EB-2011-0210

Ontario Energy Board

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

AND IN THE MATTER OF an Application by Union Gas Limited, pursuant to section 36(1) of the *Ontario Energy Board Act, 1998*, for an order or orders approving or fixing just and reasonable rates and other charges for the sale, distribution, transmission and storage of gas as of January 1, 2013.

ASSOCIATION OF POWER PRODUCERS OF ONTARIO (APPrO)

CROSS-EXAMINATION COMPENDIUM

Panel 7

Filed: 2012-07-12
EB-2011-0210
Exhibit J1.7

UNION GAS LIMITED

Undertaking of Mr. Wolnik
To Ms. Van Der Paelt

To provide representing fuel, storage and overrun for the years 2010 through 2013 as referenced in J.C-3-13-1, Table (B) (II) (should be JT1.1).

Power Customer Revenue

Component ($ million's)	2010 Actuals	2011 Actuals	2012 Forecast	2013 Forecast
Commodity	4.8	4.9	4.0	3.9
Demand	21.2	21.0	21.0	21.0
Delivery Overrun	0.3	0.6	0.0	0.0
Storage	2.4	2.4	2.3	2.3
Storage Overrun	0.2	0.1	0.0	0.0
Customer Supplied Fuel	2.2	2.5	1.4	1.3
MAV	0.8	0.9	0.7	0.7
Fixed Charges	0.3	0.3	0.3	0.3
Total	27.4	27.8	25.7	25.6
Total Power Revenue	32.2	32.7	29.7	29.5

UNION GAS LIMITED
Calculation of Firm All Day (F24-T) Transportation Service Charges
Effective January 1, 2013

Line No.	Particulars	($ 000's)
	Cost of Service	
1	Operating & Maintenance Costs (1)	647
2	Depreciation Expense	-
3	Return, Income and Capital Taxes	-
4	Total Cost of Service	647
5	Demand (GJ/day)	356,500
6	Demand Rate ($/GJ) ((line 4 * 1000) / (line 5 *12))	0.151
7	Demand Rate Commoditized ($/GJ) (line 6 *12 /365)	0.005
8	Demand Rate ($/$10^3m^3$) (line 6 * 37.75)	5.709

Notes:
(1) Assumes 6 staff at an average annual salary and benefits of $124,487 each, $300,000 personnel overtime STO and $100,000 additional compressor maintenance, less the F24-T O&M reductions of $500,000 as per Settlement Agreement, Appendix B, Schedule 2, note 2.

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STORAGE & TRANSPORTATION

Services

F24T

Do you want firm injection or withdrawal right post Timely Nomination Window? How about firm all day on 13 nomination windows?

Increase your nomination throughout the day without relying on IT or overrun

Our F24-T service enables you to access firm transportation all day using any of our 13 nominations windows. This service offers exceptional flexibility to Shippers who have varying transportation needs throughout the gas day, or to those Shippers who enter into transactions after the Timely nomination window.

SERVICE INFORMATION

Service Highlights

- Enhancement to a new or existing firm transportation service
- Firm daily service - on all four NAESB nomination windows plus additional nine nomination windows
- This service transforms the contracted demand in your underlying transportation contract into a "firm all day" service.
- Overrun applies only to the underlying transportation contract
- Hourly Quantity (HQ) of gas transported cannot exceed the daily contracted quantity (DCQ) divided by 20
- Example
  - DCQ = 100,000 GJ/d
  - HQ is 5,000 GJ/h
  - Total flow at ID2 nomination window (12 hours remaining in gas day) cannot exceed 60,000 GJ (5,000 GJ/h x 12 hours)
- During the gas day, the time between nomination deadline and effective flow of gas is approximately 2 hours

Receipt & Delivery Points

- Based on receipt and delivery points of underlying firm transportation contract.
- Receipt and Delivery Points - Ojibway, Union St. Clair, Dawn, Dawn (TCPL), Dawn (Vector), Dawn (Tecumseh), Parkway, Kirkwall, Union Bluewater

Pricing & Fuel

- Demand Charge as outlined in M12 Transportation Rate Schedule
- Shippers are billed monthly for all demand charges
- No incremental fuel charges (notwithstanding fuel provided as per underlying transportation contract)

Contract

- Standard F24-T contract
- Requires executed M12 transportation or C1 transportation contract
- Assignable to third parties with a transportation contract on a temporary or permanent basis. View our standard transportation assignment agreement

Contract Term

- From one year to ten years
- Renewal rights for contracts in excess of three years
  - Renewal for one year term with two years notice of termination

HUB Contract Application Form
Contact your account manager.
Learn more

Quick Links
- Account Manager
- Standard Contracts
- Unionline

Dawn Horizon
Sign up today for our newsletter!
Learn more

Service Eligibility	• Available to all Shippers who hold a firm M12 or C1 transportation contract • Term of F24-T contract must be equal to or shorter than that of the firm transportation contract • Quantity of F24-T cannot exceed the quantity of the firm transportation contract
Complementary Services	• F24-S (Firm All Day Storage) • UPBS (Upstream Pipeline Balancing Service) • DPBS (Downstream Pipeline Balancing Service)
How to Request Service	• Please contact an Account Manager for further information

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UNION GAS LIMITED

Answer to Interrogatory from
Association of Power Producers of Ontario ("APPRO")

Reference: Exhibit H3, Tab 8, Schedule 1

Union indicates at footnote (1), that it assumes 6 staff are required at a cost of $1,147,000 plus a further $300,000 in overtime costs. Please:

a) Please confirm that for the 13 nomination windows available for FT-SN, that these nomination windows are also shared with 4 NAESB nomination windows and 4 STS windows (to transport gas under TCPL STS service).

b) Please indicate the number of customers and their respective volumes that contract for F24-T service.

c) Provide actual labour costs directly incurred to provide F24-T service in each of 2009, 2010, 2011 and forecast for 2012.

d) Please provide a crewing plan or other similar supporting material to illustrate the need for 6 staff and the related overtime for 2013.

e) Please explain specifically what is involved in receiving and scheduling a F24 T nomination.

f) Please indicate if any of the staff proposed to manage F24-T services also process any non-F24-T nominations or perform any other duties not related to providing F24-T service. Please provide the proportion of time spent in managing non-F24-T workload.

g) Please indicate if Union allocates any of the costs in Schedule 1 to those parties accessing the TCPL STS windows.

h) Please provide the total number of Union FTE staff employed in receiving and processing all nominations under all services. Please include their job type and/or function.

i) What were the total number of all nominations received in 2011(please include standing nominations that do not change from day to day)?

j) What was the total number of F24-T nominations received in 2011?

k) Union also provides F24 S storage, a non-utility storage service, where customers contracting for this service also have access to 13 nomination windows. Please indicate what portion of the costs noted in Schedule 1 is allocated to Union's non-utility service.

Response:

The footnote on Exhibit H3, Tab 8, Schedule 1 reads as follows:

(1) Assumes 6 staff at an average annual salary and benefits of $124,487 each, $300,000 personnel overtime STO and $100,000 additional compressor maintenance.

a) Yes, the 13 nomination windows available for Union's F24-T share the 4 NAESB and 4 STS windows.

b)

Customer	Contracted F24-T Quantity (GJ/d)
1	85,000
2	140,000
3	49,500
4	80,000
5	76,000
6	11,654

c) Union does not separately track the direct labour costs associated with providing F24-T service.

In EB-2005-0551 the O&M costs for F24-T included $0.945 million for additional staffing requirements (10 roles: Gas Management Services ("GMS") (4), Gas Control (2) and Operations (4)) and $0.090 million for forecasted increases in compressor maintenance resulting from providing firm all day service. The staffing level proposed in EB-2005-0551 was based on the expected level of effort required to provide the F24-T service, including the need for 24/7 coverage.

Union has not filled all the roles proposed in EB-2005-0551. Union has been able to meet the incremental work requirements associated with F24-T with 2 roles in GMS and 2 roles in Gas Control. Field Operations have met the additional workload through overtime. This level of staffing does not provide for 24/7 coverage.

The addition of two staff in GMS allow Union to provided 24/7 coverage as had originally been contemplated in EB-2005-0551.

d) Please see the response at c) above.

e) F24-T nominations received by Union must be validated against contract parameters, must be in balance, and must be confirmed by interconnecting operators before being scheduled for gas flow. This process is followed for every F24-T nomination for every nomination cycle or window. Any issues with nominations must be addressed and resolved prior to the gas flow.

Support for F24-T also includes on-site customer training, telephone hotline support, troubleshooting nomination issues and troubleshooting nomination system issues.

f) Union's nomination staff supports both F24-T services and non-F24-T services. Union does not track staff time spent on supporting individual services.

g) No. The GMS and Gas Control groups have historically been staffed to provide support for STS. The requirement to provide firm all day service on 13 nomination windows is incremental and drives the costs in Schedule 1.

h) Union employs 21 FTE staff including 1 Manager to support nominations.

There are 12 Specialists and 2 Analysts supervised by 3 Team Leads who receive nominations from Union's shippers and who submit nominations to upstream pipelines.

There is 1 Team Lead and 2 Specialists who provide business systems support to ensure the reliability and integrity of Union's web-based nomination system.

i) Union received and processed approximately 1.1 million nominations in 2011.

j) Union processed approximately 23,000 F24-T nominations in 2011.

k) None of the costs referenced in Schedule 1 are allocated to the F24-S service. As in EB-2005-0551, Union is proposing to recover the total revenue requirement associated with providing firm service on 13 nomination windows from F24-T customers because the firm service on 13 nomination windows will primarily be used by F24-T shippers directly or by other ex-franchise shippers providing storage services to F24-T service shippers.

Contract Number	Service Requester	Contract Start Date	Contract End Date	Service Type	Primary Receipt	Primary Delivery	Contract Demand (GJ/d)
19233	St. Lawrence Gas Company, Inc.	2002-Nov-01	2013-Oct-31	STS	Union Parkway Belt	Cornwall	10,300
2623	Enbridge Gas Distribution Inc.	1992-Nov-01	2013-Oct-31	STS	Union Parkway Belt	Enbridge CDA	153,700
15957	Enbridge Gas Distribution Inc.	2001-Nov-01	2013-Oct-31	STS	Union Parkway Belt	Enbridge CDA	92,822
18786	Enbridge Gas Distribution Inc.	2002-Nov-01	2013-Oct-31	STS	Union Parkway Belt	Enbridge CDA	37,370
1140	Enbridge Gas Distribution Inc.	1989-Aug-08	2013-Oct-31	STS	Union Parkway Belt	Enbridge EDA	35,089
13307	Enbridge Gas Distribution Inc.	1999-Nov-01	2013-Oct-31	STS	Union Parkway Belt	Enbridge EDA	35,806
21854	Enbridge Gas Distribution Inc.	2003-Nov-01	2013-Oct-31	STS	Union Parkway Belt	Enbridge EDA	9,716
1141	Gaz Metro Limited Partnership	1985-Nov-01	2013-Apr-15	STS	Union Parkway Belt	GMIT EDA	25,629
6245	Gaz Metro Limited Partnership	1996-Apr-16	2013-Apr-15	STS	Union Parkway Belt	GMIT EDA	125,545
16106	Gaz Metro Limited Partnership	2001-Nov-01	2013-Oct-31	STS	Union Parkway Belt	GMIT EDA	45,000
22306	Gaz Metro Limited Partnership	2005-Nov-01	2015-Oct-31	STS	Union Parkway Belt	GMIT EDA	20,000
1138	1425445 Ontario Limited	1975-Apr-01	2013-Oct-31	STS	Union Parkway Belt	KPUC EDA	13,167
34728	Vermont Gas Systems, Inc.	2008-Apr-01	2020-Mar-31	STS	Union Parkway Belt	Philipsburg	20,279
1142	Union Gas Limited	1992-Apr-01	2013-Dec-31	STS	Union WDA	Union CDA	3,150
1142	Union Gas Limited	1992-Apr-01	2013-Dec-31	STS	Union NDA	Union CDA	49,100
1142	Union Gas Limited	1992-Apr-01	2013-Dec-31	STS	Union Parkway Belt	Union EDA	68,520
						TOTAL STS (GJ/d)	**745,193**
						St. Lawence	**10,300**
						Enbridge	**364,503**
						Gmi	**216,174**
						1425445 Ontario Limited	**13,167**
						Vermont	**20,279**
						Union	**120,770**
						Total STS (Check)	**745,193**

Source TCPL Website Copy of CDE_Report_July_2012

Union Gas Nomination Windows

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Nomination Window	Nomination Deadline CCT	Effective Flow Time CCT	Elapsed Hours	Hours Remaining
NEXT DAY				
Timely	11:45	9:00	0	24
Evening	18:00	9:00	0	24
0900 F24	7:00	9:00	0	24
INTRADAY				
1100 F24 *	9:00	11:00	2	22
1700 ID1	10:00	17:00	8	16
1400 F24	12:00	14:00	5	19
1700 F24 *	15:00	17:00	8	16
1900 F24	17:00	19:00	10	14
2100 ID2	17:00	21:00	12	12
2200 F24	20:00	22:00	13	11
0100 F24 *	23:00	1:00	16	8
0500 F24 *	3:00	5:00	20	4
0700 F24	5:00	7:00	22	2

*** These windows align with TransCanada Pipeline's STS windows**
Central Clock Time (CCT) is one hour behind Eastern Clock Time (ECT)
i.e. Nom Deadline for Timely window is 12:45pm ECT

NAESB Windows

UNION GAS LIMITED

Answer to Interrogatory from
Board Staff

Ref: Exhibit H3, Tab 4, Schedule 1

Union's customer bill impacts reveal a significant difference between delivery rate impacts for southern customers as compared to the northern and eastern customers. While customers in the Southern Service area will experience an increase of $19, customers in the Northern, Eastern and Western Service areas will experience an increase anywhere between $59 and $76.

a) Please explain the reasons for the significant difference between rate impacts for southern customers as compared to customers of other service areas.

b) Has Union in the past cross-subsidized the residential rate classes. If yes, please provide details of the cross-subsidies and the period in which these occurred. Also, please explain the reasons for doing so.

c) Has Union considered any rate mitigation measures to reduce the impact for Northern, Eastern and Western Service area customers? If no, why not?

Response:

a) As shown at Exhibit H3, Tab 1, Schedule 1, Updated, column (i), proposed Union North delivery rates are increasing by an average of 20%. Union South delivery rates are increasing by an average of 7%. The result is an overall increase in proposed in-franchise delivery rates of approximately 10%.

The delivery bill impact in Union North is $59 to $76 for the average residential customer. In Union South, the delivery bill impact is $19 for the average residential customer.

There are two factors causing Union North delivery rates to increase by an average of 20%, while Union South delivery rates increase by an average of 7%. The first is that Union North delivery revenue has decreased as a percentage of total delivery revenue from 2007 Board-approved to 2013 forecast levels. At the same time, the Union North delivery-related revenue requirement has increased as a percentage of the total delivery-related revenue requirement. Please see Attachment 1.

As shown at Attachment 1, lines 1-3, at 2007 Board-approved levels Union North delivery revenue represented 27% of total delivery revenue, while Union South represented 73%. In Union's 2013 revenue forecast, Union North delivery revenue represents 26% of total delivery revenue, while Union South represents 74%. In dollar terms, Union North delivery revenue has declined by $1.8 million while Union South delivery revenue has increased by $9.9 million.

Given that delivery rates have been essentially flat over the IR term, the decline in Union North delivery revenue demonstrates the loss of volumes in Union North compared to Union South. As shown at Attachment 1, lines 4-6, Union North Rate 01 volumes have decreased by approximately 5% from 2007 Board-approved to 2013 forecast levels, while Union South Rate M1 volumes have increased marginally. The relative change in the 2013 revenue forecast compared to 2007 Board-approved levels by operating area is driving an increase in Union North delivery rates relative to Union South delivery rates.

Concurrently, as described above, the Union North delivery-related revenue requirement has increased as a percentage of total delivery-related revenue requirement from 2007 Board-approved to 2013 forecast levels.

As shown at Attachment 1, lines 19-21, at 2007 Board-approved levels the Union North delivery-related revenue requirement represented 27% of the total revenue requirement, while Union South represented 73%. In Union's 2013 forecast, the Union North delivery-related revenue requirement represents 29% of the total revenue requirement, while Union South represents 71%. In dollar terms, the Union North revenue requirement has increased by $32.9 million while the Union South revenue requirement has increased by $33.8 million. Although the relative share of the Union North/South revenue requirement has only changed moderately, the increase in costs to Union North account for approximately 50% of the 2013 revenue deficiency.

As per Exhibit H3, Tab 1, Schedule 1, Updated, page 1, the Union North delivery-related revenue deficiency resulting from Union's 2013 cost of service forecast is $46.375 million, while the Union South delivery-related revenue deficiency is $46.066 million. After including the ratepayer portion of forecast S&T transactional service revenue in the revenue stream for ratemaking purposes, Union has proposed to recover a deficiency of $35.908 million in Union North delivery rates and $35.669 million in Union South delivery rates.

As forecast 2013 Union North delivery revenue is roughly 1/3 of Union South delivery revenue, the recovery of a $36 million deficiency in each operating area results in a Union North delivery rate increase of 20% that is approximately three times the Union South delivery rate increase of 7%.

Attachment 1 also provides a breakdown of capital and O&M-related revenue requirements from 2007 Board-approved to 2013 proposed levels. Further, Union has provided additional information on the drivers increasing the Union North delivery-related revenue requirement relative to Union South below:

- Local Storage Plant – Hagar LNG net utility plant has increased from the 2007 Board-approved levels due to plant additions of $8.2 million, a transfer of $1.0 million of assets, and a change in the depreciation due to the extended plant life from 2012. The increase in the 2013 Union North revenue requirement compared to 2007 Board-approved levels is approximately $0.9 million.

- Depreciation Expense – The Union North distribution depreciation expense has increased by $6.8 million and Union South distribution depreciation expense has increased by $7.2 million. The Union North depreciation expense is increasing at a higher percentage of Union North revenue requirement compared to Union South due to a variance between 2007 Board-approved levels and 2007 actuals.

  The 2007 Board-approved level of Union North depreciation expense was $0.7 million lower than 2007 actuals, while the 2007 Board-approved level of Union South depreciation expense was $1.7 million higher than 2007 actuals. The disproportionate increase to the Union North revenue requirement from 2007 Board-approved levels to the proposed 2013 revenue requirement is $1.7 million.

- Distribution O&M – Union North distribution O&M has increased by $3.8 million and Union South distribution O&M by $2.4 million from 2007 Board-approved levels to the 2013 forecast. The 2013 O&M budget includes more detail than the 2007 forecast, which makes a comparison between Union North and Union South difficult. One specific item which has increased for both Union North and Union South are line locates, which have both increased by approximately $1.5 million since the 2007 Board-approved forecast. The disproportionate increase to the Union North revenue requirement from Board-approved 2007 to the proposed 2013 revenue requirement is $2.8 million, which includes the allocation of direct and indirect costs. The difference calculation assumes that the Union North and Union South distribution O&M increased at same rate of 11% since the Board-approved 2007 forecast. Of this increase, the disproportionate increase of line locates results in a Union North revenue requirement increase of $0.7 million.

- Sales and Promotion Costs – In the 2007 Board-approved cost allocation study, 97% of sales and promotion supervision costs were allocated to Union South in-franchise customers, excluding gas supply and DSM direct assignments. The addition of DSM related costs to the Sales and Promotion category in the cost study resulted in most of the costs being classified to demand and allocated to only Union South in-franchise customers. In the 2013 cost allocation study, Union corrected the classification to exclude DSM. This change results in costs being classified as customer-related and allocated based on an analysis of sales activities. This correction results in 75% of the sales and promotion supervision costs being allocated to Union South and 25% to Union North, for a Union North revenue requirement increase of $1.9 million.

- General Operating and Engineering O&M Costs – The general operating and engineering operating expenses are functionalized based on an analysis of activities. Examples of the costs in this category include planning and dispatch, engineering, geology, capacity management, S&T sales, and gas control. In the 2007 Board-approved cost allocation study, the analysis was based on a sample of the internal work orders. In 2013, the analysis includes a larger sample size representing 91% of the operating expenses. The increased sample size results in a decrease of costs functionalized to transmission and purchase production functions and an increase to distribution. The functionalization update results in an increased allocation of $4.7 million delivery-related revenue requirement to Union North rate classes.

b) Union's historical revenue-to-cost ratios for General Service rate classes have minimized the cross-subsidization of residential customers in Union's rate classes.

c) Union has not proposed any rate mitigation measures to reduce the rate impacts on Union North customers specifically. Union's proposed 2013 rates for both Union South and Union North appropriately recover the 2013 test year revenue requirement and reflect the differing costs associated with serving each delivery area.

Notwithstanding Union's view that its 2013 rate proposals are appropriate, Union has considered a number of rate mitigation measures. They are:

1. At Exhibit F1, Tab 1, Union has proposed to increase the equity component of its capital structure from 36% to 40% to align with capital structures of other North American natural gas and electricity utilities of similar risk. The revenue requirement impact associated with this proposal is approximately $15 million. To manage the overall revenue requirement and rate impacts, increasing the equity component of Union's capital structure could be phased in over 2 to 4 years.

2. At Exhibit C1, Tab 5, Union is proposing to change its weather normalization method from the current 55:45 (55% 30 year average and 45% 20 year declining trend) method to 100% 20 year declining trend. This proposal increases Union's 2013 revenue deficiency by approximately $7 million. To manage the overall revenue requirement and rate impacts, implementation of the 20 year declining trend weather normalization methods could be phased in over 2 to 5 years.

3. As indicated at Exhibit C1, Tab 3, based on TCPL's proposal to eliminate the FT-RAM program, Union has not included any FT-RAM revenue in its 2013 short-term transportation and exchange revenue forecast. In the alternative, Union could partially mitigate 2013 rate impacts in Union North by including revenue associated with FT-RAM in Union North delivery rates on the assumption that TCPL is not successful in eliminating the FT-RAM program. If Union were to take this approach, Union would require deferral account protection to cover the possibility that the FT-RAM program is eliminated or materially changed as a result of TCPL's mainline rate proceeding.

4. Finally, the Board could find that, in the course of setting just and reasonable rates, it would be in the public interest to allow the 2013 revenue-to-cost ratios for Union South and Union North general service rate classes to be adjusted such that the gap between Union South and Union North delivery rates is reduced or eliminated.

UNION GAS LIMITED
Revenue Requirement Impacts

Line No.	Particulars ($000's)	Cost Type	Revenue Requirement Total (a)	Gen. Service Small Volume M1 (b)	Gen. Service Large Volume M2 (c)	Firm Contract M4 (d)	Interruptible Contract-Firm M5 (e)	Interruptible Contract-Interruptible M5 (f)	Special Large Volume Contract - Firm M7 (g)	Special Large Volume Contract - Interruptible M7 (h)	Large Wholesale Service M9 (i)	Small Wholesale Service M10 (j)	Storage & Transportation Service - Firm T1 (k)	Storage & Transportation Service - Interruptible T1 (l)	Wholesale Storage & Transportation Service T3 (m)
1	System Integrity Hysterisis	Allocator	0	60	21	3	0	4	1	0	1	0	19	0	5
2	Tecumseh Metering Assets	Rate Base	0	131	44	14	0	0	5	0	2	0	101	0	11
3	Oil Springs East Storage Pool	Rate Base	0	27	9	2	0	0	1	0	0	0	16	0	2
4	Distribution Maintenance - Meter and Regulator Repairs	O&M	0	(5)	(434)	65	1	71	28	4	5	1	188	45	19
5	Distribution Maintenance - Equipment on Customer Premises	O&M	0	(324)	92	35	1	39	15	2	3	0	102	24	10
6	Purchase Production General Plant	Rate Base	0	(169)	(91)	(16)	14	(41)	(28)	0	(11)	0	41	14	2
7	Distribution North Customer Stations	Rate Base	0	0	0	0	0	0	0	0	0	0	0	0	0
8	**Revenue Requirement Change[1]**		**0**	**(279)**	**(358)**	**103**	**15**	**74**	**22**	**7**	**(1)**	**2**	**467**	**83**	**51**

(1) A positive value represents an increase to the revenue requirement based on the proposed methodology.

UNION GAS LIMITED
Revenue Requirement Impacts

Line No.	Particulars ($000's)	Cost Type	Excess Utility Storage Space	Firm Transportation Service C1	Interruptible Trans. Service & Exchanges C1	Dawn-Trafalgar Transport Service M12	Local Production Transportation Service M13	Storage Transportation Service M16	Small Volume General Firm Service R01	Large Volume General Firm Service R10	Medium Volume Firm Service R20	Large Volume High Load Factor Firm Service R100	Large Volume Interruptible Service R25
			(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)
1	System Integrity Hysterisis	Allocator	(146)	0	1	4	0	0	20	5	1	0	0
2	Tecumseh Metering Assets	Rate Base	0	(0)	0	(306)	(1)	(0)	(2)	(1)	(0)	(0)	0
3	Oil Springs East Storage Pool	Rate Base	7	1	0	(77)	0	0	8	2	1	0	0
4	Distribution Maintenance - Meter and Regulator Repairs	O&M	-	-	-	-	-	-	(27)	45	(4)	(14)	12
5	Distribution Maintenance - Equipment on Customer Premises	O&M	-	-	-	-	-	-	(1,493)	286	532	152	523
6	Purchase Production General Plant	Rate Base	0	0	0	0	0	0	166	30	48	14	27
7	Distribution North Customer Stations	Rate Base	0	0	0	0	0	0	0	(2,169)	955	274	940
8	**Revenue Requirement Change[1]**		**(138)**	**1**	**1**	**(379)**	**(1)**	**0**	**(1,329)**	**(1,802)**	**1,533**	**427**	**1,502**

(1) A positive value represents an increase to the revenue requirement based on the proposed methodology.

UNION GAS LIMITED

Answer to Interrogatory from
Association of Power Producers of Ontario ("APPRO")

Ref: Exhibit G1, Tab 1, Pages 11-15

Union seeks to change the methodology for allocating Union North customer station costs. Union defines a customer station as one having an hourly consumption in excess of 320 m^3/h. Union proposes to use a threshold annual consumption of 934,400 m^3/year (based on annual consumption of 320 m^3/h X 20 h/d X 365 X 0.40 LF) as the criteria to determine whether a customer station has been constructed for the customer for the purposes of allocating customer station costs to various rate classes in Union North. Union concludes that no Rate 1 customers and a small percentage of Rate 10 customers consume more than 934,400 m^3/year.

a) Please confirm that customer stations incorporate the use of meters and regulators on customer premises to measure and reduce the pressure being delivered to the customers.

b) Please confirm that this cost item relates to the capital cost of the equipment. If not confirmed, explain.

c) Please confirm that the design criteria Union uses to size and install meters and regulators for individual customer loads is the maximum peak hourly load and not the estimated annual consumption. If not confirmed, explain.

d) If two customer stations are constructed to meet the same peak hourly demand, and have similar equipment installed and one consumes more than 934,400 m^3/year and one consumes less than 934,400 m^3/year, please confirm that the customer station with the lower annual consumption would not attract the same customer station costs.

e) Please identify the number of customer meter stations in Union North in each rate class that have a design hourly load in excess of 320 m^3/h.

f) Please provide the total customer station costs for the North by rate category as proposed by Union for 2013 based on annual consumption of 934,400 m^3/year.

g) Please recalculate the customer station costs allocated by rate class if they were allocated on the basis of hourly load in excess of 320 m^3/h.

Response:

a) Confirmed.

b) Confirmed.

c) Confirmed. Maximum peak hourly load and customer delivery pressure are used as design criteria.

d) Union is proposing to allocate Union North Distribution Customer Stations Plant costs based on the average number of customers in each rate class, excluding Rate 01 and excluding the Rate 10 customers that do not consume 934,400 m^3 or more per year.

   A Rate 10 customer with a customer station designed to meet an hourly demand of 320 m^3 that does not exceed an annual consumption of 934,400 m^3 is not included in the allocator described in the paragraph above. However, the customer station plant costs allocated to Rate 10 are recovered from all Rate 10 customers in Union's proposed delivery rates.

e) There are 468 Union North customer stations that exceed the design capacity of 320 m^3. The breakdown by rate class is provided in Attachment 1, column (a).

f) Please see Attachment 2.

g) Please see Attachment 1.

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J.G-5-13-1
Attachment 1

Allocation Change of Customer Stations Plant Based on Number of Stations

Line No.	Particulars ($000's)	Number of Customer Stations > 320 m^3/hr[1]	Allocated Union North Customer Stations Costs: Customer Stations Gross Plant	Accumulated Depreciation	Customer Stations Net Plant
		(a)	(b)	(c)	(d) = (b - c)
1	R01	0	0	0	0
2	R10	337	21,126	8,480	12,646
3	R20	100	3,887	1,560	2,327
4	R100	29	1,128	453	675
5	R25[2]	2	3,824	1,535	2,289
6	Total	468	29,965	12,028	17,937

Notes:

1 The number of stations in a rate class is based on the current customer rate classes and has not been updated to reflect changes to the forecasted number of customers.

2 The number of Rate 25 customers is based on the the actual number of customers that only have a Rate 25 service. No adjustment has been made to reflect the actual number of customers who have a companion Rate 25 service.

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EB-2011-0210
J.G-5-13-1
Attachment 2

Proposed Allocation of Union North Customer Stations Plant

Line No.	Particulars ($000's)	Proposed Allocation N_CUSTSTATIONS	Allocated Union North Customer Stations Costs: Customer Stations Gross Plant	Accumulated Depreciation	Customer Stations Net Plant
		(a)	(b)	(c)	(d) = (b - c)
1	R01	0	0	0	0
2	R10	37	6,223	2,498	3,725
3	R20	62	10,456	4,197	6,259
4	R100	18	2,999	1,204	1,795
5	R25	61	10,287	4,129	6,158
6	Total	178	29,965	12,028	17,937

UNION GAS LIMITED

Answer to Interrogatory from
Association of Power Producers of Ontario ("APPRO")

Reference: Exhibit H3, Tab 1, Schedule 2, Pages 3 and 4
Exhibit G1, Tab 1, Appendix B, Page 2

Union is proposing to increase Rate 20, Rate 25 and Rate 100 by 43.5%, 43.4% and 29.1% respectively.

a) Please provide a detailed explanation by rate class illustrating why these rates are increasing as much as proposed.

b) Please explain why such significant increases are just reasonable and do not constitute rate shock.

Response:

a) Please see the response at Exhibit J.H-1-1-2 a).

b) Please see the response at Exhibit J.H-1-1-2 c).

UNION GAS LIMITED

Undertaking of Mr. Wolnik
To Mr. Tetreault

Reference: J.H.-1-13-1, J.H.-1-1-2

In the first reference Union was asked to provide a detailed explanation to support the increases for Rate classes 20, 25 and 100 of 43.5%, 43.4% and 29.1% respectively. These increases are relative to the rates currently in effect. Union's response was to see the response to J.H.-1.1.2 a) J.H.-1.1.2a). These responses provide general aggregate information about revenue requirement in the North and limit the comparison to changes from 2007, and do not provide any rate specific information for the rates requested.

a) Please provide a detailed explanation by rate class for these significant rate increases as requested. Please include (but do not limit the response to) the impact of the following items in explaining the overall increases:

   i) Forecast volumes by rate class.
   ii) The impact by rate class of the increase in rate of return.
   iii) The impact by rate class of the increase in the additional equity.
   iv) The impact by rate class of the $22.7 increase in O&M from 2007 (see Attachment 1 to J.H.-1-1-2 line 10).
   v) The impact by rate class of Union's elimination of the FT-Ram Credits.
   vi) Changes by rate class referenced in G1 Tab 1 pages 11-15.
   vii) The impacts of DSM programs by rate class (include both the program costs and lost revenue impacts).
   viii) The impact by rate class of proposed changes to depreciation expense.

The Union North revenue requirement increase is driven by cost increases and cost allocation corrections since the 2007 Board-approved cost allocation study. A comparison between the 2007 Board-approved and the 2013 proposed cost allocation study by Union North rate class is provided at Attachment 1.

In J.H-1-1-2, part a), pages 3-4, Union provides a description of the drivers for the Union North revenue requirement increase, which includes local storage plant, distribution depreciation expense, distribution O&M, sales and promotion O&M and general operating and engineering O&M. The total revenue requirement increase to Union North rate classes for each of the cost drivers is provided at lines 1, 8, 12, 13, and 14, respectively on Attachment 1. The revenue requirement increase associated with interest and return by rate class is provided on lines 4 and 5 and the increase in Union North depreciation expense by rate class is provided at line 10.

The $22.7 million increase in O&M in J.H-1-1-2, line 10, is the delivery-related revenue requirement for the Union North rate classes. The total Union North O&M increase of $24.3

million is provided at line 17 and includes the allocation of administrative and general O&M expense. Administrative and general costs are allocated in proportion to the allocation of other O&M expenses in the cost allocation study. As both Union North O&M and total administrative and general O&M costs have increased from Board-approved 2007 levels, the allocation of administrative and general O&M costs to Union North rate classes have increased, as provided at line 15.

Union has also proposed several cost allocation methodology changes that impact the allocation to Union North rate classes. The revenue requirement impact of those changes by rate class is provided at J.G-1-3-1, Attachment 2.

Union North rate classes are also impacted by customer changes by rate class. The 2013 forecasted number of customers, contracted demands, and annual volumes relative to 2007 and 2011 Board-approved levels are provided at Attachment 2. The impact of DSM program cost changes by Union North rate class relative to 2007 and 2011 Board-approved levels are provided at Attachment 3.

FT-RAM revenue was not included in either 2007 Board-approved rates or 2013 proposed rates and accordingly is not driving an increase in Union North rates.

Filed: 2012-06-07
EB-2011-0210
JT2.21
Attachment 1

Union North In-franchise Revenue Requirment Comparison by Rate Class

Filed 2013 vs. 2007 Board-Approved Cost Study

Line		2007						2013						2013 less 2007 Board-Approved					Variance	
No.	Particulars ($000's)	R01	R10	R20	R100	R25	Total	R01	R10	R20	R100	R25	Total	R01	R10	R20	R100	R25	Total	%
		(a)	(b)	(c)	(d)	(e)	(f)=(a+b+c+d+e)	(g)	(h)	(i)	(j)	(k)	(l)=(g+h+i+j+k)	(m)=(g-a)	(n)=(h-b)	(o)=(i-c)	(p)=(j-d)	(q)=(k-e)	(r)=(l-f)	(s)=((l-f)/f)
	Net Plant																			
1	Local Storage Plant [1]	1,585	507	61	83	0	2,236	8,622	2,282	601	42	0	11,547	7,038	1,775	540	(41)	0	9,311	416%
2	Other Rate Base [2]	559,965	103,279	53,674	71,026	24,119	812,062	654,965	91,608	74,667	56,888	24,780	902,907	95,000	(11,671)	20,993	(14,138)	661	90,844	11%
3	Total Rate Base	561,550	103,786	53,736	71,109	24,119	814,298	663,587	93,890	75,268	56,930	24,780	914,454	102,037	(9,896)	21,532	(14,179)	661	100,156	12%
4	Return - Debt Component	26,433	4,885	2,529	3,347	1,135	38,331	25,772	3,646	2,923	2,211	962	35,515	(662)	(1,239)	394	(1,136)	(173)	(2,816)	(7%)
5	Equity Component	18,116	3,348	1,734	2,294	778	26,270	25,990	3,677	2,948	2,230	971	35,815	7,874	329	1,214	(64)	192	9,546	36%
6	Taxes	19,131	3,423	1,607	2,037	703	26,900	16,767	2,513	1,939	1,580	578	23,377	(2,364)	(911)	332	(457)	(125)	(3,523)	(13%)
7	Total Return and Taxes	63,680	11,657	5,870	7,678	2,616	91,501	68,529	9,836	7,810	6,021	2,511	94,707	4,849	(1,821)	1,940	(1,657)	(105)	3,206	4%
	Depreciation Expense																			
8	Union North Distribution Plant [3]	23,653	3,644	2,328	3,248	1,199	34,072	29,444	3,714	3,424	3,093	1,221	40,896	5,791	69	1,097	(155)	22	6,824	20%
9	Other Depreciation Plant	7,033	1,246	595	714	213	9,802	9,609	1,586	949	591	282	13,016	2,575	340	353	(123)	69	3,214	33%
10	Total Depreciation Expense	30,686	4,890	2,923	3,962	1,412	43,874	39,053	5,299	4,373	3,684	1,503	53,912	8,367	409	1,450	(278)	91	10,038	23%
11	Cost of Gas [4]	200,362	58,275	13,444	2,441	13,760	288,283	145,807	41,021	8,747	46	8,031	203,652	(54,555)	(17,255)	(4,697)	(2,396)	(5,728)	(84,631)	(29%)
	O&M																			
12	Distribution North [5]	12,943	1,544	1,137	2,304	332	18,260	16,137	1,653	1,874	1,837	656	22,157	3,194	109	736	(467)	324	3,896	21%
13	Sales and Promotion [6]	2,904	1,392	1,024	1,584	55	6,959	5,924	1,294	1,395	2,053	439	11,105	3,020	(98)	371	468	384	4,145	60%
14	General Operating & Engineering [7]	4,730	642	401	365	235	6,373	7,225	854	919	608	368	9,973	2,494	211	518	243	134	3,600	56%
15	Administrative and General	20,780	2,254	1,390	2,066	438	26,929	31,919	2,824	2,640	2,177	1,215	40,775	11,139	570	1,249	111	777	13,846	51%
16	Other O&M	16,081	1,291	231	165	187	17,955	15,254	1,107	247	31	121	16,761	(827)	(184)	16	(134)	(66)	(1,194)	(7%)
17	Total O&M	57,439	7,123	4,184	6,483	1,247	76,476	76,460	7,731	7,074	6,706	2,799	100,771	19,021	608	2,890	223	1,552	24,294	32%
18	Total Revenue Requirement	352,167	81,946	26,420	20,565	19,035	500,133	329,848	63,887	28,004	16,457	14,845	453,042	(22,319)	(18,058)	1,584	(4,108)	(4,190)	(47,092)	(9%)
19	Other Revenue	5,708	60	1	0	1	5,770	5,490	43	1	0	1	5,535	(218)	(17)	0	(0)	0	(234)	(4%)
20	Total Revenue Requirement (line 18 - line 19)	346,459	81,886	26,419	20,565	19,035	494,364	324,358	63,844	28,003	16,457	14,844	447,506	(22,101)	(18,042)	1,584	(4,108)	(4,191)	(46,857)	-9%
	Revenue Requirement in Rates																			
21	Delivery [8]	136,196	20,675	12,474	18,043	5,144	192,531	164,862	19,246	18,330	16,337	6,701	225,475	28,666	(1,429)	5,856	(1,706)	1,557	32,945	17%
22	Storage and Transmission	51,577	18,492	6,003	755	941	77,768	71,774	23,299	6,931	(12)	2,117	104,109	20,196	4,807	928	(766)	1,176	26,341	34%
23	Other Cost of Gas	158,686	42,719	7,942	1,768	12,950	224,065	87,723	21,300	2,743	131	6,026	117,922	(70,963)	(21,420)	(5,200)	(1,636)	(6,924)	(106,143)	(47%)
24	Total Revenue Requirement	346,459	81,886	26,419	20,565	19,035	494,364	324,358	63,844	28,003	16,457	14,844	447,506	(22,101)	(18,042)	1,584	(4,108)	(4,191)	(46,857)	(9%)

Notes:

(1) Description of the local storage plant cost increase is provided at J.H-1-1-2, page 3.
(2) Other rate base includes net plant excluding local storage plant (line 1), working capital, and accumulated deferred taxes.
(3) Description of the Union North depreciation expense increase is provided at J.H-1-1-2, page 3.
(4) Cost of Gas costs include compressor fuel.
(5) Description of the Union North Distribution O&M cost increase is provided at J.H-1-1-2, page 3.
(6) Description of the cost allocation correction for sales and promotion O&M is provided at J.H-1-1-2, page 3.
(7) Description of the general operating and engineering O&M cost allocation update is provided at J.H-1-1-2, page 4.
(8) 2007 delivery-related revenue requirement excludes Rate 77.

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JT2.21
Attachment 2

Union North
Forecast Number of Customers, Contracted Demands, and Annual Volumes by Rate Class

Line No.	Particulars ($000's)	R01	R10	R20	R100	R25	R77	Total
		(a)	(b)	(c)	(d)	(e)	(f)	(g) = sum (a to f)
	Number of Customers							
1	2013 Proposed	319,406	2,048	62	19	70	-	321,605
2	2011 Board-approved	295,672	2,962	64	19	79	1	298,797
3	2007 Board-approved	295,672	2,962	64	19	79	1	298,797
4	Difference (line 1 - line 3)	23,734	(914)	(2)	-	(9)	(1)	22,809
	Contracted Demands (10^3m^3/d)							
5	2013 Filed	-	-	3,580	5,998	-	-	9,578
6	2011 Board-approved	-	-	2,423	7,782	-	-	10,205
7	2007 Board-approved	-	-	2,423	7,782	-	-	10,205
8	Difference (line 5 - line 7)	-	-	1,157	(1,784)	-	-	(627)
	Annual Volumes (10^3m^3)							
9	2013 Filed	855,598	316,269	628,164	1,895,488	129,481	-	3,825,000
10	2011 Board-approved	870,427	422,932	526,116	2,254,074	104,645	-	4,178,194
11	2007 Board-approved	905,311	381,370	525,588	2,275,112	104,645	-	4,192,026
12	Difference - 2013 vs. 2011 (line 9 - line 10)	(14,829)	(106,663)	102,048	(358,586)	24,836	-	(353,194)
13	Difference - 2013 vs. 2007 (line 9 - line 11)	(49,713)	(65,101)	102,576	(379,624)	24,836	-	(367,026)

UNION GAS LIMITED

Undertaking of Mr. Wolnik
To Ms. Van Der Paelt

To reconcile change in volume due to MAV reductions compared to J.C-3-13-1 that shows no reduction.

Below is a revised table from part b) ii) of J.C-3-13-1 to correct a change in Rate 25 MAV contract parameters and reconcile to the Northern NUG revenue reduction referenced in J.C-3-2-2.

10^3 m^3	2007	2008	2009	2010	2011	2012	2013
R100	789,479	789,479	789,479	789,479	789,479	789,479	789,479
R20	0	0	0	0	0	0	0
R25	8000	8000	8000	8000	4,500	4,500	4,500
T1	1,240,997	1,240,997	1,256,837	1,256,837	1,256,837	1,256,837	1,256,837

Rate 25 MAV reduced June 1, 2011 as a result of revised contractual parameters for a specific customer.