2	1	0	-	
15	Total Change in North West Zone Costs (line 7 + line 14)	5	3	1	1	-	_
	Union North East Zone						
	Transportation Demand Costs						
16	EB-2017-0278 October 2017 QRAM	29,646	19,707	7,228	2,074	-	636
17	EB-2017-0087 2018 Rates	29,824	19,876	7,261	2,067	-	620
18	Change in Costs (line 17 - line 16)	178	169	34	(8)	-	(17)
	Transportation Fuel Costs						
19	EB-2017-0278 October 2017 QRAM	819	523	204	66	-	26
20	EB-2017-0087 2018 Rates	831	531	207	67	-	26
21	Change in Costs (line 20 - line 19)	12	8	3	1	-	(0)
22	Total Change in Transportation Costs (line 18 + line 21)	190	176	37	(7)	-	(17)
	Storage Demand Costs						
23	EB-2017-0278 October 2017 QRAM	41,156	30,441	8,399	2,105	211	_
24	EB-2017-0087 2018 Rates	41,156	30,441	8,399	2,105	211	_
25	Change in Costs (line 24 - line 23)	0	0	0	0	0	-
	Storage Fuel Costs						
26	EB-2017-0278 October 2017 QRAM	366	232	91	41	2	-
27	EB-2017-0087 2018 Rates	364	231	90	41	2	-
28	Change in Costs (line 27 - line 26)	(2)	(1)	(0)	(0)	(0)	-
29	Total Change in Storage Costs (line 25 + line 28)	(2)	(1)	(0)	(0)	(0)	
30	Total Change in North East Zone Costs (line 22 + line 29)	188	175	36	(7)	(0)	(17)
50	· ,				(1)	(0)	(17)
31	Common Costs EB-2017-0278 October 2017 QRAM	1,271		_			_
31 32	EB-2017-0278 October 2017 QRAM EB-2017-0087 2018 Rates	1,271 1,271	<u>-</u>	-	-	-	-
33	Change in Costs (line 32 - line 31)	- 1,271	-	<u>-</u>	<u>-</u>	-	<u> </u>
24		400	470	07	(0)	(0)	(A ¬)
34	Total Change in Storage and Transportation Costs (line 15 + line 30)	193	179	37	(6)	(0)	(17)

## UNION GAS LIMITED Union North 2018 Gas Supply Plan as filed in EB-2015-0181 at October 2017 QRAM

		2017 G	as Supply Plan (1	1)	2018 G	Sas Supply Plan (4)		
Line No.	Particulars	Annual Volume (TJ) (1)	Rates (2) (\$ / GJ)	Costs (3) (\$000's)	Annual Volumes (TJ) (4)	Rates (2) (\$ / GJ)	Costs (\$000's)	Cost Variance
	Transportation Costs	(a)	(b)	(c)	(d)	(e)	(f) = (d x e)	(g) = (f - c)
	Union North West Zone Demand Costs							
1	TCPL MDA	2,031	21.804	1,456	2,031	21.804	1,456	-
2	TCPL SSMDA	2,972	43.860	4,286	2,972	43.860	4,286	-
3	TCPL WDA	18,764	31.350	19,340	18,764	31.350	19,340	(0)
4 5	CTHI/CPMI Subtotal	2,066	19.506	1,325 26,406	2,066	19.506	1,325 26,406	(0)
3				20,400			20,400	(0)
6	Union North East Zone Demand Costs TCPL NCDA	3,211	58.624	6,188	3,211	58.624	6,188	0
7	TCPL EDA	365	64.737	777	365	64.737	777	-
8	TCPL NDA	2,915	48.388	4,638	2,915	48.388	4,638	-
9	TCPL PKWY EDA	21,108	12.531	8,696	21,108	12.531	8,696	0
10	TCPL PKWY NDA	15,695	18.045	9,311	15,695	18.045	9,311	0
11 12	TCPL PKWY NCDA Subtotal	122	8.900	29,646	730	8.900	214 29,824	178 178
	Common Costs							
13	LBA			1,200			1,200	-
14	TCPL Minimum Flow Charge			71			71	
15	Subtotal			1,271			1,271	-
16	Demand Costs in Rates (line 5 + line 12 + line 15)			57,322			57,500	178
	Union North West Zone Fuel Costs							
17	TCPL MDA	6	2.616	17	6	2.616	17	-
18	TCPL SSMDA	54	2.616	141	54	2.616	141	0
19 20	TCPL WDA CTHI/CPMI	155 1	2.616 2.616	405 3	156 1	2.616 2.616	408 3	2
21	Subtotal	·	2.010	565	•	2.010	568	2
	Union North East Zone Fuel Costs							
22	TCPL NCDA	87	2.616	227	91	2.616	238	12
23	TCPL EDA	11	2.616	29	11	2.616	29	-
24 25	TCPL NDA TCPL PKWY EDA	70 52	2.616 3.549	182 186	70 53	2.616 3.549	182 186	- 0
26	TCPL PKWY NDA	55	3.549	195	55 55	3.549	194	(1)
27	TCPL PKWY NCDA	-	3.549		0	3.549	1	1_
28	Subtotal			819			831	12
29	Fuel Costs in Rates (line 21 + line 28)			1,384			1,398	14
30	Total Transportation Costs (line 16 + line 29)			58,707			58,899	192
	Storage Costs							
	Union North West Zone Demand Costs							
31	TCPL WDA STS Injection	1,150	42.754	1,616	1,150	42.754	1,616	(0)
32	Subtotal			1,616			1,616	(0)
	Union North East Zone Demand Costs							
33	TCPL NDA STS Injection	17,921	18.045	10,632	17,921	18.045	10,632	-
34	TCPL EDA STS Withdrawal	9,845	12.531	4,056	9,845	12.531	4,056	-
35	TCPL Pkwy to EDA	19,042	12.531	7,845	19,042	12.531	7,845	0
36 37	TCPL Pkwy to EDA EMB TCPL Pkwy to NDA	9,125 24,455	13.716 18.045	4,115 14,508	9,125 24,455	13.716 18.045	4,115 14,508	0
38	Subtotal	21,100	10.010	41,156	21,100	10.0.10	41,156	0
39	Demand Costs in Rates (line 32 + line 38)			42,772			42,772	0
00	,			76,112			72,112	
40	Union North West Zone Fuel Costs TCPL WDA STS Injection	14	2.616	37	15	2.616	40	3
40 41	TCPL WDA STS Injection TCPL SSMDA STS Withdrawal	28	2.616 3.549	37 99	28	3.549	99	-
42	TCPL WDA STS Withdrawal	31	3.549	111	31	3.549	111	-
43	Subtotal			246			249	3
	Union North East Zone Fuel Costs							
44 45	TCPL NCDA STS Injection TCPL NCDA STS Withdrawal	2	2.616	5	2	2.616	4	(0)
45 46	TCPL NCDA STS Withdrawai TCPL Pkwy to EDA	8 8	3.549 3.549	30 27	8 8	3.549 3.549	27 30	(3) 2
47	TCPL Pkwy to EDA EMB	17	3.549	60	16	3.549	57	(3)
48	TCPL Pkwy to NDA	69	3.549	244	69	3.549	246	2
49	Subtotal			366			364	(2)
50	Fuel Costs in Rates (line 43 + line 49)			613			614	1
E4	Total Storage Costs /line 20 - line 50)			42 205			42 200	
51	Total Storage Costs (line 39 + line 50)			43,385			43,386	1
52	Total Storage and Transportation Costs			102,091			102,284	193

## Notes:

- (1) EB-2015-0181, Exhibit A, Tab 2, Appendix A, Schedule 1, p. 1-2, column (g).
  (2) EB-2017-0278, Tab 2, Schedule 2, p.2, column (d).
  (3) EB-2017-0278, Tab 2, Schedule 2, p.2, column (e).
  (4) EB-2015-0181, Exhibit A, Tab 2, Appendix A, Schedule 1, p. 1-2, column (j).

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## PARKWAY DELIVERY OBLIGATION REPORTING 1 2 3 The purpose of this evidence is to report on the Parkway Delivery Obligation ("PDO") of Union's South Direct Purchase ("DP") customers. In Union's 2014 Rates application and 4 5 evidence (EB-2013-0365), Union filed a Settlement Agreement ("2014 Settlement") 6 proposing to permanently shift the PDO of its Union South DP customers from Parkway to 7 Dawn over time. The 2014 Settlement was approved by the OEB on June 16, 2014. 8 9 Under the 2014 Settlement, Union is required to report annually on: capacity that could be 10 made available in the two years commencing with the test year to further reduce the PDO at a 11 lower cost than the cost of the Parkway Delivery Commitment Incentive ("PDCI"); forecasted PDO quantities for the two years commencing with the test year; measures used by Union to 12 13 manage the initial Parkway shortfall; and, actual transmission compressor fuel on the Dawn to 14 Parkway system in the prior year. 15 16 This evidence is organized to track those requirements similarly and as follows: 17 1. Capacity Available to Reduce PDO 18 2. Forecasted PDO Quantities 19 3. Management of the Initial Parkway Shortfall

4. Dawn to Parkway Transmission Compressor Fuel

20

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- Please see Rate Order, Working Papers, Schedule 20 for details of the PDO and PDCI costs
- 2 included in 2018 Rates by rate class. The PDCI is paid monthly to DP customers for any
- 3 continued obligated Daily Contract Quantity deliveries at Parkway.

4

5

## 1. CAPACITY AVAILABLE TO REDUCE PDO

- 6 In April 2014, Union offered South Direct Purchase customers 146 TJ/day of temporarily
- 7 available excess Dawn to Parkway capacity to shift a portion of their PDO volume to Dawn.
- 8 This temporary capacity was no longer available as of October 31, 2015. However, Union
- 9 agreed to manage the Parkway shortfall in-order to maintain the 146 TJ/day of PDO shift beyond
- October 31, 2015, until sufficient Dawn to Kirkwall capacity was turned back by other M12
- shippers to facilitate a permanent PDO shift.

12

- 13 Effective November 1, 2017, Union has sufficient Dawn to Kirkwall M12 turnback to replace the
- temporarily available capacity noted above (146 TJ/day) and to offer incremental PDO
- reductions of 73 TJ/day. The incremental PDO reductions were offered to:
- 1) South DP customers with a PDO and without M12 service (these customers elected to
- accept the full offering of 54 TJ/day); and,
- 2) South DP customers with a PDO served using their own M12 Service, including
- 19 TransCanada Energy ("TCE") Halton Hills Generation Station ("HHGS"), (HHGS
- 20 elected to accept 14 TJ/day of the 19 TJ/day offered).

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- 1 Union forecasts that no additional PDO reductions will be available to Union South DP
- 2 customers in 2018. Please see Exhibit A, Tab 2, Attachment 1, for an updated table illustrating
- 3 the capacity available for PDO shift, and the current and forecasted PDO reductions.

4

- 5 Exhibit A, Tab 2, Attachment 1, line 1 provides an updated forecast of the Dawn to Parkway
- 6 equivalent of the M12 Dawn to Kirkwall turnback used to facilitate PDO shift for customers
- 7 without M12 service. The quantities shown are the Dawn to Parkway equivalent of Dawn to
- 8 Kirkwall turnback using an equivalency factor of approximately 73%.

9

- 10 Union received notices for 67 TJ/day (Dawn to Parkway equivalent) of turnback effective
- November 1, 2017. Union has not received any turnback requests effective November 1, 2018
- and is not forecasting any turnback effective November 1, 2019 (to be confirmed through
- 13 contract elections by October 31, 2017, two years prior to contract expiry). A comparison of the
- forecast provided in the 2017 Rates proceeding (EB-2016-0245) and the current forecast is
- provided in Table 1 below.

-

<sup>&</sup>lt;sup>1</sup> The methodology for using the equivalency factor is explained in Union's 2014 Rates evidence (EB-2013-0365, Exhibit A, Tab 4, p. 24).

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Table 1
 M12 Dawn to Kirkwall Turnback Forecast (Dawn to Parkway Equivalent)

Particulars (TJ/day)	Nov 2017	Nov 2018	Nov 2019
2017 Rates EB-2016-0245	67	0	N/A
2018 Rates EB-2017-0087	67	0	0

3

- 4 Allocation of the updated capacity available through turnback is reflected in Exhibit A, Tab 2,
- 5 Attachment 1, lines 2 to 6. The quantities turned back were first allocated to replace the initial
- 6 Parkway shortfall of 146 TJ/day that is associated with the PDO (Exhibit A, Tab 2, Attachment
- 7 1, line 4). Once the initial Parkway shortfall capacity was replaced, the remaining quantity was
- 8 used to facilitate further PDO relief as described above.

9

10

## 2. FORECASTED PDO QUANTITIES

- When implementing the first PDO shift in 2014 (146 TJ/day), customers with a contracted PDO
- less than 100 GJ/day were allowed to shift 100% of their PDO to Dawn. All other customers
- were allowed to shift the greater of 99 GJ/day or 36% of their contracted PDO to Dawn. This
- simplified contract administration for small contracts while not significantly reducing the
- percentage available for all other contracts. Exhibit A, Tab 2, Attachment 1, lines 7 to 9
- summarizes the total PDO for all Union South DP customers while Exhibit A, Tab 2, Attachment
- 17 1, lines 10 to 24 details the breakdown for each DP customer grouping.

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When implementing the PDO shift in April, 2017 (54 TJ/day), Union used a methodology

2 similar to the one described above and identical to what was outlined in its 2017 Rates

- 3 application and evidence.<sup>2</sup> Since the capacity available for the 2017 PDO shift (effective
- 4 November 2017) was approximately 60% less than what was available for the 2014 PDO shift
- 5 (54 TJ/day versus 146 TJ/day), Union maintained the threshold for 100% turnback at 40 GJ/day
- 6 (i.e. 60% less than the 100 GJ/day allowed in 2014) for customers without M12 service.
- 7 Application of this threshold was forecasted to result in an allocation to customers of
- 8 approximately 14 TJ/day (Exhibit A, Tab 2, Attachment 1, line 15, column j). The quantity
- 9 remaining for all other contracts with a PDO (greater than 40 GJ/day) was 40 TJ/day, which
- resulted in a reduction of up to 17% of the customers' PDO being allowed to shift to Dawn
- 11 (Exhibit A, Tab 2, Attachment 1, line 16, column j). Customers with M12 capacity were
- allowed to reduce an equal pro-rata share of 17% of their beginning PDO quantity (a total of 19
- 13 TJ/day). <sup>4</sup> The potential reduction of all customers' annual PDO was 73 TJ/day (54 TJ/day for
- 14 non-M12 customers plus 19 TJ/day for M12 customers), of which only 68 TJ/day was elected by
- 15 customers.<sup>5</sup>

16

- 17 As Union did not receive any M12 Dawn to Kirkwall turnback effective November 1, 2018,
- there will not be any incremental PDO relief for DP customers in 2018. However, as part of the
- 19 2014 Rates Settlement Agreement (EB-2013-0365), HHGS has the option to turn back all or any
- 20 portion of its remaining M12 capacity and convert an equal amount of the PDO to non-obligated

<sup>&</sup>lt;sup>2</sup> EB-2016-0245, Exhibit A, Tab 2, p.4.

 $<sup>^{3}</sup>$  40 TJ/day  $\div$  (251 TJ/day - 14 TJ/day) = 17%

<sup>&</sup>lt;sup>4</sup> Exhibit A, Tab 2, Attachment 1, column j, (line 17 + line 21) x 17% = (31 + 84) x 17% = 19 TJ/day

<sup>&</sup>lt;sup>5</sup> Exhibit A, Tab 2, Attachment 1, column j, line 11+ line 18 + line 22 = 54 + 0 + 14 = 68 TJ/day

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- deliveries at Dawn as of November 1, 2018. As such, HHGS has a PDO reduction of 70 TJ/day
- 2 forecasted in 2018.

3

- 4 The forecasted PDO for sales service customers is shown at Exhibit A, Tab 2, Attachment 1, line
- 5 25.

6

## 7 3. MANAGEMENT OF THE INITIAL PARKWAY SHORTFALL

- 8 For 2017, Union is using M12 Dawn to Kirkwall turnback to manage the remaining initial
- 9 Parkway shortfall of 13 TJ/day without purchasing additional services. Effective November 1,
- 10 2018 Union will no longer have any shortfall at Parkway related to PDO.

11

#### 12 4. DAWN TO PARKWAY TRANSMISSION COMPRESSOR FUEL

- Dawn to Parkway transmission compressor fuel will be included in Union's reporting
- requirements filed in its annual earnings sharing and deferral account disposition proceeding.

## Parkway Delivery Obligation (PDO) for 2016 - 2019 (TJ/day)

No.   Particulars   Nov-15   Nov-16   Nov-17   Nov-15   Nov-16   Nov-17   Nov-18   Nov-18   Nov-17   Nov-18   Nov-19					2016 Rates		20	016 Rates IR			2017 Rates	;		2018 Rates	
No. Particulars    No. 15   No. 15   No. 15   No. 17   No. 18				As File	ed (EB-2015-0	)116)	As File	As Filed (EB-2015-0116)			As Filed (EB-2016-0245)			As Filed (EB-2017-0087)	
CAPACITY AVAILABLE FOR PDO SHIFT															
CAPACITY AVAILABLE FOR DOS SHIFT   1				Nov-15	Nov-16	Nov-17	Nov-15	Nov-16	Nov-17	Nov-16	Nov-17	Nov-18	Nov-17	Nov-18	Nov-19
Ex-Franchise M12 Dawn to Kirkwall Turnback				(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(I)
Allocation of Capacity Available (turnback):  2															
2 Opening Balance	I12 Dawn to Kirkwall Tur	kwall Turnback		-123	-10	-29	-123	-10	-67	-10	-67	0	-67	0	
2 Opening Balance	apacity Available (turnba	e (turnback):													
3 Temporary Capacity Provided 4 Replacement of Temporary Capacity 5 Closing Balance		,		-146	-23	-13	-146	-23	-13	-23	-13	0	-13	0	
4 Replacement of Temporary Capacity 5 Closing Balance 123 10 13 123 10 13 10 13 0 13 0 0 6 Available for PDO Shift 0 0 0 1:15 0 0 0 5:4 0 0 5:4 0 0 5:4 0 0 5:4 0 0 5:4 0 0 5:4 0 0 5:4 0 0 5:4 0 0 5:4 0 0 5:4 0 0 5:4 0 0 5:4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		rided		0									0	0	
Closing Balance   Closing Ba						_	-		-	-		-			
### COTAL DIRECT PURCHASE PDO  7 Beginning PDO  369 369 369 369 369 369 369 369 369 369															
7 Beginning PDO 8 Annual PDO Shift line 11 + line 17 + line 21 9 DO for Customers with M12 Service 13 Annual PDO Shift 16 Percentage Reduction for those with PO > 99 GJ/day (1) 16 Percentage Reduction for those with PO > 99 GJ/day (1) 17 Beginning PDO 18 Annual PDO Shift 19 DO for Customers with M12 Service (except TCE): 19 Beginning PDO 25 A	r PDO Shift			0	0	-16	0	0	-54	0	-54	0	-54	0	
8 Annual PDO Shift line 11 + line 17 + line 21	SE PDO			•					<u>'</u>						
9 Remaining PDO  369 369 346 369 369 290 376 303 233 298    RECT PURCHASE PDO DETAIL BY CUSTOMER GROUP    PDO for Customers without M12 Service															2
PDD for Customers without M12 Service   PDD for Customers with PD solid   PDD for Customers with PD solid   PDD for Customers with M12 Service   PDD for Customers with M1		17 + line 21													
PDO for Customers without M12 Service:   10   Beginning PDO   254   25	)			369	369	346	369	369	290	376	303	233	298	228	22
10     Beginning PDO     254     254     254     254     254     254     254     254     254     254     254     254     254     254     254     254     254     254     254     261     207     251       12     Surplus Required     0     54     0     17%     0     17%     0     17%     0     17%     0     17%     0     17%     0     17%     0     17%     0     17%     0     17%     0     0     0     0	DETAIL BY CUSTOMER	STOMER GROUP													
11 PDO Shift 12 Surplus Required 13 Remaining PDO 13 Remaining PDO 14 Annual PDO Shift 15 Allocation to those with PO < 100 GJ/day (1) 16 Percentage Reduction for those with PO > 99 GJ/day (1) 17 PDO for Customers with M12 Service (except TCE): 18 In-Franchise M12 Dawn to Parkway Turnback line 15 * line 16 19 Remaining PDO 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	mers without M12 Servi	I12 Service:													
Surplus Required   0	DO			254	254	254	254	254	254	261	261	207	251	197	19
13   Remaining PDO   254   254   238   254   254   200   261   207   207   197     14   Annual PDO Shift				0	0	-16	0	0	-54	0	-54	0	-54	0	
14 Annual PDO Shift  0 0 16 0 0 0 54 15 Allocation to those with PO < 100 GJ/day (1) 16 Percentage Reduction for those with PO > 99 GJ/day (1) 17 Beginning PDO 18 In-Franchise M12 Dawn to Parkway Turnback line 15 * line 16 19 Remaining PDO 31 31 31 31 31 31 31 31 31 31 32 20 Annual PDO Shift  18 Beginning PDO 31 31 31 31 31 31 31 31 31 31 31 31 31 3	juired			0						0				0	
15 Allocation to those with PO < 100 GJ/day (1) 16 Percentage Reduction for those with PO > 99 GJ/day (1) 17 PDO for Customers with M12 Service (except TCE): 18 In-Franchise M12 Dawn to Parkway Turnback line 15 * line 16 19 Remaining PDO 10 0 0 0 0 0 12 0 0 0 17 17 Beginning PDO 11 31 31 31 31 31 31 31 31 31 31 31 31 3	PDO			254	254	238	254	254	200	261	207	207	197	197	19
16 Percentage Reduction for those with PO > 99 GJ/day (1) 0% 0% 6% 0% 0% 21% 0% 17% 0% 17% 0% 17% PDO for Customers with M12 Service (except TCE):  17 Beginning PDO 31 31 31 31 31 31 31 31 31 31 31 26 31 18 In-Franchise M12 Dawn to Parkway Turnback line 15 * line 16 0 0 0 -2 0 0 0 -7 0 -5 0 0 0 19 Remaining PDO 311 31 29 31 31 24 31 26 26 31 120 Annual PDO Shift 0 0 0 2 0 0 7 0 5 0 0 PDO for TCE Halton Hills:  21 Beginning PDO 84 84 84 84 84 84 84 84 84 84 84 84 84	) Shift			0	0	16	0	0	54	0	54	0	54	0	
16 Percentage Reduction for those with PO > 99 GJ/day (1) 0% 0% 6% 0% 0% 21% 0% 17% 0% 17% 0% 17% PDO for Customers with M12 Service (except TCE):  17 Beginning PDO 31 31 31 31 31 31 31 31 31 31 31 26 31 18 In-Franchise M12 Dawn to Parkway Turnback line 15 * line 16 0 0 0 -2 0 0 0 -7 0 -5 0 0 0 19 Remaining PDO 311 31 29 31 31 24 31 26 26 31 120 Annual PDO Shift 0 0 0 2 0 0 7 0 5 0 0 PDO for TCE Halton Hills:  21 Beginning PDO 84 84 84 84 84 84 84 84 84 84 84 84 84	nose with PO < 100 GJ/da	L00 GJ/dav (1)		0	0	0	0	0	0	0	12	0	14	0	
17 Beginning PDO 18 In-Franchise M12 Dawn to Parkway Turnback line 15 * line 16 0 0 0 -2 19 Remaining PDO 20 Annual PDO Shift  PDO for TCE Halton Hills: 21 Beginning PDO 2 Beginning PDO 31 31 31 31 31 31 31 31 24 31 26 26 31  20 In-Franchise M12 Dawn to Parkway turnback line 15 * line 20 31 884 84 84 84 84 84 84 84 84 84 84 84 84			· (1)	0%	0%	6%	0%	0%	21%	0%	17%	0%	17%	0%	0
17     Beginning PDO     31	mers with M12 Service (	Service (except TCE):													
18     In-Franchise M12 Dawn to Parkway Turnback line 15 * line 16     0     0     -2     0     0     -7     0     -5     0     0       19     Remaining PDO     31     31     29     31     31     24     31     26     26     31       20     Annual PDO Shift     0     0     2     0     0     7     0     5     0     0       PDO for TCE Halton Hills:       21     Beginning PDO     84     84     84     84     84     84     84     84     84     84     84     84     84     84     84     70     84       22     In-Franchise M12 Dawn to Parkway turnback line 15 * line 20     0     0     -5     0     0     -18     0     -14     -70     -14       23     Remaining PDO     84     84     84     84     84     66     84     70     0     70	DO .			31	. 31	31	31	31	31	31	31	26	31	31	3
19     Remaining PDO     31     31     29     31     31     24     31     26     26     31       20     Annual PDO Shift     0     0     0     2     0     0     7     0     5     0     0       PDO for TCE Halton Hills:       21     Beginning PDO     84     84     84     84     84     84     84     84     84     84     84     84     84     84     84     84     84     84     84     70     84       22     In-Franchise M12 Dawn to Parkway turnback line 15 * line 20     0     0     -5     0     0     -18     0     -14     -70     -14       23     Remaining PDO     84     84     84     84     84     84     70     0     70		Parkway Turnback line	2 15 * line 16	0	0	-2	0	0		0	-5	0	0	0	
PDO for TCE Halton Hills: 21 Beginning PDO 884 84 84 84 84 84 84 84 84 84 84 84 84		,		31	. 31		31	31		31			31	31	3
21     Beginning PDO     84     84     84     84     84     84     84     84     84     84     84     84     84     70     84       22     In-Franchise M12 Dawn to Parkway turnback line 15 * line 20     0     0     -5     0     0     -18     0     -14     -70     -14       23     Remaining PDO     84     84     84     84     84     70     0     70	Shift			0	0	2	0	0	7	0	5	0	0	0	
22     In-Franchise M12 Dawn to Parkway turnback line 15 * line 20     0     0     -5     0     0     -18     0     -14     -70     -14       23     Remaining PDO     84     84     79     84     84     66     84     70     0     70	alton Hills:														
22 In-Franchise M12 Dawn to Parkway turnback line 15 * line 20 0 0 -5 0 0 -18 0 -14 -70 -14 23 Remaining PDO 84 84 84 66 84 70 0 70	DO			84	84	84	84	84	84	84	84	70	84	70	
		Parkway turnback line	15 * line 20	0	0	-5	0	0	-18	0	-14	-70	-14	-70	
24 Annual PDO Shift 0 0 5 0 0 18 0 14 70 14	PDO			84	84	79	84	84	66	84	70	0	70	0	
	Shift			0	0	5	0	0	18	0	14	70	14	70	
25 PDO for Sales Service (2) 103 11 11 103 11 11 19 11 11 11	Service (2)			103	11	11	103	11	11	10	11	11	11	11	

#### Notes:

- (1) For November, 2017 customers with PO < 40 GJs/day will be allocated to shift 100% of their obligation to Dawn
- (2) The actual contract amount for November 1, 2016 is higher, but Union has turnback rights which are effective January, 2017

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### 1. INTRODUCTION

This document provides an overview of the 2017/18 Gas Supply Plan ("GSP" or the "Plan") of Union Gas Limited ("Union") and includes the underpinning assumptions and the market context from which it was formed. This includes future trends that may impact the GSP going forward.

### 1.1 Overview of the Gas Supply Planning Process

The objective of Union's GSP is to identify the efficient combination of upstream transportation, supply purchases, and storage assets required to serve sales service and bundled direct purchase ("DP") customers' annual, seasonal and design day natural gas delivery requirements under a set of gas supply planning principles. Balanced consideration of these principles ensures Union's customers have access to secure, reliable and diverse natural gas purchased at a prudently incurred cost. The planning principles are outlined in detail in Section 3.

Union's GSP also provides the strategic direction guiding the Company's long-term supply acquisition process. The GSP does not commit Union to the acquisition of a specific supply type or facility, nor does it preclude Union from pursuing a particular supply. Rather, the GSP identifies the transportation and supply volume requirements.

## 1.2 Summary of Union North and Union South

In Ontario, natural gas is a significant and critical energy source relied on for providing heat and hot water to homes and institutions, fueling manufacturing plants and generating electricity. These applications operate on demand, meeting the consumer expectation that energy will be readily available when needed. Home owners in Ontario depend on a reliable supply of natural gas. The natural gas infrastructure needs to be robust and flexible to allow Ontario to position itself to secure long-term access to economic supply in light of the North American supply dynamics.

Union serves approximately 1.5 million customers in northern, eastern and southern Ontario through an integrated network of over 70,000 kilometres of natural gas transmission and distribution pipelines. Total consumption in Union's franchise areas during 2016 was approximately 519 PJ.

Union operates storage and transmission assets that include 178 PJ of underground natural gas storage at the Dawn Hub and a 7.8 PJ/d Dawn Parkway Transmission System. Union's Dawn Parkway System is an integral part of the natural gas delivery system for residents, businesses, industries and power plants of Ontario, Québec and U.S. Northeast. The Dawn Parkway System connects these consuming markets to North America's major supply basins and the largest underground natural gas storage in Canada, the Dawn Hub.

Union's Dawn Hub has been recognized as a key market hub for the Province of Ontario and the entire Great Lakes region, and is Ontario's energy advantage. The growth of Dawn as an effective and efficient trading hub provides competitive and transparently priced natural gas supplies and services which benefit all Ontarians. Dawn currently is one of the most physically traded, liquid hubs in North America. The liquidity of Dawn stems from the combination of access to underground storage, interconnections with upstream pipelines, take

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away capacity to growth markets, a large number of buyers and sellers of natural gas and price transparency.

Union is divided into two separate operating areas: Union South and Union North as shown in Figure 1. Union North is further divided into Union North West and Union North East, comprised of three delivery areas in each zone as outlined below:

#### North West Zone:

- Manitoba Delivery Area ("MDA")
- Western Delivery Area ("WDA")
- Sault Ste. Marie Delivery Area ("SSMDA")

#### North East Zone:

- North Delivery Area ("NDA")
- North Central Delivery Area ("NCDA")
- Eastern Delivery Area ("EDA")



Figure 1

Union North is served exclusively through deliveries off of the TransCanada Mainline. Five of the six Northern delivery areas align with delivery areas on the TransCanada Pipeline Limited ("TransCanada") Mainline. The delivery area that does not align is Union's Manitoba Delivery Area, which is connected to the TransCanada Mainline at the Spruce interconnect in the Centrat MDA by two additional pipelines (Centra Transmission Holdings and Centra Pipeline Minnesota).

Union provides distribution services to all customers, however customers continue to have the option to purchase their supply from Union or arrange supply through a DP arrangement. Union in-franchise customers fall into three distinct categories:

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- Sales Service: Union acquires supply and transportation capacity for these customers in Union South and Union North. These customers are included in the GSP;
- Bundled DP: These customers acquire their own supply. In Union North, Union holds transportation capacity on behalf of bundled DP customers. In Union South, subsequent to the suspension of the vertical slice, bundled DP customers acquire their own transportation. These customers are included in the GSP:
- Transportation service ("T-Service") DP: These customers acquire their own supply and transportation and are not considered within the GSP. This service is available to large contract commercial and industrial customers in Union South and Union North.

Of the 1.5 million customers that Union serves, approximately 1.4 million are sales service customers that rely on Union to provide their gas supply. Sales service customers are primarily residential and small commercial customers. The remaining customers rely on DP arrangements with marketers and alternate suppliers to meet their gas supply needs. From a volume perspective, sales service customers consumed 164 PJ in 2016, while DP customers consumed 355 PJ.

Union performs the role of system operator and supplier of last resort. As system operator, Union manages many operational factors. These include:

- Seasonal balancing requirements for sales service customers;
- Weather variances outside of checkpoint balancing for bundled DP customers;
- Changes in supply and balancing requirements as customers move between sales service and DP;
- Differences between daily receipts and the demands of all end users including transportation service customers; and,
- Unaccounted for gas and compressor fuel variances.

As supplier of last resort, Union is the default supplier to its in-franchise customers. A supplier of last resort must ensure it has the assets or can acquire the assets to serve customers that others choose not to serve or fail to serve (e.g. for reason of financial failure), or any customer who chooses to be a sales service customer and have Union provide gas supply services. DP customers can revert back to sales service on short notice.

#### 2. MARKET CONTEXT

## 2.1 Emerging Supply Sources

North American natural gas markets are expected to continue to experience significant change. Production in Appalachia, the Gulf region and Western Canada from shale gas formations continue to exceed expectations. As a result, the flow of natural gas on the Canadian and U.S. pipeline grid has been and continues to change with the addition of new pipeline infrastructure and the new utilization of existing assets. Gas traditionally flowed West to East and South to North. With new shale plays being developed, pipelines are reversing flows and new pipelines are being built to allow gas to flow East to West and North to South. In addition, market area shippers are shifting from long haul transportation to short haul transportation as supply basins are located closer to consuming markets. In the U.S., shale gas production accounted for more than half of U.S. natural gas production in 2015 and

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is projected to more than double from 37 Bcf/d in 2015 to 79 Bcf/d by 2040, which is  $\frac{\text{Page 7 of 33}}{70\% \text{ of}}$  total U.S. natural gas production by 2040.

ICF International ("ICF") has also indicated that U.S. and Canadian Shale Gas Production at major supply basins across North America are projected to more than double as shown below (Figure 2). The Marcellus and Utica shales account for about 57% of the incremental production growth from shale formations. Production from tight oil shale plays in the Permian basin is projected to more than triple by 2035. Major growth is also expected from Western Canadian shale plays (the Montney, Horn River, Cordova & Liard), which grow to over 6.6 Tcf from their current level of over 2.6 Tcf, however, lower oil prices pose a greater risk for development of these resources.

U.S. and Canadian Shale Gas Production, Tcf per Year 45 40 35 ■ Western Canada ■ All Other US 30 Permian Shale ■ Eagle Ford 25 ■Bakken Utica 20 ■ Marcellus ■ Haynesville \* 15 ■ Fayetteville Barnett 10 ■ Woodford

Figure 2

\* Haynesville shale production includes production from other shales in the vicinity, e.g., the Bossier Shale.

2020

5

0 <del>-</del>

2015

"Source: ICF Forecast: Natural Gas – Strategic, Q3 2017 Outlook. Used with permission."

2025

2030

2035

The Appalachian region of the U.S. Northeast is home to the Utica and Marcellus shale formations in Ohio, Pennsylvania, and West Virginia which have emerged as the single largest and fastest growing producing region of natural gas in North America. Since January 2012, natural gas production in the Appalachian region has accounted for 85% of U.S. shale gas production growth as reported in the United States Energy Information Administration, Drilling Productivity Report, July 2015, and has driven recent growth in total U.S. natural

<sup>&</sup>lt;sup>1</sup> EIA Today in Energy – August 15, 2016 - https://www.eia.gov/todayinenergy/detail.php?id=27512

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gas production. This region is expected to continue to grow and could produce nearly 38 Bcf/d by 2035.

The development of abundant and competitively priced natural gas presents Ontario consumers, including residential, commercial, industrial and power, with an opportunity to diversify their natural gas supply portfolio. Accessing this new supply will be essential to providing diversity of supply and affordable energy prices to fuel Ontario's economic competitiveness. By utilizing both new and existing infrastructure, access to abundant sources of supply can increase reliability and security for the Ontario natural gas supply portfolio and provide increased liquidity at the Dawn Hub.

## 2.2 Natural Gas Price Signals

The emergence of shale production has increased dramatically since 2007 and the increase in available supply has put downward pressure on natural gas prices.

The EIA also indicates that U.S. natural gas production growth is the result of continued development of shale gas and tight oil plays which account for nearly two-thirds of natural gas production by 2040. Continued development of the Marcellus and Utica plays in the U.S. Northeast is the main driver of growth in total U.S. shale gas production and the main source of total U.S. dry natural gas production.

ICF indicates that Henry Hub prices will remain in the \$3-\$4 USD/MMBtu range in the longer term as shown in Figure 3. ICF has indicated that natural gas prices will rise, but price increases will be moderated by low-cost gas supplies. A rebound in drilling activity will lead to continued production growth and increases in per-well production. These two factors have reduced costs and made gas supplies more responsive to price changes, which will limit upward pressure on prices.

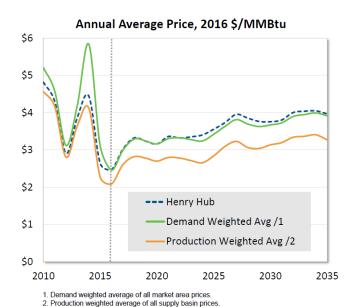


Figure 3

"Source: ICF Forecast: Natural Gas – Strategic, Q3 2017 Outlook. Used with permission."

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Natural gas supply costs are an important consideration in the GSP. However, Union must balance the benefits of all the attributes of the planning principles and the requirement to ensure customers receive secure, reliable, diverse supplies of natural gas at a prudently incurred cost.

To ensure that gas supplies are acquired at a prudently incurred and reasonable cost, Union follows specific gas procurement policies and procedures, as accepted by the Ontario Energy Board (the "OEB")<sup>2</sup>, to govern commodity purchases including a Request for Proposal process. Union's gas commodity purchases are influenced by the characteristics and traits of the specific supply points or basins where Union purchases supplies. Each of these points has different liquidity and supply characteristics. Certain points have a large number of active parties and volume trading activity and others do not. Having many suppliers at a specific point, along with other buyers, creates an environment of higher liquidity, reliability and more efficient gas purchases.

### 2.3 Transportation/Pipeline Changes

As supply and transportation market options change, so does Union's gas supply mix and how gas is transported to Ontario. Unchanged, however, is Union's application of the gas supply planning principles and the requirement to ensure customers receive secure, reliable, diverse supplies of natural gas at a prudently incurred cost. When Union considers a new supply basin, new upstream transportation capacity or renewals for existing transportation, multiple alternatives are considered. A landed-cost analysis is completed and filed when a new transportation path is contracted for, in accordance with the OEB-approved 2007 Cost of Service (EB-2005-0520) Settlement Agreement. The analysis for new transportation paths included in Union's 2017/18 GSP will be filed as part of Union's 2017 Disposition of Non-Commodity Deferral Account Balances and Earnings Sharing Amount evidence in the spring of 2018.

Natural gas utilities, through their planning process, look to diversify their natural gas supply portfolio and seek secure, reliable and reasonably priced natural gas. As outlined in Section 2.1, North American natural gas markets are undergoing a significant change resulting in Eastern local distribution companies ("LDC") shifting their supply portfolios to source gas closer to the end –use markets. Market participants are re-balancing with new supply sources and replacing long-haul transportation contracts with short-haul transportation contracts from the west and south. Union also continues to encourage new sources of supply and new infrastructure.

#### 3. GAS SUPPLY PLANNING OBJECTIVES AND PRINCIPLES

The GSP defines the gas supply requirements and the necessary upstream transportation capacity and assets needed to meet customers' annual, seasonal and design day gas delivery. Union's gas supply portfolio is guided by a set of principles that are designed to ensure customers receive secure, diverse gas supply at a prudently incurred cost.

The principles are as follows:

<sup>&</sup>lt;sup>2</sup> EB-2011-0210, Exhibit D1, Tab 1, Appendix A.

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

These principles have been presented to and accepted by the OEB<sup>3</sup> on a number of occasions. Most recently these principles were presented to the OEB as part of the Gas Supply Planning Consultation<sup>4</sup>.

A description of each guiding principle is provided below.

## 3.1 Ensure secure and reliable gas supply to Union's service territory at a reasonable cost

Union has an obligation to provide gas supply and transportation capacity for sales service customers and transportation capacity for Union North bundled DP customers. Union also provides a load balancing function for all sales service and bundled DP customers to manage the seasonal differences between supply and demand. To meet this obligation, Union uses a combination of firm upstream transportation contracts; Dawn sourced supply and storage capacity. Union ensures adequate firm capacity is available on a sustained basis to meet firm design day and annual demands through transportation capacity contractual rights. This includes a combination of long-term transportation contracts with third parties, transportation contracts with guaranteed renewal rights, as well as dedicated Union storage, transmission and distribution assets.

## 3.2 Minimize risk by diversifying contract terms, supply basins and upstream pipelines

Union's current upstream transportation portfolio and related supply are diversified with respect to supply basin, gas supply producers and marketers, contract term and transportation service provider. Union's approach to diversifying the portfolio of firm assets is analogous to a prudent investment portfolio where diversity of funds, risk and term are critical to a successful portfolio.

In Union South and Union North East, Union utilizes capacity on multiple upstream pipelines to access several supply basins or market hubs. These pipelines provide access to supplies in Western Canada, the Gulf of Mexico, Chicago, the U.S. mid-continent and Appalachia through Niagara. The GSP also includes Dawn purchases as part of the supply portfolio. Union purchases gas from suppliers under a North American Energy Standards Board ("NAESB") contract. Union has NAESB contracts with approximately 100 suppliers. The portfolio of suppliers and upstream transportation contracts provides diversity and reduces the exposure to price volatility for customers. It also provides Union the flexibility to manage its seasonal inventory targets.

<sup>&</sup>lt;sup>3</sup> 2012 Deferrals Disposition (EB-2013-0109), Decision and Order, p. 8

<sup>&</sup>lt;sup>4</sup> Distributor Gas Supply Consultation (EB-2015-0238)

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Union also manages risk to customers by diversifying the length of the contract terms to provide flexibility in managing the upstream transportation portfolio with existing contract terms ranging from 1 to 16 years. For details on Union's contracts see Appendix C and D.

For gas supply purchases, the sales service supply portfolio can consist of multi-year, annual, seasonal, monthly, and in rare cases, daily purchases.

# 3.3 Encourage new sources of supply as well as new infrastructure to Union's service territory

Union continues to seek new sources of cost-effective supplies to serve its customer base either through accessing new supply sources with existing infrastructure or participating in longer-term projects to encourage the development of new infrastructure to and through Ontario. The development of new supply sources and the related infrastructure often require long-term commitments. In the OEB's Union and Enbridge Long-Term Contracts proceeding (EB-2010-0300 / EB-2010-0333) decision, the OEB recognized the role that regulated utilities play in supporting new infrastructure development:

"The Board recognized that the enrolment of regulated utilities for such long term arrangements would be a necessary and desirable element in new infrastructure development..." (p.7)

In addition, Union supports the infrastructure required to allow new supply sources to flow to Union North West and Union North East. In order for Ontario natural gas customers to access new emerging supply, new required infrastructure on the Union, Enbridge, and TransCanada Mainline systems was completed. Union remains committed to the recently approved NEXUS Transmission Project to provide support for significant infrastructure to bring new supplies and suppliers to Dawn to enhance the liquidity of the Dawn Hub.

#### 3.4 Meet planned peak day and seasonal gas delivery requirements

Inherent in the obligation to meet sales service and bundled DP customers' gas supply needs is the requirement to construct a gas supply portfolio that will meet:

- Design day requirements to provide service to sales service and bundled DP customers on the day of highest anticipated design day demand in each delivery area; and,
- Seasonal/annual requirements to be able to meet the annual requirements of the markets while balancing the summer / winter load changes.

A further description of how Union meets these requirements is provided in Section 5.

#### 3.5 Deliver gas to various receipt points on Union's system to maintain system integrity

The Union South transportation portfolio has delivery points at Dawn, Parkway, Union CDA, Union ECDA, Kirkwall, St. Clair and Ojibway. In addition to the physical connections Union has with adjoining pipelines, abundant storage, and robust Dawn Parkway System design, it is also Union's practice to contractually receive gas at multiple delivery points. This practice provides two benefits.

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First, it maintains system integrity as Union is not reliant on one receipt point for all of its gas supplies. A system interruption or upset at one receipt point would not cause a complete supply failure to Union's system.

Second, delivery to multiple receipt points allows Union to minimize its pipeline facilities in the area. For example, the delivery of gas at Ojibway enables the Panhandle transmission system to be smaller than would otherwise be necessary to meet design day requirements. In this case, if Union receives gas at Ojibway, Union does not have to transport the equivalent volume from Dawn to Ojibway. The effectiveness of delivered supply to minimize pipeline facilities will depend on system hydraulics.

Union needs to balance the value of contracting and relying on third party providers and the continued cost and reasonableness of doing so when compared to physical alternatives. For example, Union has reduced the reliance it had on upstream supplies serving the Sarnia area through the Sarnia Expansion Project in early 2015<sup>5</sup>.

In response to customers' requests, Union has been moving the Parkway Obligation for DP customers to Dawn<sup>6</sup>, and has also reduced the reliance on deliveries at the east end of its system on behalf of sales service customers.

This trend is supported by the increased security and reliability resulting from the expansion of the Dawn Parkway System, including loss of critical unit protection across the entire Dawn Parkway System.

### 4. GAS SUPPLY PLANNING PROCESS

The GSP identifies the efficient combination of upstream transportation, supply purchases, and storage assets required to serve sales service and bundled DP customers' annual, seasonal and design day gas delivery requirements, while adhering to the planning principles described earlier. The upstream transportation contracts in the GSP, along with storage assets, are managed by Union to provide an integrated service to all sales service and bundled DP customers. The costs for both the supply and the transportation services identified in the GSP are recovered through commodity, transportation and storage charges. The GSP is finalized and receives executive approval in the third quarter each year. The annual gas supply planning process is summarized in Appendix A.

Union's gas supply planning is a complex process that incorporates demand related items such as customer growth, normalized weather, design day requirements, customer consumption patterns and economic outlooks. The firm needs of our customers are analyzed to ensure the appropriate level of firm transportation and storage assets are held to meet annual, seasonal and design day demand. The GSP is appropriately sized and there are no assets in the GSP in excess of those necessary to meet firm customer requirements.

To complete the GSP, Union uses gas supply planning software known as SENDOUT. SENDOUT is a widely recognized gas supply planning tool and is used by a number of LDCs in North America. Union has used this software for 30 years and the results have been presented in a number of rate applications since 1987.

<sup>&</sup>lt;sup>5</sup> Sarnia Expansion Pipeline Project (EB-2014-0333)

<sup>&</sup>lt;sup>6</sup> 2014 Rates (EB-2013-0365)

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Union uses SENDOUT to ensure that the assets incorporated in the GSP meet annual, seasonal, and design day demands. SENDOUT determines the amount of capacity, supply and associated costs required to meet customer demands. Union's GSP includes the following key inputs and assumptions:

- The design day demand forecast for each Union North delivery area;
- Union's in-franchise monthly demand forecast based upon customer location, supply arrangement, storage requirement and service type (excludes transportation service);
- A monthly commodity price forecast using the same pricing methodology as the Quarterly Rate Adjustment Mechanism ("QRAM") process;
- Upstream transportation tolls in effect at the time the forecast was prepared;
- All upstream transportation contracts held by Union plus existing obligated Ontario deliveries for the bundled DP market;
- Sales service and bundled DP storage requirements that are cycled completely each year in the GSP with storage full on November 1 and empty by March 31 assuming normal weather;
- Applicable heating value;
- Sufficient inventory at February 28 to meet the design day requirements for sales service and bundled DP customers;
- No migration between sales service and bundled DP customers for the term of the GSP. Any migration is therefore a risk that needs to be managed by Union; and,
- 9.5 PJ of system integrity space. This storage space is used in a number of ways to maintain the operational integrity of Union's integrated storage, transmission and distribution systems. The GSP has 6.0 PJ of this space filled with system integrity supply while the remaining 3.5 PJ is left empty as contingency space.

The outcome of the annual planning process is a plan that provides a monthly volumetric forecast of demands and supplies (by transportation path) and a forecast of Union's costs to serve its sales service and bundled DP customers.

## 5. UNION'S 2017/18 GAS SUPPLY PLAN

The GSP defines the gas supply requirements and the necessary upstream transportation capacity and assets needed to meet customers' annual, seasonal and design day demands. The GSP received executive approval in July 2017, and reflects the best available information at that time. The key inputs and outputs, as well as plan changes, are described in more detail below.

## **5.1 Design Day Demand**

Union ensures assets are available to provide firm service to customers on an extreme cold weather day called a design day. A design day is measured in heating degree days ("HDD"). A HDD is a measure of temperature that identifies the need for heating and occurs when the average daily temperature falls below 18 degrees Celsius. An average daily temperature of zero degrees Celsius equals 18 HDD. The main information required to develop the GSP to serve design day demand includes weather, firm customer demand, forecast demand growth and required assets.

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#### Weather

Union uses the coldest historically observed degree day for Union South and each of the six delivery areas in Union North.

#### Firm Customer Demand

The firm customer design day demand is forecasted by multiplying the firm use per degree day factor with the coldest observed degree day.

Union develops a trend line using the daily firm customer consumption from the prior winter and the associated daily degree day data. Union extrapolates the calculated trend line to the coldest observed degree day resulting in the estimated design day demand for each delivery area. An illustrative example of the degree day data and the trend line calculation for the NCDA is provided in Figure 4.

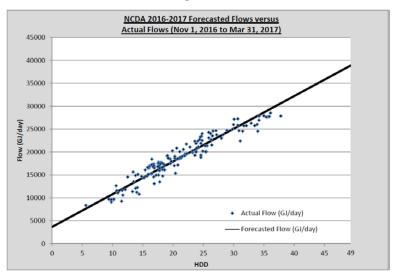


Figure 4

#### **Forecast Demand Growth**

The design day demand described above is adjusted by the winter season growth factor reflected in the demand forecast. This forward looking forecast growth factor is added to the firm customer demand, to provide a total forecasted design day demand for each delivery area. The forecast growth factor includes customer growth and changes in average consumption. For winter 2017/18, the growth factor for Union North is a decrease of 1.39%.

#### **Required Assets**

The design day requirements are met by holding storage and transportation capacity. Design day weather does not occur every year, however, the assets must be available should that design day occur given Union's role as the system operator and supplier of last resort for sales service and bundled DP customers.

In order to meet these design day requirements for Union South and Union North, Union uses a combination of contracted upstream transportation capacity, and Union's storage, transmission and distribution assets. The use of storage assets is more cost effective than

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contracting for firm upstream transportation capacity filled all year. Since Union's storage and transmission assets reside within the Union South franchise area, the role of the gas supply portfolio is different on a design day in Union South than in Union North.

The differing methodologies are described below. These methodologies are consistent with Union's Gas Supply Planning Review prepared by Sussex Economic Advisors (the "Sussex report")<sup>7</sup>.

#### 5.1.1 Union South Design Day

Union South design day demand is the total firm requirement of the in-franchise sales service, bundled, unbundled and transportation service customers.

The design day weather condition for Union South is based on the coldest observed degree day experienced which is 43.1 measured at the London, Ontario airport.

For Union South, the GSP is focused on purchasing upstream supply and transportation to meet Union's annual demand requirements. The annual volume requirement is divided by 365 days such that the upstream pipe flows at 100% utilization each day of the year. During times when usage is less than the upstream supply, the excess supply is injected into storage at Dawn. When demands are greater than the upstream supply, gas is withdrawn from storage and transported to Union South in-franchise customers.

The role of meeting the entire design day needs for Union South resides within the storage and transmission system plans. The GSP is only a component of this broader exercise and only manages the average day supply needs for Union South sale service customers. To meet the design day requirements of the Union South in-franchise customers, Union must have a sufficient volume of gas in storage for the seasonal and design day demand requirements and sufficient transportation assets to move the upstream supply and gas out of storage into the transmission pipeline systems. If the transmission or storage assets are not sufficient to meet seasonal and design day requirements, Union will build additional assets or purchase services to meet this shortfall. Union's distribution systems are also designed to meet design day requirements.

Although the design degree day of 43.1 has not changed in Union South, the customers' demands on a design day have increased. The design day requirements in Union South have increased from 2,921 TJ/d in 2016/17 to 3,027 TJ/d in 2017/18. The resources available to meet Union's design day in Union South are shown in Figure 5.

<sup>&</sup>lt;sup>7</sup> EB-2013-0109, Exhibit C, Tab 2 and Tab 3

Figure 5

#### Winter 2017/2018 Design Day Union South Design Day Demand and Resources (TJ/day)

Demand	
Union South*	3,027
Comple	
Supply	
Storage at Dawn	1,684
Non-obligated (e.g. Power Plants)	278
TCPL Empress to Union CDA	3
Panhandle	37
Ojibway	21
TCPL Niagara	21
Ontario Parkway	214
Vector	84
Nexus	106
Ontario Dawn	580
Total Supply	3,027

<sup>\*</sup> includes Sales Service, Bundled Direct Purchase, T-service

#### 5.1.2 Union North Design Day

Union North design day demand is the total firm requirement of the in-franchise sales service and bundled DP customers in each of Union's six Northern delivery areas. Union does not include demand for customers with transportation service contracts as these customers are required to provide their own transportation services to meet their design day requirements.

The design day weather condition is based on the coldest observed degree day experienced in each of the six delivery areas. The design degree day for each Union North area is as follows:

51.6	Thunder Bay
54.7	Fort Frances
48.2	Sault Ste Marie
49.3	Muskoka / Gravenhurst
51.9	Sudbury
47.1	Kingston
	54.7 48.2 49.3 51.9

For Union North, the firm design day demand is a direct input into the GSP. Since there is no physical storage in the north, Union is required to purchase transportation services to move the firm design day demand from Parkway, Dawn or Empress to the delivery areas where the gas is consumed.

Union's Northern delivery areas are connected to TransCanada's Mainline and are physically separated from Union's Dawn storage and transmission pipeline assets.

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Therefore, Union requires firm transportation services to connect each of the six Northern delivery areas to a supply source.

Gas supply flows via TransCanada long-haul and short-haul firm transportation to meet Union North seasonal and annual demand requirements. As in Union South, the target is to fill Union North in-franchise storage at November 1 and provide sufficient inventory at February 28 to meet the design day withdrawal requirement.

The Union North gas supply portfolio also ensures sufficient firm transportation services are available to meet design day demand requirements in each delivery area. The full suite of assets is only used in each delivery area when a design day occurs. Since Union is required to contract for transportation services to meet design day demand, there are days when the pipe is not fully utilized. Union uses a portfolio of firm services and assets including TransCanada Firm Transportation ("FT"), TransCanada firm Storage Transportation Service ("STS") and other firm TransCanada services to meet its design day demand requirement.

Figure 6 illustrates what services and assets are relied on in the GSP to meet design day demand.

Figure 6
Union North Design Day Demand (TJ/Day)

	<b>MDA</b>	<u>WDA</u>	<b>SSMDA</b>	<u>NDA</u>	<b>NCDA</b>	<b>EDA</b>	Total
Demand							
Bundled Direct Purchase and Sales Service	6	84	40	148	37	163	479
T-Service Storage Redelivery	-	-	-	13	-	-	13
North Dawn T-Service	-	-	-	17	2	14	33
Peak Day Demand for the Region	6	84	40	178	39	178	524
Supply							
Long-haul from Empress							
Sales Service	6	45	18	6	6	1	83
Bundled Direct Purchase	-	6	3	1	3	-	13
Short-haul from Parkway							
Sales Service	-	-	-	35	2	42	79
Bundled Direct Purchase	-	-	-	8	-	16	24
North T-Service	-	-	-	17	2	14	33
Redelivery from Storage							
From Parkway							
STS Withdrawals	-	31	-	43	14	26	115
STS Pooled Withdrawals	-		-	-	13	-	13
Short-haul	-	-	-	67	-	52	119
Enhanced Market Balancing	-	-	-	-	-	25	25
From Dawn							
STS Withdrawals	-	-	19	-	-	_	19
Peak Day Supply to the Region	6	83	40	178	39	177	522
Excess(Shortfall) by delivery area		(1)	-	-	-	(1)	(2)

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The GSP has identified an additional 2 TJ/d requirement in Union North to meet design day requirements. The shortfall identified is in the EDA & WDA. The shortfall in the EDA is largely due to forecasted growth. The WDA shortfall is due to an increase in contract and sales service customers. Union is evaluating options to meet this additional requirement.

#### **5.2 Demand Forecast**

The GSP for 2017/18 is based upon the 2018-2020 weather normalized demand forecast for general service customers and contract rate classes as prepared by Union's demand forecasting team.

A comparison of the annual demand forecast included in the 2017/18 GSP relative to the 2016/17 GSP is provided in Figure 7.

Figure 7

#### **Union Demand Forecast**

Line		2016/17 Gas	2017/18 Gas		
No.	Particulars (TJ)	Supply Plan	Supply Plan	Variance	% change
		(a)	(b)	(c) = (b-a)	(d) = (c/a)
	<u>UNION SOUTH</u>				
1	General Service - Sales Service	130,396	129,423	(973)	
2	General Service - BT	11,540	11,371	(169)	
3	General Service - Unbundled	934	0	(934)	
4	General Service - ABC	22,027	20,585	(1,442)	
5	Sub-Total	164,897	161,379	(3,519)	-2.1%
6	Contract - Sales Service	2,371	3,829	1,457	
7	Contract - BT & ABC	43,054	45,521	2,467	
8	Sub-Total	45,426	49,350	3,924	8.6%
9	Total Union South (line 5 + line 8)	210,323	210,729	406	0.2%
	UNION NORTH				
10	General Service - Sales Service	40,597	40,443	(154)	
11	General Service - BT	3,906	4,052	147	
12	General Service - ABC	6,423	5,758	(665)	
13	Sub-Total	50,926	50,254	(672)	-1.3%
14	Contract - Sales Service	3,672	2,337	(1,335)	
15	Contract - BT	3,526	3,564	37	
16	Sub-Total	7,199	5,901	(1,298)	-18.0%
17	Total Union North (line 13 + line 16)	58,125	56,155	(1,970)	-3.4%
18	Total Union Forecast Demand (line 9 + line 17)	268,448	266,883	(1,564)	-0.6%

The annual general service forecast has decreased by 3,519 TJ in Union South and 672 TJ in Union North due to consumption savings more than offsetting customer growth.

The total annual contract market has increased by 3,924 TJ in Union South and decreased by 1,298 TJ in Union North. The increase in Union South is a result of forecasted growth from the Panhandle Reinforcement Project. The decrease in Union North is due to lower forecasted consumption by Rate 25 sales service.

Union continues to see a migration of customers from DP to sales service. A comparison of the number of sales service and DP customers in the 2017/18 GSP relative to the 2016/17 GSP is provided in Figure 8.

Figure 8

Number of Customers by Service classification - Union South

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	2016/17 Forecast	<b>2017/18 Forecast</b>	Variance	)I <u>3.</u>
Sales Service	1,023,721	1,058,787	35,066	
Bundled DP	78,453	68,395	(10,058)	
Unbundled DP	8,577	0	(8,577)	
Total	1,110,751	1,127,182	16,431	

Union South is required to purchase additional supply for the increased demand due to the return to sales service supply. Union holds upstream pipeline transportation capacity for both sales service and bundled DP customers in Union North so no additional transportation capacity is required resulting from a customer's return to system.

The gas demand/supply balance for sales service customers for the 2017/18 GSP is provided in Appendix B.

#### 5.3 Transportation Portfolio

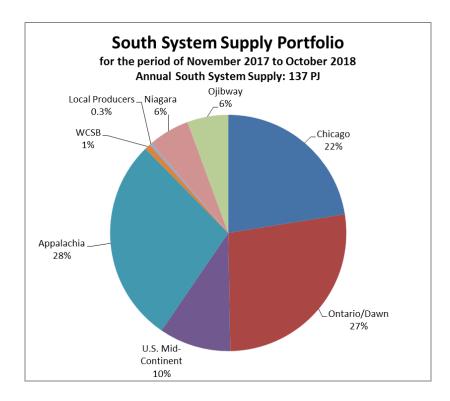
Union holds a combination of firm transportation contracts, Dawn sourced supply and storage capacity to meet the forecasted annual demand. Firm transportation services provide direct and secure access to a diverse group of supply basins and market hubs in North America.

#### **Union South**

For Union South, Union holds firm transportation contracts and sources supply at Dawn to meet average annual demand requirements. Union utilizes capacity on multiple upstream pipelines to access several supply basins or market hubs. These pipelines provide access to supplies in Western Canada, Chicago, the U.S. mid-continent and Appalachia. The GSP also includes Dawn purchases as part of the Union South supply portfolio. Figure 9 demonstrates the sources of supply underpinned by Union's transportation portfolio for Union South sales service customers. The following pie charts represent Unions upstream transportation portfolio included in the GSP. Refer to Section 5.5 for changes that have occurred since the creation of the plan.

Figure 9

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#### **Union North**

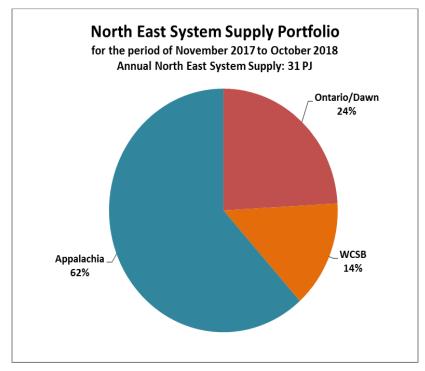
In Union North, Union's plan uses various transportation services to meet sales service and bundled DP customer annual demands.

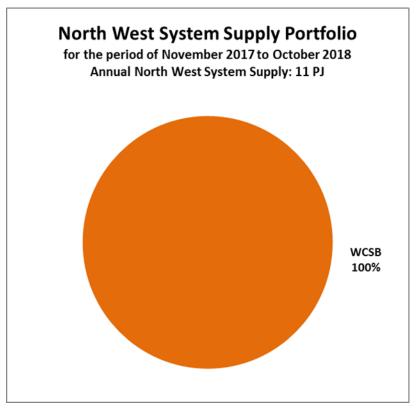
In order to meet the annual demand requirements for Union North East sales service customers, Union utilizes capacity on multiple upstream pipelines providing access to supplies in Western Canada and Appalachia. The GSP also includes Dawn purchases as part of the Union North East supply portfolio.

In order to meet the annual demand requirements for Union North West sales service customers, Union must utilize capacity on the TransCanada Mainline, the only pipeline available, providing access to supplies in Western Canada.

Figure 10 demonstrates the sources of supply underpinned by Union's transportation portfolio for Union North East and North West sales service customers.

Figure 10





The GSP reflects the effective management of TransCanada capacity by:

- Using TransCanada STS injections, which allow Union to transport excess supply away from Union North to Parkway to be injected into Dawn storage in the summer;
- Using TransCanada STS withdrawals and Enhanced Market Balancing service in the winter months to serve weather-driven demands. Gas is withdrawn from Dawn storage throughout the winter and is transported back to Union North without the need for contracting additional TransCanada FT capacity to that delivery area; and,
- Using contractual STS pooling rights to group all of Union's STS rights serving the various Union North delivery areas. This provides Union with the flexibility to serve certain delivery areas in Union North with gas service in excess of that delivery area's specific STS rights.

#### 5.4 Unabsorbed Demand Charges ("UDC")

In Union North, the upstream transportation portfolio is first sized to meet the design day demand requirement. The amount of supply needed to be transported on the upstream long-haul and short-haul capacity to meet average annual demand requirements is less than the capacity needed to meet design day requirements. As a result, a portion of Union's contract capacity is planned to be unutilized during the year. The difference between total contracted capacity and total demand for both Union North sales service and bundled DP customers results in unutilized capacity. Subject to finalizing and contracting the transportation capacity required to meet the design day shortfall, the total planned UDC is 16.3 PJ in the 2017/18 GSP. If weather is colder than normal and annual consumption is greater Union will use this capacity to meet incremental supply requirements. Figure 11 shows the total planned UDC by delivery area.

Figure 11
Unabsorbed Demand Charge (UDC) (PJ) (W17/18)

Delivery Area	Long-haul	Short-haul	Total
North West			
MDA	1.5	-	1.5
WDA	10.6	-	10.6
SSMDA	1.8	-	1.8
North East			
NDA	0.2	1.5	1.7
NCDA	0.2	-	0.2
EDA	-	0.6	0.6
	14.2	2.1	16.2

The GSP forecasts a 100% load factor on all upstream transportation landing at Dawn.

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## 5.5 Changes in Upstream Transportation Portfolio

## Panhandle Eastern Pipe Line Company, LP

Union has contracted for the following firm renewable capacity from the Panhandle Field Zone to Ojibway:

- 35,000 Dth/d November 1, 2017 through October 31, 2025
- 22,000 Dth/d November 1, 2019 through October 31, 2027

#### **NEXUS Gas Transmission, LLC**

Union has committed to holding 150,000 Dth/d of firm renewable capacity from Kensington to the interconnection with Union's system at St. Clair. Union allocates 50,000 Dth/d of capacity to serve Union North East sales service customers and the remaining 100,000 Dth/day of capacity to serve Union South sales service customers. This capacity will have a 15 year term, and will commence once the NEXUS pipeline project is in service.

The GSP assumed a November 1, 2017 in-service date for the NEXUS pipeline project. Please refer to Section 6.6 for an update on the NEXUS project status, and Union's contingency plan to address delays in the NEXUS project beyond November 1, 2017.

#### **Gas Supply Plan Pipeline Renewal Assumptions**

The GSP assumes that all pipeline capacity contracted with renewal rights will continue to be available in the future, unless Union has elected turn-back or automatic conversion rights (i.e. TransCanada long-haul to short-haul pipeline conversions).

The GSP assumes all capacity Union was awarded in TransCanada's 2017 New Capacity Open Season ("NCOS") and 2018 NCOS is in-service as of November 1, 2017 and November 1, 2018, respectively. Please refer to Section 6.3 for an update on the TransCanada 2017 NCOS and the associated Vaughn Mainline Expansion project. In order to affect changes for the November 1, 2018 short-haul contracts awarded, the GSP assumes 5,602 GJ/d of Empress to Union NDA capacity is turned back to TransCanada effective October 31, 2018.

#### **Dawn Supply Requirements**

The GSP identifies the total amount of supply required to meet the sales service forecasted demands. This supply requirement is typically greater than the upstream transportation capacity under contract at any point in time. A supply requirement not met by an existing upstream transportation arrangement is referred to as an uncommitted supply requirement and is assumed to be supplied at Dawn.

The GSP has identified Dawn supply requirements for 2017/18 of approximately 102 TJ/d Union South and 21TJ/d for Union North East.

Union will, as part of an ongoing process, evaluate the portfolio to ensure it meets the needs identified in the GSP. This includes monitoring the impacts of in-service delays for new transportation projects and evaluating all available transportation alternatives. Maintaining an uncommitted position allows Union flexibility to secure additional upstream transportation capacity as warranted.

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A complete listing of the transportation capacity currently contracted for Union South and Union North is provided at Appendix C and D.

#### 5.6 Cost of Gas

The transportation tolls and gas prices utilized in the development of the GSP are consistent with those used to set the April 2017 QRAM commodity price. Union then established specific prices for each supply location taking into account the various basis differentials and the foreign exchange rate.

As part of Union's Incentive Rate Mechanism Settlement Agreement<sup>8</sup>, Union stated in Section 4.7.1, that the cost of gas supply, upstream transportation and gas supply balancing would continue to be passed through to customers through the QRAM. Union reflects updated transportation tolls and forecasted gas commodity in rates through the QRAM process. Variances in actual gas supply costs and transportation tolls relative to forecasted gas supply costs and transportation tolls reflected in rates are captured in Union's gas supply deferral accounts. Union includes the prospective disposition of gas supply related deferral accounts in the QRAM process.

#### **5.7 Bundled DP Customer Assumptions**

The GSP includes all bundled DP customer demand and the corresponding supply based on their Daily Contract Quantities ("DCQ"). Union is unable to predict customer migration between sales service and bundled DP. Therefore, for the term of the GSP, customers are assumed to remain with the service they elected effective January 2017.

On an ongoing basis throughout the year, Union continues to monitor the migration between bundled DP and sales service supply. As customers return to sales service supply, Union proactively manages the expected supply requirements by filling any pipe that is returned to Union when the customer returns to sales service supply. In addition, each month, Union purchases incremental supply for demand that is returned without underlying pipe based on forecast activity for the balance of the gas year.

#### 5.8 Storage

Union operates 178 PJ of underground natural gas storage. Consistent with the Natural Gas Electricity Interface Review Decision<sup>9</sup>, the allotment of storage space to in-franchise customers is 100 PJ. For the 2017/18 GSP, the in-franchise space requirement is 93.2 PJ. This leaves 6.8 PJ of excess in-franchise space which is available for S&T short term sales. This is a decrease of 0.4 PJ in the space required for in-franchise needs when compared to the 93.6 PJ in the 2016/17 GSP. The decrease in in-franchise storage is due to a decrease in demands (See Figure 7).

The in-franchise space of 93.2 PJ is provided to in-franchise customers to meet the storage requirements of sales service, bundled DP and T-Service customers. The amount available to

<sup>&</sup>lt;sup>8</sup> 2014-2018 Incentive Regulation (EB-2013-0202)

<sup>&</sup>lt;sup>9</sup> Natural Gas Electricity Interface Review ("NGEIR") (EB-2005-0551)

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in-franchise customers is based on the storage allocation methodologies approved by the OEB as part of the Natural Gas Storage Allocation Policies Decision<sup>10</sup>.

The storage space available to sales service and bundled DP customers in Union South and Union North is determined using the OEB-approved aggregate excess methodology.

This methodology calculates the difference between the forecasted winter demand (November 1 through March 31) and the annual average daily demand for a 151 day period. The result is the required storage space allocation.

Aggregate Excess = Forecasted Winter Consumption – [(151/365)\*(Total Annual Consumption)]

Union South T-service customers determine which methodology is used to calculate their contracted storage space parameter. The two methodologies available to a Union South T-service customer are: aggregate excess or 15 x obligated DCQ.

#### 5.9 Conclusion

Adhering to the gas supply guiding principles, Union continues to establish a GSP that is right sized to meet firm sales service and bundled customer demands with a diverse, flexible, secure, reliable and cost effective portfolio of firm services and assets. Union's gas supply planning process incorporates demand related items such as customer growth, normalized weather, design day requirements, customer consumption patterns and economic outlooks. Union plans and contracts for services and assets to provide an efficient combination of upstream transportation, supply purchases and storage assets to serve sales service and bundled DP customers' annual, seasonal and design day gas delivery requirements.

As supply and transportation market options change, so does Union's supply mix and how it is transported to Ontario. Union continues to proactively evaluate new supply and transportation options for Union North and Union South customers. Unchanged, however, is Union's application of the gas supply planning principles and the requirement to ensure secure, reliable supplies to serve its customers at prudently incurred costs.

## 6. FUTURE TRENDS THAT MAY IMPACT THE GAS SUPPLY PLAN

Union monitors the North American natural gas industry and identifies how trends may impact Union's future gas supply portfolio.

#### **6.1 Distributor Gas Supply Planning Consultation**

In October 2015, the OEB initiated a consultation on distributor gas supply planning<sup>11</sup>. Specifically, the consultation focused on gas supply and transportation planning strategies and the risk/cost trade-offs considered in the GSP. Union and Enbridge each presented an overview of their Gas Supply Planning Process and subsequently, provided a side-by-side

<sup>&</sup>lt;sup>10</sup> NGEIR Integration (EB-2007-0724/0725)

<sup>&</sup>lt;sup>11</sup> EB-2015-0238

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comparison document of their gas supply and transportation planning processes. OEB staff facilitated a discussion on the comparison document with interested parties in March 2016.

OEB Staff prepared a report on specific matters raised in the consultation, providing recommendations the OEB may wish to consider in determining whether any changes to the regulatory framework were warranted. This report was provided to the OEB on August 12, 2016.

OEB Staff recommendations for the OEB to consider were:

- Increased Accountability: Gas distributors should apply for pre-approval of their gas supply planning framework on a stand-alone basis, separate from other applications.
- Increased Transparency: Gas distributors should submit a gas supply memoranda annually on a stand-alone basis.
- Performance Measurement: The new memoranda should include a report card on the
  performance of the GSP over the previous three years along with a forecast of the
  forward looking three years.

On March 16, 2017, the OEB launched an initiative to develop a Framework for the Assessment of Distributor Gas Supply Plans ("Framework").

The Framework will establish the OEB's expectations and objectives for distributor gas supply plans and clearly articulate the approach the OEB will take to assess whether the plans meet those objectives. The development of the Framework will also address what role Renewable Natural Gas ("RNG") should play in the system gas supply portfolios of distributors.

To assist OEB Staff in developing a draft Framework for consideration, a Working Group was established. The Working Group has been designed to ensure that there is a balanced and broad representation of relevant interests with a focus on bringing the appropriate level of expertise on the issues.

Three Working Group meetings have been conducted by OEB Staff. The first two Working Group meetings, focused on RNG, while the third focused on the broader framework for the assessment of distributor gas supply plans.

OEB Staff intends to prepare an initial draft of the Framework by fall 2017 for discussion with stakeholders, and anticipates a final Framework will be completed by the end of 2017.

## **6.2 Renewable Natural Gas ("RNG")**

RNG is an alternative to conventional gas supply, is non-emitting, and can be stored, transmitted and distributed using the existing natural gas infrastructure. RNG is produced by capturing methane that results from the decay of any organic matter. Some examples of RNG include landfill and waste water treatment plant gas.

In developing a Framework for the Assessment of Distributor Gas Supply Plans, OEB Staff identified RNG as an issue that the Working Group would focus on. The issues discussed by the Working Group as it relates to RNG include:

Understanding the current RNG marketplace and sources in Ontario;

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- Drivers for inclusion of RNG in the system gas supply plan;
- Availability and reliability of supply of RNG that should be taken into consideration in developing the Framework;
- What are the barriers and enablers to including RNG in the supply mix; and,
- What key metrics should the OEB utilize to help inform the appropriate contribution to the supply mix.

Union has identified RNG as a potential future customer abatement program. Union and Enbridge have jointly been working with the Ministry of Environment and Ministry of Environment and Climate Change to define program structure for advancing these technologies. These programs will require support from the government in order to proceed, including the use of Climate Change Action Plan ("CCAP") funding. This is an example of an instance where collaboration between utilities, government and regulators can advance technologies and programs in order to reduce greenhouse gas ("GHG") emissions.

Union has not included any specific RNG in its GSP for the 2017/18 gas year. To the extent that programs discussed above advance and RNG is available to include in Union's GSP, Union will adjust its gas supply purchases accordingly.

#### 6.3 Dawn to Parkway and Vaughan Mainline Expansion Project

In December 2015, the OEB approved the Settlement Proposal for Union's 2017 Dawn Parkway project. This project was approved to meet the growing Demand on the Dawn to Parkway system. The Vaughan Mainline Expansion Project will provide takeaway capacity for a portion of the new Dawn to Parkway capacity. Union's 2017 Dawn to Parkway project is under construction and is on schedule to be in service by or before November 1, 2017.

In August 2016, the National Energy Board ("NEB") approved the 11.7 km Vaughan Mainline Expansion Project, which will increase capacity of the TransCanada Mainline between Parkway and Maple, enabling Ontario natural gas customers further access to new emerging supply sources. The project is currently under construction. Due to construction challenges, the targeted in-service date has changed from November 1, 2017 to mid to late November 2017. This delay will not have a material impact on the GSP as the majority of the capacity Union secured will be used to facilitate the North T-Service from Dawn Service. Union has contracted 7,000 GJ/d of new capacity and 887 GJ/d of long-haul to short-haul conversion capacity that is related to this project.

#### 6.4 New Sources of Supply at Dawn

On February 22, 2017, TransCanada conducted a Long Term Fixed Price ("LTFP") open season for TransCanada Mainline transportation service from Empress to Dawn at a discounted, fixed rate. The service was subscribed by 23 Western Canadian producers at an aggregate volume of 1.5 PJ/d and is proposed to be in-service by November 1, 2017. On September 21, 2017 the NEB released a Decision approving TransCanada's Dawn LTFP service. This service does not represent a new infrastructure build to Dawn, but rather long term commitments by counterparties on existing pipeline infrastructure that will bring new suppliers to Dawn.

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The Rover Pipeline (anticipated to be in-service December 2017) and NEXUS pipeline (anticipated to be in-service late third quarter 2018) projects, both of which have been approved by the Federal Energy Regulatory Commission ("FERC") will provide new infrastructure between Appalachian producers and Dawn.

These new sources of supply at Dawn will provide Union additional counterparties to transact with when sourcing Dawn supplies to meet the needs of the gas supply portfolio.

#### 6.5 Panhandle Transmission System

## **Panhandle Reinforcement Project**

In the Panhandle Reinforcement Project<sup>12</sup>, Union proposed to increase the capacity of Union's Panhandle Transmission System to meet residential, commercial and industrial growth in Windsor-Essex, Chatham-Kent and surrounding areas, including the fast growing greenhouse market in the Leamington/Kingsville area. The current Panhandle Transmission System is nearing its design day capacity and the project is required to meet the continued reliable delivery of natural gas to this growing market.

On February 23, 2017, the OEB approved the Panhandle Reinforcement Project leave to construct and recovery of costs associated with the project. The project involves replacing 40 kilometres of the existing NPS 16 pipeline from Dawn to Dover Transmission with a new NPS 36 pipeline along with related modifications at other transmission stations. The project is expected to meet the firm demands in this area for the next five years. The project is currently under construction and is targeted to be in-service November 2017.

#### **Kingsville Transmission Reinforcement Project**

Union continues to forecast robust firm transportation growth along the entire Panhandle Transmission System. To accommodate this growth, in late June 2017, Union announced an invitation of environmental study for the proposed Kingsville Transmission Reinforcement Project ("KTRP"). The proposed pipeline, up to NPS 20, is approximately 17 km in length and will begin at Union's existing NPS 20 Panhandle Pipeline, and end at a new valve site located in the Town of Kingsville. KTRP will provide high pressure gas to the distribution network, reducing the capacity constraint on the Panhandle Transmission System and avoiding major distribution expansion in the area.

Union's leave to construct application is expected to be filed with the OEB in early 2018 with a target in-service date of November 1, 2019.

#### 6.6 NEXUS

In 2015, Union entered into an agreement to contract, subject to certain conditions precedent, for long-term transportation capacity for 15 years with the NEXUS Pipeline commencing November 1, 2017. The total volume of the contract is 150,000 Dth/d, which qualifies Union as an anchor shipper. Union has received pre-approval of the cost consequences of the NEXUS contract<sup>13</sup>.

<sup>&</sup>lt;sup>12</sup> Panhandle Reinforcement Project (EB-2016-0186)

<sup>&</sup>lt;sup>13</sup> Pre-Approval of NEXUS Long-Term Contract (EB-2015-0166), Decision and Order

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The NEXUS Pipeline is designed to transport supplies of Appalachian shale gas production, from the single largest and fastest growing supply basin in North America to customers in Ohio, Michigan, and ultimately the Dawn Hub; creating a direct connection from the largest source of natural gas on the continent to Ontario.

## **NEXUS Project Update:**

On August 25, 2017, the NEXUS project received FERC approval to proceed with construction. NEXUS is anticipated to be in-service late third quarter 2018. Union has been proactively planning for a delay in NEXUS in-service and has executed on a contingency plan for the 17/18 winter.

#### **NEXUS Contingency Planning:**

As part of an ongoing process, Union evaluates the portfolio to ensure it meets the needs identified in the GSP. This includes monitoring the impacts of in-service delays for new transportation projects.

In order to backstop delays to the NEXUS in-service date, Union has secured alternate upstream contracts to replace the NEXUS transportation capacity. Union has increased its DTE/MichCon capacity by 30,000 Dth/day to hold 90,000 Dth/day of capacity until NEXUS is in-service. This DTE/MichCon contract expiry is tied to the earlier of the NEXUS inservice date or October 31, 2018. Union also secured 60,000 Dth/day of capacity on Vector Pipeline for November 1, 2017 through March 31, 2018. This combination of DTE/MichCon and Vector capacity will fully backstop the 150,000 Dth/day of NEXUS capacity for the winter of 2017/18.

### 6.7 TransCanada Energy East Project

As part of the Energy East Project, TransCanada has proposed to convert an existing natural gas pipeline to oil service between Alberta and Ottawa. Union supports the project in principle, but was initially concerned that there may be negative impacts on natural gas consumers in Ontario and Québec, based on the conversion of an existing natural gas pipeline between North Bay and Ottawa. This converted natural gas capacity is proposed to be partially replaced with a new pipeline between Toronto and Ottawa (the "Eastern Mainline Project").

In August 2015, TransCanada, Union, Enbridge, and Gaz Métro announced that an agreement in principle was reached that resolved the concerns regarding the potential negative impacts the proposed Energy East Project may have on natural gas consumers in Ontario and Québec.

The agreement included commitments that:

- There will be sufficient capacity to meet the firm natural gas transportation requirements of Ontario and Québec (including all firm demands out to 2017), plus additional capacity for future growth;
- Natural gas shippers are not required to financially backstop the development of the Eastern Mainline Project in the event it is terminated by TransCanada;

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- Gas consumers will not assume the risk of capital cost overruns for the Eastern Mainline Project; and,
- Natural gas consumers will have a net benefit of \$100 million over the project life to 2050.

TransCanada filed the executed agreement with the NEB in November 2015, and its consolidated Energy East Project application, which encompassed the terms of the agreement, in May 2016.

In September 2016, the NEB review panel assigned to the Energy East and Eastern Mainline Projects recused themselves from the proceeding. The review process was put on hold. In January 2017, a new review panel was assigned to the projects, and subsequently voided all decisions that had been made by the previous panel, effectively restarting the review process. Throughout the middle of 2017, public consultations were held to obtain input regarding the scope of the assessment to be undertaken and hearing design.

On September 8, 2017, the NEB granted TransCanada's request for a 30-day suspension of the review process for TransCanada to evaluate the final List of Issues and Environment Assessment Factors issued by the NEB, and the resulting impacts on the Projects and the respective project applications.

#### **6.8 TransCanada STS Changes**

TransCanada filed its "Storage Transportation Service Modernization and Standardization Application" ("STS Application") with the NEB on February 18, 2016. TransCanada's Application sought to alter how STS is tolled, which would have resulted in a significant increase to Union's costs to serve its customers in Union North.

The proceeding occurred from April 22 to August 29, 2016. During that time, TransCanada and interveners had the opportunity to file evidence, information requests and letters of comment according to the detailed timetable provided in the NEB's Hearing Order.

The NEB issued its Decision on the STS Application in November 2016, denying the requested changes to STS at this time. As a result, there were no impacts to Union's STS costs in Union North.

#### **6.9 2018–2020 Mainline Tolls**

TransCanada is required to file an Application with the NEB by December 31, 2017 for approval of Mainline tolls for the 2018-2020 period. Mainline tolls have a direct impact on Union's cost of gas. A preliminary consultation process between TransCanada and its shippers regarding 2018-2020 tolls is currently underway.

## **6.10 Long Term Contracting Trends**

There are several areas of constraint in the North American pipeline system requiring new builds and/or longer term (and/or maximum rate) contracts to secure capacity. Such examples include, NEXUS Pipeline (new), Panhandle Eastern Pipe Line (existing but becoming constrained), TransCanada Eastern Triangle, Niagara/Chippawa, and Vector into Dawn.

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While LDC's need to make long term commitments to secure access to new transportation capacity builds, they also can be required to extend commitments as the holder of an existing contract on systems being expanded. As pipelines undergo expansions to respond to market need, they will often require existing shippers to term up their existing contracts to retain access to the capacity beyond their current contract term. Union has had to extend the end dates of contracts on the TransCanada system in the past as a result of system expansions, and may be required to do so should further facilities expansions occur.

Areas of constraint are expected to continue into the future as political, environmental, and regulatory challenges make construction of new greenfield pipeline projects increasingly difficult, particularly in urban areas and in the U.S. Union continues to evaluate all supply sources and pipeline capacity to ensure that Union maintains diversity and security of supply.

### **6.11 Climate Change**

The Ontario Cap and Trade program came into effect on January 1, 2017 with the purpose of reducing GHG emissions in Ontario. It covers natural gas distributors (and others) and puts a price on certain carbon emissions. Union is required to purchase emission allowances/credits for:

- Facility-related obligations for Union owned or operated facilities; and,
- Customer-related obligations for natural gas-fired generators, residential, commercial and industrial customers in the franchise area who are not Large Final Emitters or voluntary participants.

In accordance with the Regulatory Framework for the Assessment of Costs of Natural Gas Utilities' Cap and Trade Activities (EB-2015-0363) issued by the Ontario Energy Board on September 26, 2016, Union filed its 2017 Compliance Plan on November 15, 2016 outlining the company's activities and cost consequences to implement and comply with the Cap and Trade regulations. On September 21, 2017 Union's Compliance Plan was found reasonable by the OEB. Union expects to file its 2018 Compliance Plan in the fall of 2017.

Union does not expect a material impact on its operations or GSP in the short or medium term from the Cap and Trade program and the CCAP<sup>14</sup>. Longer term impacts of the Cap and Trade program on Union's GSP remain uncertain. Initiatives being considered to reduce emissions in support of the province's GHG reduction targets could have varying impacts on the GSP including:

- Displacement of fossil-based natural gas with RNG;
- Compressed Natural Gas/Liquefied Natural Gas ("CNG"/"LNG") for Transportation;
- Energy efficiency initiatives (such as DSM programs) to reduce the carbon footprint of natural gas consumers throughout Ontario;
- The wider use of natural gas Combined Heat & Power ("CHP") systems; and,
- Natural Gas-related innovation.

<sup>&</sup>lt;sup>14</sup> Panhandle Reinforcement Project (EB-2016-0186)

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## 7 APPENDICES

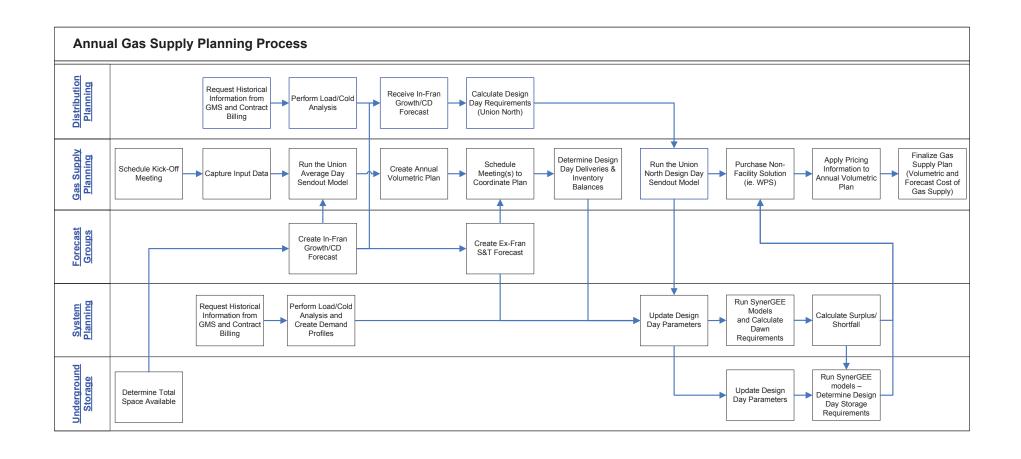
Appendix A - Gas Supply Planning Process

Appendix B - Sales Service Gas Supply Demand Balance

Appendix C - Union South Detailed List of Transportation Contracts

Appendix D - Union North Detailed List of Transportation Contracts

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# Appendix B Union Gas Limited - System Sales Supply Demand Balance - November 2017 to October 2018

Particulars (TJ)	<u>Nov-17</u>	<u>Dec-17</u>	<u>Jan-18</u>	Feb-18	<u>Mar-18</u>	<u>Apr-18</u>	<u>May-18</u>	<u>Jun-18</u>	<u>Jul-18</u>	<u>Aug-18</u>	<u>Sep-18</u>	Oct-18	<u>Total</u>
South  Demands  System Sales  South Co. Use, UFG, Comp. Fuel	13,103 1,066	20,407 1,527	23,558 1,491	20,849 1,976	17,149 1,287	11,059 565	5,807 342	3,263 342	3,430 513	3,393 485	3,925 553	7,308 495	133,252 10,641
Less: Customer Supplied Fuel Total Demands	(788) 13,382	(1,006) 20,928	(1,182) 23,867	(1,020) 21,805	(775) 17,661	(466) 11,159	(294) 5,855	(291) 3,314	(322) 3,621	(306) 3,572	(273) 4,205	(322) 7,480	(7,045) 136,847
Supplies													
TCPL Empress-Union CDA Vector	90 2,532	93 2,617	93 2,617	84 2,363	93 2,617	90 2,532	93 2,617	90 2,532	93 2,617	93 2,617	90 2,532	93 2,617	1,095 30,807
TCPL Niagara-Kirkwall Panhandle	633 1,108	654 1,145	654 1,145	591 1,034	654 1,145	633 1,108	654 1,145	633 1,108	654 1,145	654 1,145	633 1,108	654 1,145	7,702
Local Production	38	40	40	36	40	38	40	38	40	40	38	40	13,478 465
South Ojibway	633	654	654 3,237	591	654	633	654	633	654	654 3,184	633	654	7,702
Dawn Nexus	3,237 3,165	3,237 3,271	3,23 <i>1</i> 3,271	2,821 2,954	3,237 3,271	3,396 3,165	2,503 3,271	3,081 3,165	3,184 3,271	3,184 3,271	3,081 3,165	3,184 3,271	37,384 38,510
Total Supplies	11,436	11,710	11,710	10,474	11,710	11,596	10,975	11,281	11,657	11,657	11,281	11,657	137,144
Change in Inventory - wd/(inj) Total Supplies + Inventory Change	1,946 13,382	9,218 20,928	12,157 23,867	11,331 21,805	5,950 17,661	(437) 11,159	(5,121) 5,855	(7,967) 3,314	(8,036) 3,621	(8,085) 3,572	(7,076) 4,205	(4,177) 7,480	(297) 136,847
North Demands System Sales													
Union NCDA	357	515	634	535	452	278	142	85	79	77	92	206	3,451
Union EDA Union MDA	1,309 50	1,890 74	2,314 93	1,949 75	1,661 63	1,048 38	550 19	328 11	307 10	312 9	348 12	778 28	12,794 482
Union NDA	1,492	2,149	2,622	2,183	1,837	1,129	592	356	332	337	399	853	14,282
Union SSMDA Union WDA	423 785	729 1,122	659	578 1,165	498 990	291 616	147 326	94 209	120 200	184 190	95 202	277 457	4,096 7,675
North Comp Fuel	10	3	1,414 10	1,165 5	3	15	32	31	32	32	31	32	7,675 235
Ī	4,427	6,481	7,744	6,490	5,505	3,416	1,809	1,114	1,080	1,139	1,179	2,631	43,015
Supplies	404	407	407	400		404	407	404	407	407	404	407	0.040
TCPL Empress-Union NCDA TCPL Empress-Union EDA	181 30	187 31	187 31	169 28	-	181 30	187 31	181 30	187 31	187 31	181 30	187 31	2,013 334
TCPL Empress-Union MDA	52	79	99	81	68	38	17	7	5	4	8	26	483
TCPL Empress-Union NDA TCPL Empress-Union SSMDA	189 440	195 <b>5</b> 70	195	177 -	-	189 552	196 570	189 552	196 570	196 570	189 552	196 571	2,106 4,948
TCPL Empress-Union WDA	919	1,221	982	399	85	708	375	220	198	193	224	521	6,044
TCPL Parkway-Union EDA TCPL Parkway-Union NDA	677 52	531 226	634 128	536 152	-	92 34	86 85	560 178	565 202	686 77	563 174	547 231	5,478 1,538
TCPL Parkway-Union NCDA	50	48	44	38	-	36	50	50	48	52	52	38	506
Nexus Total Supplies	1,583 4,172	1,635 4,723	1,635 3,935	1,477 3,056	1,635 1,788	1,583 3,443	1,635 3,231	1,583 3,550	1,635 3,637	1,635 3,632	1,583 3,557	1,635 3,982	<b>19,255</b> 42,706
Change in Inventory - wd/(inj) Total Supplies + Inventory Change	255 4,427	1,758 6,481	3,809 7,744	3,434 6,490	3,717 5,505	(27) 3,416	(1,423) 1,809	(2,436) 1,114	(2,557) 1,080	(2,492) 1,139	(2,378) 1,179	(1,351) 2,631	309 43,015
Total Demands	1,121	0,101	7,7 11	0,100	0,000	0,110	1,000	1,111	1,000	1,100	1,170	2,001	10,010
South	13,382	20,928	23,867	21,805	17,661	11,159	5,855	3,314	3,621	3,572	4,205	7,480	136,847
North	4,427 17,808	6,481 <b>27,409</b>	7,744 31,611	6,490 <b>28,295</b>	5,505 <b>23,165</b>	3,416 <b>14,575</b>	1,809 <b>7,664</b>	1,114 4,428	1,080 <b>4,701</b>	1,139 <b>4,711</b>	1,179 <b>5,383</b>	2,631 <b>10,111</b>	43,015 179,862
Total Supplies	•						•						·
South North	11,436 4,172	11,710 4,723	11,710 3,935	10,474	11,710 1,788	11,596 3,443	10,975 3,231	11,281 3,550	11,657 3,637	11,657 3,632	11,281 3,557	11,657 3,982	137,144 42.706
<del>-</del>	15,608	16,434	15,645	3,056 13,530	13,498	15,039	14,207	14,830	15,294	15,289	14,837	15,639	42,706 179,850
Change in Inventory - wd/(inj) South	1,946	9,218	12,157	11,331	5,950	(437)	(5,121)	(7,967)	(8,036)	(8,085)	(7,076)	(4,177)	(297)
North _	255	1,758	3,809	3,434	3,717	(27)	(1,423)	(2,436)	(2,557)	(2,492)	(2,378)	(1,351)	309
_	2,200	10,975	15,966	14,765	9,668	(465)	(6,543)	(10,403)	(10,592)	(10,578)	(9,454)	(5,528)	13
Total Supplies + Inventory Change	17,808	27,409	31,611	28,295	23,165	14,575	7,664	4,428	4,701	4,711	5,383	10,111	179,862

#### **Gas Supply Plan Memorandum** Appendix C

#### **UNION GAS LIMITED**

Summary of November 1, 2017 Upstream Transportation Contracts as of September 2017

Filed: 2017-09-26 EB-2017-0087 Exhibit A Tab 3 Appendix C

#### **Southern Operations Areas**

Line <u>No.</u>	<u>Upstream Pipeline</u>	Primary Receipt Point (a)	Primary Delivery Point (b)	Contract Quantity ( c)	Contract Units (d)	Contract Termination Date (e)	Unitized Demand Charge (\$Cdn/GJ) (f)	Commodity Charge (\$Cdn/GJ) (g)	100% LF Toll (\$Cdn/GJ) (h=f+g)	Rate Type
	TransCanada Pipeline	(α)						(9)	. 0,	
1	Empress to Union ECDA FT	Empress	Union ECDA	3,000	GJ	31-Oct-2019	1.990		1.990	Tariff
2	Dawn to Union CDA FT	Dawn	Union ECDA	8,000	GJ	31-Oct-2019	0.339		0.339	Tariff
3	Niagara to Kirkwall FT	Niagara	Kirkwall	21,101	GJ	31-Oct-2022	0.230		0.230	Tariff
4	Kirkwall to Union CDA FT	Kirkwall	Union CDA (Amended)	135,000 167,101	GJ GJ	31-Oct-2032	0.162		0.162	Tariff
5	TCPL FT - Total			167,101	GJ					
	Panhandle Eastern Pipe Line Field Zone									
6	PEPL FT <sup>(1)</sup>	Panhandle Field Zone	Ojibway (Union)	25,000	DTH	31-Oct-2025	0.425	0.044	0.469	Tariff
7	PEPL FT (2)	Panhandle Field Zone	Ojibway (Union)	10,000	DTH	31-Oct-2027	0.425	0.044	0.469	Tariff
8	PEPL - Total		•	36,927	GJ					
	(3)									
_	Vector Pipelines <sup>(3)</sup>	Chicago	Cdn/US Interconnect	90,000	DTH	31-Oct-2022	0.279	0.000	0.004	Fixed
9	Vector US FT1 <sup>(4)</sup>	Chicago		80,000				0.002	0.281	
10	Vector Canada FT1 Vector - Total	Cdn/US Interconnect	Dawn (Union)	84,404 84,404	GJ GJ	31-Oct-2022	0.019 0.298	0.0004 0.002	0.019	Fixed
11	vector - rotal			04,404	GJ		0.296	0.002	0.300	
12	Vector US FT1	Chicago	Cdn/US Interconnect	60,000	DTH	31-Mar-2018	0.207	0.002	0.209	Fixed
13	Vector Canada FT1	Cdn/US Interconnect	Dawn (Union)	63,303	GJ	31-Mar-2018	0.011	0.0004	0.011	Fixed
14	Vector - Total		,	63,303	GJ		0.218	0.002	0.220	
	DTE Gas Company									
15	DTF <sup>(5)</sup>	MichCon Generic	St. Clair (Union)	90,000	DTH	31-Oct-2018	0.067		0.067	Fixed
16	DTE - Total		` '	94,955	GJ					
	NEXUS									
	NEXUS - FT <sup>(6)(7)</sup>	Kensington	St. Clair (Union)	150,000	DTH	01-Nov-32	0.915		0.915	Fixed
	• 1			158,258	GJ					
17	Other: St.Clair Pipelines L.P. (St.Clair Pipeline)	Ct Clair/Intl Darder	St. Clair/Intl Border	214 000	GJ	24 Oct 2022	0.004		0.004	Tariff
17	St. Ciaii Fipeiiries L.P. (St. Ciaii Fipeiirie)	St. Clair/Intl Border	St. Ciali/IIIII border	214,000	GJ	31-Oct-2023	0.004		0.004	rann
18	St.Clair Pipelines L.P. (Bluewater Pipeline)	Bluewater/Intl Border	Bluewater/Intl Border	127,000	GJ	31-Oct-2023	0.022		0.022	Tariff
	Exchange Rate 1 US = Conversion Factor	1.2538 1.055056		As of August 31, 20	)17					

Heat Content (as of April 1/17)

38.95

Note:

- (1) Effective November 1, 2019 Contract Quantity increases to 35,000 DTH/day.
- Effective November 1, 2019 Contract Quantity increases to 22,000 DTH/day. (2)
- (3) A portion of the Vector portfolio is anticipated to be allocated to serve the North portfolio until NEXUS is in service
- (4) Demand charge drops to 0.204 \$Cdn/GJ on Dec 1, 2017
- Contract terminates on October 31, 2018 or at the time NEXUS pipeline becomes operational (5)
- Union has contracted for 150,000 DTH/day and allicates 50,000 DTH/day to the North Portfolio (6)
- Start date assumed in Gas Supply Plan to be November 1, 2017 with a 15 year contract term. (Actual commencement date will be dependent on NEXUS in service date) (7)

#### Gas Supply Plan Memorandum Appendix D

## **UNION GAS LIMITED**

Summary of November 1, 2017 Upstream Transportation Contracts (1)(2) as at September 2017

Filed: 2017-09-26 EB-2017-0087 Exhibit A Tab 3

Appendix D

#### Northern and Eastern Operations Areas

Line <u>No.</u>	<u>Upstream Pipeline</u>	Primary Receipt Point	Primary Delivery Point	Contract Quantity	Contract Units	Contract Termination Date	Unitized Demand Charge (\$Cdn/GJ)	Commodity Charge (\$Cdn/GJ)	100% LF Toll (\$Cdn/GJ)	Rate Type			
		(a)	(b)	( c)	(d)	(e)	(f)	(g)	(h=f+g)				
	TransCanada Pipeline	( )	( )	` '	` '	( )	( )	(0)	( 0,				
1	Empress to Union NCDA FT	Empress	Union NCDA	9,208	GJ	31-Oct-2019	1.927		1.927	Tariff			
2	Empress to Union EDA FT	Empress	Union EDA	1,089	GJ	31-Oct-2022	2.128		2.128	Tariff			
3	Empress to Union NDA FT	Empress	Union NDA	5,244	GJ	31-Oct-2019	1.591		1.591	Tariff			
4	Empress to Union NDA FT	Empress	Union NDA	4,800	GJ	31-Oct-2018	1.591		1.591	Tariff			
5	Empress to Union WDA FT	Empress	Union WDA	51,407	GJ	31-Oct-2019	1.031		1.031	Tariff			
6	Empress to Union SSMDA FT	Empress	Union SSMDA	8,843	GJ	31-Oct-2019	1.442		1.442	Tariff			
7	Empress to Union SSMDA FT	Empress	Union SSMDA	12,800	GJ	31-Oct-2020	1.442		1.442	Tariff			
8	Empress to Union MDA FT	Empress	Union MDA	5,565	GJ	31-Oct-2019	0.717		0.717	Tariff			
9	Parkway to Union EDA FT	Parkway	Union EDA	35,000	GJ	31-Oct-2022	0.412		0.412	Tariff			
10	Parkway to Union EDA FT	Parkway	Union EDA	75,000	GJ	31-Oct-2031	0.412		0.412	Tariff			
11	Parkway to Union EDA FT (EMB)	Parkway	Union EDA	25,000	GJ	31-Oct-2031	0.451		0.451	Tariff			
12	Parkway to Union EDA FT	Parkway	Union EDA	9,286	GJ	31-Oct-2031	0.412		0.412	Tariff			
13	Parkway to Union EDA FT	Parkway	Union EDA	5,000	GJ	31-Oct-2032	0.412		0.412	Tariff			
14	Parkway to Union NCDA FT	Parkway	Union NCDA	1,100	GJ	31-Oct-2031	0.293		0.293	Tariff			
15	Parkway to Union NCDA FT	Parkway	Union NCDA	2,887	GJ	31-Oct-2032	0.293		0.293	Tariff			
16	Parkway to Union NDA FT	Parkway	Union NDA	10,000	GJ	31-Oct-2030	0.593		0.593	Tariff			
17	Parkway to Union NDA FT	Parkway	Union NDA	116,629	GJ	31-Oct-2031	0.593		0.593	Tariff			
18	TCPL FT - Total			378,858	GJ								
	TransCanada Storage Transportation Service Firm Withdrawal												
19	NCDA	Parkway	Union NCDA	13,704	GJ	31-Oct-2022							
20	WDA	Parkway	Union WDA	31,420	GJ	31-Oct-2022							
21	SSMDA	Dawn	Union SSMDA	35,022	GJ	31-Oct-2022							
22	NDA	Parkway	Union NDA	48,375	GJ	31-Oct-2022							
23	EDA	Parkway	Union EDA	26,351	GJ	31-Oct-2022	0.412		0.412	Tariff			
24	TCPL Firm STS Withdrawal - Total	•		154,872	GJ								
	TransCanada Storage Transportation	Service Firm Injec	etion										
25	WDA	Union WDA	Parkwav	3,150	GJ	31-Oct-2022	1.406		1.406	Tariff			
26	EDA	Union EDA	Parkway	1,000	GJ	31-Oct-2022	1.100		1.100				
27	NDA	Union NDA	Parkway	49,100	GJ	31-Oct-2022	0.593		0.593	Tariff			
28	TCPL Firm STS Injection - Total	C	. aay	53,250	GJ	0. 00. 2022	0.000		0.000				
	Centra Transmission Holdings Inc. (3)												
29	Centra Transmission Holdings Inc. Centra Transmission Holdings Inc.	Spruce	Union MDA	149.6	10 <sup>3</sup> m <sup>3</sup>	31-Oct-2017	0.507		0.507	Tariff			
30	Centra Pipelines Minnesota Inc.	•	Baudette		MCF	31-Oct-2017	0.126		0.307	Tariff			
30	Centra Pipelines Minnesota Inc.  CTHI FT - Total	Sprague	Daudelle	5,281 5,716	GJ	31-00:-2017	0.120		0.120	rann			
31	CITILIFI - TOTAL			3,7 10	GJ								
1													

Exchange Rate 1 US =
Conversion Factor
Heat Content (as of April 1/16)

1.2538 CAD 1.055056

38.21

As of August 31, 2017

Note:

(1) Assumes all 2017 TCPL NCOS as awarded, and existing contracts reduced as bid

- (2) Excludes Vector and NEXUS capacity allocated from the South portfolio
- (3) Renewal letters sent in April 2017 to renew for 1 year to October 31, 2018