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| 2  | PREFILED EVIDENCE OF   |
|----|--|
| 3  | PATTI PIETT, DIRECTOR, GAS SUPPLY  |
| 4  | TINA HODGSON, MANAGER, ASSET ACQUISITIONS  |
| 5  | MARY EVERS, MANAGER, GAS SUPPLY  |
| 6  | DREW QUIGLEY, MANAGER, GAS SUPPLY PLANNING   |
| 7  |  |
| 8  | The purpose of this evidence is to address the gas supply-related matters proposed for 2013. The |
| 9  | evidence is organized under the following headings:  |
| 10 | 1/ Gas Supply Plan   |
| 11 | 2/ Gas Supply Pricing  |
| 12 | 3/ Upstream Transportation Portfolio   |
| 13 |  |
| 14 | 1/ Gas Supply Plan   |
| 15 | The purpose of this evidence is to describe the 2013 Gas Supply Plan. The 2013 (test year), 2012 |
| 16 | (bridge year), 2011 (outlook) and the 2010 (historical year) Gas Purchase Expense schedules are  |
| 17 | found at Exhibit D3, Tab 2, Schedule 1; Exhibit D4, Tab 2 Schedule 1; Exhibit D5, Tab 2,         |
| 18 | Schedule 1 and Exhibit D6, Tab 2, Schedule 1, respectively. The Gas Purchase Expense             |
| 19 | schedules are consistent with those presented by Union in previous rates proceedings.            |

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#### 1 1.1/ Gas Supply Plan Planning Process

- 2 In developing the Gas Supply Plan, Union models all upstream transportation capacity and
- 3 storage assets to provide an integrated service across all delivery areas for bundled customers.
- 4 Union uses software known as SENDOUT to complete the Gas Supply Plan. Union has used
- 5 this modeling tool for a number of years and it has been presented in previous rate applications.
- 6 It was most recently used to support the gas costs approved by the Board in Union's 2007 rates
- 7 proceeding (EB-2005-0520).

8

- 9 The Gas Supply planning process is guided by a set of principles that are intended to ensure that
- 10 customers receive secure, diverse gas supply at a prudently incurred cost. These principles are:
- i. Ensure secure and reliable gas supply to Union's service territory;
- ii. Minimize risk by diversifying contract terms, supply basins and upstream pipelines;
- iii. Encourage new sources of supply as well as new infrastructure to Union's service territory;
- iv. Meet planned peak-day and seasonal gas delivery requirements; and,
- v. Deliver gas to various receipt points on Union's system to maintain system integrity.

- 17 Union's five-year Gas Supply Plan, completed during the spring of 2011, includes the following
- 18 key inputs and assumptions:
- i. Union's in-franchise demand forecast based upon customer location (Union North/Union
- South), supply arrangement (sales service), storage requirement (sales service and direct
- purchase) and service type (excludes Rate T1, Rate T3, North T-Service and Unbundled
- 22 service);

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- ii. A monthly commodity price forecast as described in section 1.6;
- 2 iii. Upstream transportation tolls in effect at the time the forecast was prepared;
- 3 iv. Heating value of 37.51 GJ/10<sup>3</sup>m<sup>3</sup> in Union North and 37.75 GJ/10<sup>3</sup>m<sup>3</sup> in Union South;
- 4 v. All upstream transportation contracts held by Union plus existing obligated Ontario
- 5 deliveries for the bundled direct purchase market;
- 6 vi. Sales service and bundled direct purchase storage is cycled completely each year in the
- 7 plan with storage full on November 1 and empty by March 31;
- 8 vii. Sufficient inventory at February 28 to meet the peak day requirements for sales service and
- 9 bundled direct purchase customers;
- 10 viii. No migration between sales service and bundled direct purchase customers for the term of
- the plan; and,

15

- ix. 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.

16 1.2/ Gas Supply Plan Results

- 17 The Gas Supply Plan model provides a forecast of Union's costs required to serve in-franchise
- sales service and bundled direct purchase customers. These costs are reflected in the Gas
- 19 Purchase Expense schedules previously referenced.

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1 Union's 2012 to 2016 in-franchise Gas Supply/Demand Balance forecast for sales service and 2 bundled direct purchase customers in 2013 is provided at Exhibit D3, Tab 2, Schedule 3. 3 4 There are no material changes in the proposed 2012 – 2016 Gas Supply Plan from the Gas Supply Plan filed in Union's 2007 rates proceeding (EB-2005-0520). 5 6 7 1.3/ Upstream Transportation Capacity 8 Union holds a combination of firm upstream transportation contracts, Dawn sourced supply and storage capacity to meet the full forecast annual demand. Firm transportation arrangements 9 provide direct and secure access to a diverse group of supply basins and hubs in North America. 10 A key objective of the Gas Supply Plan is to optimize the use of upstream contracted pipeline 11 capacity. This is accomplished by managing upstream transportation capacity on an integrated 12 13 basis and shifting the use of this capacity from one area to serve demand in another area when the opportunity and the need exists. 14 15 In Union North, Union utilizes TransCanada Pipelines ("TCPL") and Michigan Consolidated 16 Gas Company/Great Lakes Gas Transmission ("MichCon/GLGT") capacity to meet sales service 17 and bundled direct purchase customer demands. The transportation capacity necessary to meet 18 peak day demands on a firm basis exceeds that required to meet the annual demand 19

requirements. The Gas Supply Plan reflects the effective management of TCPL and

20

21

MichCon/GLGT capacity by:

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1 i. Using 15.4 PJ of TCPL Storage Transportation Service ("STS") injection and TCPL Dawn 2 Diversions. STS injection is a service that allows Union to move excess volumes from 3 Union North to Parkway and ultimately to Dawn storage in the summer; and, 4 ii. Using 15.0 PJ of TCPL STS withdrawals primarily in the winter months to serve weatherdriven demands. Gas is withdrawn from Dawn storage throughout the winter and is 5 transported back to Union North via STS withdrawals without the need for contracting 6 7 additional TCPL firm transportation ("FT") capacity to that delivery area. 8 Using contractual STS pooling rights to group all of Union's STS rights serving the various 9 Union North delivery areas provides Union with the flexibility to serve the individual delivery 10 areas in Union North with gas service in excess of that delivery area's specific STS rights. 11 12 Unutilized TCPL and MichCon/GLGT FT capacity (held in order to serve peak day firm loads 13 for sales service and bundled customers in Union North that cannot be managed via the above mechanisms) is forecast at 10.4 PJ for the 2013 test year. This results in Unabsorbed Demand 14 Charges ("UDC"). If weather is colder than normal, and if it is economical to do so, Union will 15 use this capacity to meet incremental supply requirements in either Union North or Union South, 16 subject to TCPL's authorization of downstream diversions. This unutilized capacity result has 17 increased from the 2007 Board-approved filing. In EB-2005-0520, the Board approved 4.4 PJ of 18 UDC for unutilized TCPL FT capacity serving the Northern bundled customers. The increase in 19

unutilized capacity is the result of decreases in weather-related throughput in the general service

market in Union North as discussed in the evidence of Mr. Paul Gardiner at Exhibit C1, Tab 1,

20

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1 and decreases in Union North contract customer throughput as discussed in the evidence of Ms. Sarah Van Der Paelt and Mr. Paul Gardiner at Exhibit C1, Tab 2. 2 3 4 In Union South, Union utilizes capacity on multiple different upstream pipelines to provide service to meet sales service customer demands. The Gas Supply Plan reflects the effective 5 management of these capacities as there is no unutilized transportation capacity forecast for the 6 7 2013 test year as the Plan forecasts a 100% load factor on all Union South upstream transportation. In EB-2005-0520, the Board approved 0.2 PJ for Union South. 8 9 The Gas Supply Plan includes 15.3 TJ of Dawn Delivered Service as part of the Union South 10 supply portfolio in 2013, which represents approximately 15% of Union's South sales service 11 12 purchases. Dawn delivered service supports this diversity by providing Union access to a robust 13 and liquid Dawn market hub. With this diversity, Union is less exposed to price volatility. 14 Dawn sourced supply is acquired on a month-to-month basis following Union's System Gas -15 Gas Procurement Policy and Procedures (Appendix A). Purchasing on a month-to-month basis 16 provides Union the flexibility to manage to its seasonal inventory targets without incurring 17 additional UDC. 18 19 1.4/ Incremental Supply 20 If Union is required to purchase incremental supply for unplanned balancing purposes, Union 21

considers its various options in terms of cost effectiveness and operational need. Often these

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- transactions take place at Dawn. Since the November, 2004 implementation of the load
- 2 balancing checkpoints for bundled direct purchase customers, approved by the Board in the RP-
- 3 2003-0063 Decision, Union's incremental supply purchases are primarily driven by sales service
- 4 consumption being greater than forecast (primarily due to colder than normal weather).
- 5 However, even with direct purchase load balancing checkpoints, Union still retains load
- 6 balancing obligations related to weather variances relative to the February inventory checkpoints
- 7 and March weather and consumption variances for both sales service and bundled direct
- 8 purchase customers.

9

- 10 1.5/ Winter Peaking Service
- 11 Union is not forecasting a Winter Peaking Service requirement in Union South for the winters of
- 12 2012/2013 and 2013/2014. As discussed in the evidence of Mr. Matt Wood at Exhibit B1, Tab
- 5, there is no Parkway shortfall forecast on the Dawn-Parkway system for the winters of
- 14 2012/2013 and 2013/2014.

- 16 1.6/ <u>Pricing</u>
- 17 The Gas Supply Plan was prepared in the spring of 2011. The transportation tolls and gas prices
- utilized in the development of the plan are those used to set the January 1, 2011 Quarterly Rate
- 19 Adjustment Mechanism ("QRAM") commodity price. These prices are reflected in the Gas
- 20 Purchase Expense schedules and shown at Exhibit D3, Tab 2, Schedule 1; Exhibit D4, Tab 2,
- 21 Schedule 1; Exhibit D5, Tab 2, Schedule 1 and Exhibit D6, Tab 2, Schedule 1.

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| _ | 1 7 / | D' .   | D 1      |
|---|-------|--------|----------|
| 1 | 1.//  | Direct | Purchase |

- 2 The Gas Supply Plan includes all bundled direct purchase demand and contracted Daily Contract
- 3 Quantities ("DCQ"), and assumes that the number of direct purchase customers remains constant
- 4 as of January 1, 2011. Union is unable to predict customer migration between sales service and
- 5 bundled direct purchase. Therefore, for the term of the Gas Supply Plan, customers are assumed
- 6 to remain with the service they had received effective January 1, 2011.

7

- 8 On an actual basis, if customers migrate to direct purchase, Union facilitates this movement by
- 9 displacing planned commodity purchases and allocating upstream transportation capacity, as per
- the vertical slice allocation methodology approved in the RP-1999-0017 proceeding and as
- discussed later in Section 3.1.

12

- 13 1.8/ Weather
- 14 The Gas Supply Plan is based upon the 2013 weather normalized demand forecast for in-
- franchise general service customers, as outlined in the evidence of Mr. Paul Gardiner at Exhibit
- 16 C1, Tab 5.

- 18 1.9/<u>Storage</u>
- Union's 2011 to 2015 Peak Storage Availability and Utilization forecast is provided at Exhibit
- 20 C3, Tab 4, Schedule 3. Storage is provided to in-franchise customers to meet the demand
- 21 requirements of sales service and bundled direct purchase, Rate T1, Rate T3 and Northern T-
- 22 service customers.

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1 These storage allocation methodologies were approved by the Board as part of the Natural Gas 2 Storage Allocation Policies Decision (EB-2007-0724/0725). 3 4 The storage space available to sales service and bundled direct purchase customers in Union South and Union North is determined using the Board-approved Aggregate Excess methodology. 5 6 This method is defined as the calculation of the difference between total winter demand 7 (November 1 through March 31) and the average annual demand for a 151 day period. This method determines the allocation of storage space based on the following formula: 8 9 Aggregate Excess = Total Winter Consumption – [(151/365)\*(Total Annual Consumption)]10 11 12 Union has provided the storage space allocations available to customers electing U2 (unbundled) service in Union South and electing T-service and unbundled service in Union North at Exhibit 13 D3, Tab 2, Schedules 6 and 7, respectively. These allocations are updated annually based on the 14 methodology approved in the EB-2007-0724/0725 Decision. 15 16 Accordingly, customers electing T-service and U5/U7/U9 (unbundled) service in Union South 17 have the option of electing the storage space allocation method which best serves their need. 18 The allocation methods available are the Aggregate Excess methodology and the 15 x DCQ 19 methodology. 20

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- 1 New large T1 and U7 (unbundled) service customers in Union South with daily firm
- 2 transportation demand requirements in excess of 1,200,000 m<sup>3</sup>/day have the storage space
- 3 allocation calculated as follows: Peak hourly consumption x 24 hours x 4 days, unless the
- 4 customer elects firm deliverability less than the maximum entitlement.

5

- 6 If the customer elects less than the maximum deliverability entitlement, the maximum cost based
- 7 storage space entitlement is 10 x firm storage deliverability contracted (but not to exceed peak
- 8 hourly consumption x 24 hours x 4 days).

9

10

#### 2/ GAS SUPPLY PRICING

- 11 The purpose of this evidence is to review Union's gas supply (commodity and upstream
- transportation) pricing mechanism.

13

- 14 2.1/<u>QRAM</u>
- 15 Union uses the QRAM to set reference prices for commodity and upstream transportation,
- including the prospective recovery of gas cost related deferral account balances. The existing
- 17 QRAM process was reviewed and approved in EB-2008-0106.

- 19 The major features of the QRAM include:
- 20 i. A quarterly change to the commodity reference prices using a 21 day average of the
- forward 12 months gas prices as indicated on the New York Mercantile Exchange
- 22 ("NYMEX"), adjusted for the Alberta basis and foreign exchange rate;

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- ii. The prospective recovery of applicable deferral account balances;
- 2 iii. The prospective true-up of historical deferral account variances, between previously
- 3 projected and actual deferred costs or credits;
- 4 iv. TCPL transportation toll changes as approved by the NEB; and,
- 5 v. An efficient, consistent and mechanical filing and approval process.
- 7 The Board has consistently approved Union's QRAM applications. The QRAM process is
- 8 working well and Union is not proposing any changes.

#### 10 3/ UPSTREAM TRANSPORTATION

- 11 The purpose of this evidence is to provide information on Union's upstream transportation
- 12 portfolio commitments.

6

9

- 14 The North American supply/demand dynamics are changing at a rapid rate. The recent
- introduction of significant sources of shale supply and the declining production in the Western
- 16 Canadian Sedimentary Basin ("WCSB") are examples of the changing market dynamics that
- directly impact the supply choices available to Union. A discussion on the impacts of the
- changing market dynamics can be found at Exhibit A2, Tab 1, Schedule 1 and Schedule 4.
- 19 Union's transportation portfolio continues to evolve in response to cost effective supplies
- 20 available to Ontario. Union's current upstream transportation portfolio is diversified with respect
- 21 to supply basin access, contract term and transportation service provider. Exhibit D3, Tab 2,
- Schedule 5 presents Union's Summary of Union's Upstream Transportation Contracts.

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- 1 3.1/ Southern Allocation of Upstream Transportation Capacity (Vertical Slice)
- 2 Union allocates its upstream transportation capacity to Union South customers as they migrate
- 3 from sales service to direct purchase using the vertical slice methodology approved by the Board
- 4 in its RP-1999-0017 Decision. The components and relative percentages of the vertical slice are
- 5 based on Union's projected upstream transportation portfolio as of each November 1 and remain
- 6 in effect for one year. Union communicates the upcoming vertical slice percentages to customers
- 7 and the Board in August of each year.

8

- 9 Union's sales service vertical slice upstream transportation portfolio for November 1, 2011 is
- found at Table 1. This portfolio is being allocated to customers switching from sales service to
- direct purchase during the period November 1, 2011 to October 31, 2012.

| <u>Transportation</u> | Daily Volume (GJ) | % Portfolio  |
|-----------------------|-------------------|--------------|
| Alliance/Vector       | 66,436            | 27.5%        |
| Vector                | 85,154            | 35.2%        |
| Trunkline/Panhandle   | 21,017            | 8.7%         |
| Panhandle – Ojibway   | 26,270            | 10.9%        |
| <u>TransCanada</u>    | 42,925            | <u>17.8%</u> |
| Total                 | 241,802           | 100.0%       |

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- 1 3.2/ Union South Transportation Portfolio as at November 1, 2011
- 2 The following describes the transportation components in Union's South transportation portfolio
- 3 and vertical slice:

4

- 5 1) Alliance/Vector
- 6 Union holds an existing firm transportation contract on Alliance Pipeline and a corresponding
- 7 contract on Vector Pipeline. These contracts transport gas from the WCSB and deliver it to
- 8 Union's system at Dawn. The contracts reflect a volume of 84,405 GJ/d of firm transport with a
- 9 term of December 1, 2000 through November 30, 2015.

10

- Of the total contracted capacity, 66,436 GJ/d serves sales service customers in Union South and
- is allocated to customers migrating to direct purchase using the vertical slice methodology.
- 13 The Board previously reviewed these transportation contracts in the RP-2001-0029 proceeding.
- Since that time, Union was required to give Alliance notice by December 1, 2010 to exercise its
- right to extend the duration of the contract beyond the original termination date of December 1,
- 16 2015. Union elected not to extend the term of the contract for economic reasons.

- 18 2) <u>Vector</u>
- 19 Union holds a second firm transportation contract on Vector Pipeline, transporting gas from
- 20 Chicago to Union's system at Dawn. The contract reflects a volume of 81,000 Dth/d (85,460
- 21 GJ/d) of firm transport for a term of November 1, 2008 through November 30, 2015.

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1 Of the total contracted capacity, 85,154 GJ/d serves sales service customers in Union South and 2 is allocated to customers migrating to direct purchase using the vertical slice methodology. 3 4 The Board previously reviewed this transportation contract in the EB-2009-0052 proceeding. 5 3) Trunkline/Panhandle 6 7 Union holds an existing firm transportation contract on Trunkline Gas Company from the Gulf of Mexico to Bourbon, Illinois, and a corresponding short-haul contract on Panhandle Eastern Pipe 8 Line from Bourbon to Union's system at Ojibway. The volumes are obligated at Parkway by a 9 firm Ojibway to Parkway service. The contracts reflect a volume of 20,000 Dth/d (21,101 GJ/d) 10 of firm transport for a term of November 1, 2007 through October 31, 2012. 11 12 Of the total contracted capacity, 21,017 GJ/d serves sales service customers in Union South and 13 is allocated to customers migrating to direct purchase using the vertical slice methodology. 14 15 The Board previously reviewed these transportation contracts in the EB-2008-0034 proceeding. 16 17 4) Panhandle 18 Union holds a firm long haul transportation contract with Panhandle Eastern Pipe Line from the 19 Panhandle Field Zone to Union's system at Ojibway. The volumes are obligated at Parkway by a 20 firm Ojibway to Parkway service. This contract reflects a volume of 25,000 Dth/day (26,376 21 GJ/d) of firm transport for a term of November 1, 2010 through October 31, 2017. 22

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1 Of the total contracted capacity, 26,270 GJ/d serves sales service customers in Union South and is allocated to customers migrating to direct purchase using the vertical slice methodology. 2 3 The Board previously reviewed these transportation contracts in the 2010 Deferral Disposition 4 proceeding, EB-2011-0038. 5 6 5) TCPL In total, Union's South portfolio holds 71,327 GJ/d of TCPL capacity transporting gas from 7 Empress, Alberta to the Union CDA. 8 9 Of the total contracted capacity, 42,925 GJ/d serves sales service customers in Union South and 10 is allocated to customers migrating to direct purchase using the vertical slice methodology. 11 12 13 3.3/ Union North Transportation Portfolio as at November 1, 2011 The following describes the transportation components in Union's north transportation portfolio. 14 15 The vast majority of customers in Union North continue to be served directly from TCPL 16 interconnects. Approximately 95% of Union's long haul TCPL FT contracts and all of Union's 17 18 TCPL STS contracts have completed their primary term and renew on a 1-year rolling basis. Detailed TCPL contract capacity can be found in Exhibit D3, Tab 2, Schedule 5. 19 20 To achieve some supply diversity in Union North, Union contracted for firm transportation from 21

Michigan to the Sault Ste. Marie Delivery Area ("SSMDA") for a volume of up to 6,143 GJ/d

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- beginning November 1, 2011 through October 31, 2014 in order to supply a portion of that
- 2 delivery area from Michigan. Accordingly, Union holds capacity with MichCon, GLGT and
- 3 finally on TCPL for service to SSMDA. This path is new for Union beginning in November 1,
- 4 2011 and provides some supply diversity to Union North where now 5% of the total Union North
- 5 system supply is sourced outside of the WCSB.

6

- 7 3.4/ <u>Transportation Committed to Beginning November 1, 2012 South Portfolio</u>
- 8 Niagara Kirkwall with TCPL
- 9 Union holds a firm transportation contract with TCPL for the path Niagara to Kirkwall. The
- contract quantity is for 21,101 GJ/d (20,000 Dth/d) beginning November 1, 2012 through
- October 31, 2022 (ten year term).

- 13 This contract will become part of Union's upstream transportation portfolio as of November 1,
- 14 2012.

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# SYSTEM GAS

# GAS PROCUREMENT POLICY AND PROCEDURES

**April 2010** 

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| 8 | Gas Procurement Procedure        | 9 |
| 9 | Glossary                         |   |

| 1 INTRODUCTION Union Gas purchases natural gas for its system operations and regulated system gas su portfolio. The Gas Procurement Policy and Procedures (the "Policy") addresses the proof securing natural gas supplies for Union's system gas customers.  The Policy applies to all system gas purchases. | pply |
|---|------|
| The Policy applies to all system gas purchases.   |      |
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#### 2 OBJECTIVES

There are five objectives that provide the foundation for the activities that take place under the Policy. The objectives are as follows:

#### 2.1 Provide reasonable value through a diversified portfolio

This objective is intended to achieve a market sensitive price, through the use of diversified tools to provide a reasonable cost of gas for Union Gas ratepayers. This means finding a balance between the use of fixed price contracts, indexed price contracts, and supply basin diversification to achieve this goal.

#### 2.2 Minimize exposure to counterparty credit risk

This objective is in place to recognize the need for prudent credit practices in gas procurement.

# 2.3 Union ensures fairness to customers and all counterparties in all gas supply transactions

Union ensures that all transactions are carried out with integrity with no preferential treatment shown towards any particular counterparty.

#### 2.4 Corporate Governance and Controls

Corporate Governance is an integral part of the Policy. The gas supply portfolio plans have oversight by senior management. All transactions are approved by senior management and have appropriate internal controls in place. Subject to the Internal Audit department's annual risk assessment, transactions are periodically audited to ensure compliance with the Policy.

#### 3 CONTROLS

There are six independent controls built into the Policy. 1) Corporate Governance through executive review of the gas supply plan; 2) Transactions in the procurement plan approved by the presiding Vice President or Director, Gas Supply, and the Manager, Gas Supply; 3) Absolute segregation of the responsibilities between the front office (transactors) and the back office (transaction administration) functions; 4) Internal audits of the transactions; 5) Exception reporting; and 6) Standard contracts reviewed annually by Finance, Credit, Tax and Legal.

#### 3.1 Corporate Governance

Union Gas executive, at least annually, review and approve the gas supply plan. In accordance with Delegation of Authority, the presiding Vice President, has full authority to implement the plan including the purchase of incremental gas that may be required. The gas supply plan is used to establish the monthly procurement plan.

#### 3.2 Procurement Plan Approval

The Gas Supply department develops the monthly procurement plan. The monthly procurement plan identifies the specific dates for the transactions to be executed.

The presiding Vice President, or Director, Gas Supply and the Manager, Gas Supply or his /her delegate sign the monthly procurement plan. This provides all necessary authorizations for the transactors to execute the transactions in the procurement plan.

#### 3.3 Segregation of Duties

#### 3.3.1 Front Office (Gas Supply)

Gas Supply is responsible for developing and executing the monthly procurement plan. The Manager, Gas Supply or his/her designate is responsible for revising the plan, presenting the plan for appropriate approval, and presenting supporting information for any changes recommended. Once the plan is approved, the Manager, Gas Supply and his/her designate is responsible for:

- Establishing and overseeing the business relationships associated with conducting the plans.
- Ensuring compliance with all credit guidelines provided by Credit.
- Recording all transactions and related terms and informing appropriate persons of all transactions.
- Maintaining price data.
- Reporting of purchases and exceptions from the Policy to Regulatory.
- Providing reports as requested by senior management or the OEB.
- Providing open communication to the OEB and intervenors on policy and procedural updates.
- Initiating a review of the Policy if market conditions warrant or at least every 3 to 5 years.

#### 3.3.2 Back Office (Finance/Credit)

The Finance department performs the administration and accounting of all the transactions. Gas Supply does not have access to post any accounting entries.

The department's responsibilities are:

- Providing first line checking of all transaction invoices received monthly.
- Paying all counterparty invoices. Being responsible for all account reconciliation with the counterparties.
- Providing counterparty credit support as detailed in Section 4, Credit Guidelines.
- Working with Gas Supply to monitor mark to market activity, and performing mark to market calculations for internal and external reporting requirements as required.
- Reviewing standard contracts on an annual basis (Corporate Governance).

Finance must notify the Director, Gas Supply immediately in the event there are any material discrepancies relating to transactions, which could expose the company to legal liability and which remain unresolved after 48 hours. The resolution of any discrepancy with the counterparty is conducted by Finance and/or Gas Supply. The resolution of any disputes are placed in writing and sent to the counterparty with an explanation of the discrepancy and an explanation of how the discrepancy was resolved and the provision that the counterparty consents to the resolution unless the company receives notice otherwise within 48 hours from the receipt.

#### 3.4 Internal Audit of Transactions

Periodically, the Internal Audit department initiates and conducts an audit of transactions. The intent of the audit is to ensure the Policy is being followed. At the discretion of the auditors, a transactor may be directed to be absent from his/her office for at least three consecutive days. This mandatory absence is at the discretion of the Audit department and without prior warning. During that time, the transactor must have no contact with the Audit personnel except as requested by the auditors.

In the event that Audit discovers any discrepancies relating to transactions, settlements, etc. that could expose the company to legal liability, the Director, Gas Supply is notified immediately.

The audit procedures include (but are not limited to):

- Reviewing the transaction activities for compliance with internal guidelines and limits and other company policy and regulatory requirements.
- Reviewing a sample of transactions for accuracy, ensure approved contract is in place.
- Reviewing a sample of transactions to ascertain whether transactions were within the range of same day market prices.
- Tracking a sample transaction through the system, from the initial trade to the closing of the contract period including approval to the general ledger.
- Comparing a sample of confirmations or execution authorizations to the position sheets to ensure that the prices, amounts, etc. are properly transcribed.

- Reviewing the authorizations, transaction summaries and confirmation logs for proper authorization and completeness.
- Reviewing and testing the reconciliation procedures.
- Completing a written report noting any discrepancies or deviations from the Policy and any other irregularities, which could expose the company to legal liability.

#### 3.5 Exception Reporting

The transactors adhere to the Policy as completely as possible in all circumstances. However, Union recognizes that exceptions to the Policy may be required in certain market situations and such exceptions are reported as required.

#### 3.6 Annual Review of Standard Contracts

All standard contracts relating to procurement activity are reviewed on an annual basis by Finance, Credit, Tax and Legal.

#### 4 CREDIT GUIDELINES

The credit guidelines apply to all gas supply transactions. The guidelines reflect the appropriate credit risk for the specific type of gas supply transaction. The intent of the guidelines is to maintain a prudent credit practice balanced with the need to maintain ample alternatives for acquiring gas supplies.

Credit requirements apply to all index transactions. In addition, credit requirements apply to short-term fixed price transactions up to three-months from the transaction date. For example, if the transaction date is in January, the three-month period following the transaction date is February, March and April. Credit requirements would apply to fixed price transactions during this period.

Fixed price transactions extending beyond three months from the transaction date are considered physical hedges and are therefore not permitted under this policy.

#### 4.1 Credit Requirements

Counterparties require an investment grade rating by an acceptable rating agency (Standard & Poors (BBB- and above), Moody's (Baa3 and above), and DBRS(BBB/low and above) and / or an acceptable internal review by the Credit department. Alternatively, a counterparty without a rating, or below investment grade, may be an approved counterparty provided a parent or affiliate that has an investment grade rating guarantees these transactions. Legal and Credit must approve any guarantee offered. In special circumstances a counterparty without an investment grade rating and without a parent or affiliate guarantee may be an approved counterparty at the discretion of the Credit department in accordance with Union Gas Credit guidelines.

Any approved counterparty receives a credit limit assigned by the Credit department. Upon request from the Gas Supply department, the Credit department considers raising the credit limit for specific counterparties in accordance with Union Gas Credit guidelines and within the Credit department's Delegation of Authority.

If at any time counterparty's credit exposure is greater than the authorized credit limit, Credit informs the Director, Gas Supply and the he/she recommends a course of action to bring the counterparty within authorized credit limits by either raising the limit, if appropriate, or restricting transactions with the counterparty until they are within limits.

If Credit has reason to be concerned about the financial stability of any counterparty, Credit notifies the Director, Gas Supply, and Legal. Credit, Legal and the Director, Gas Supply develops a course of action to limit Union's financial liability consistent with the provisions of the gas purchase agreement in place with the counterparty.

#### 5 SUPPORT DEPARTMENTS

#### 5.1 Tax Department

The Tax department provides the Gas Supply and the Finance departments with any updates or implications of any proposed or pending tax legislation that affects the program or transactions. The Gas Supply and Finance departments seek the advice of the Tax department as required. The Tax department reviews the standard contracts on an annual basis (Corporate Governance).

#### 5.2 Legal

Legal is responsible for reviewing contractual terms and establishing Union's standard gas purchase agreement (GPA) or a NAESB for counterparties. Once a standard format of each of the documents has been approved by legal, any future sign off by legal is not required. If there are any subsequent changes to the formatting or the wording, or potential law changes then a proper review and sign off are required by legal for any new documentation. Legal reviews the standard contracts on an annual basis (Corporate Governance).

#### 6 AFFILIATE TRANSACTIONS

All counterparties are treated equally and no preferential treatment is given to affiliated companies. Any transaction conducted with an affiliated company complies with the Ontario Energy Board's Affiliate Relationships Code for Gas Utilities.

#### 7 APPROVED TRANSACTION INSTRUMENTS

#### 7.1 Transaction Instruments

Union Gas is authorized to use the following transaction pricing instruments either through the RFP process (written and verbal), electronic gas trading platforms or a brokerage house.

- Fixed price contracts specify purchase of natural gas at a fixed price for a specific term.
- Index price contracts specify purchase of natural gas at a price to be determined in the future for a specific term.
- Price trigger contracts are a hybrid of fixed and index contracts. Initially, the contract is index and Union has the right to fix the price over the contract term.

#### 8 GAS PROCUREMENT PROCEDURE

The following provides an overview of the procedures and related internal controls that must be followed when conducting a transaction.

#### 8.1 Request For Proposal's (RFP's)

#### 8.1.1 Written RFP's

Written RFP's are sent to prospective suppliers by email based on the appropriate counterparty list. Responses to written RFP's are received by email or facsimile.

Emails are sent and received by the "UniongasRFP" mailbox. It is the responsibility of the supplier to ensure that proposals are received by the closing time. Suppliers offering late proposals are notified that their proposal was rejected due to being late. Reasonable allowances are made for communication problems.

In the case where the initial price has changed due to market volatility, Union calls the next best offer to ensure the price change requested is legitimate and reasonable and that the original successful supplier still has the best price. Verbal quotes to finalize the transaction are electronically recorded. Recordings are kept for a period of one year following the transaction.

#### 8.1.2 Verbal RFP's

Verbal RFP's are used by exception, primarily for purchases outside the monthly procurement plan. In addition, given the volatile nature of natural gas pricing, it may from time to time, be in the best interests of Union's customers to use a verbal (by phone) tendering procedure. This procedure is used to minimize price disadvantage (eg. in a market of rising prices) or take advantage of price opportunities that materialize from time to time. Supplier short lists (by delivery point) are used in this process to facilitate its timely turnaround with the market. This procedure is intended to complement, not replace the written RFP process by obtaining market responsive pricing without compromising the principle of fairness to both customers and suppliers.

Verbal RFP's are issued only to suppliers who have returned an executed copy of Union's Gas Purchase Agreement or NAESB and those who consistently respond to RFP's for gas sales at the delivery point and consistently make competitive price offers. Verbal quotes are electronically recorded. Recordings are kept for a period of one year following the transaction.

#### 9 GLOSSARY

**Back Office -** The management and staff that have the primary responsibility for accounting, payables/receivables management, reporting and credit matters.

**Basis** - The differential that exists at any time between the futures price for a given commodity and the comparable price at a different physical location.

Canadian Gas -Gas delivered in specific regions in Canada.

**Counterparty** – The person or institution standing on the opposite side of a transaction.

**Credit Risk** – The risk of default by either counterparty in a transaction.

**Front Office -** The management and staff that have the primary responsibility for counterparty contact and transacting.

**Futures Exchange -** A location where trading in commodities is conducted in accordance with other specific rules, procedures and guarantees (i.e. New York Mercantile Exchange (NYMEX)).

Gas Purchase Agreement - Any of Union Gas Limited's contracts for gas purchases

NAESB - North American Energy Standard Board standard gas purchase agreement.

**New York Mercantile Exchange (NYMEX)** - The world's largest commodity futures exchange and preeminent trading forum for energy in North America, the NYMEX is a regulated financial institution that provides a centralized marketplace to increase market efficiency through the competition among many buyers and sellers.

**Request for Proposal (RFP)** - A request by a prospective party to a contract, asking other potential parties to a contract, for proposals on the key principles and terms related to an expected transaction. Either the seller or buyer may issue a request for proposal, although normally the buyer issues the request. The party requesting normally outlines the key proposed conditions of purchase and sale, but may permit alternative forms and conditions.

**US Gas -** Gas delivered in specific regions in the United States.

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#### PREFILED EVIDENCE OF

#### BETH CUMMINGS, MANAGER OF O&M AND CAPITAL REPORTING

3

1

2

4 The purpose of this evidence is to provide an overview of Union's Operating and Maintenance

- 5 ("O&M") expenses for the 2013 test year. Summaries of projected costs by cost type are
- 6 provided at Exhibit D1, Summary Schedule 2 and variance explanations from the prior year are
- 7 provided at Exhibit D3 through Exhibit D6, Tab 3, Schedule 2, for 2013, 2012 and 2011,
- 8 respectively. Summaries of 2010 actual costs by cost type and variance explanations to the 2007
- 9 Board-approved costs are provided at Exhibit D6, Tab 3, Schedule 2.

provided at Exhibit A2, Tab 3, Schedule 1.

10

19

11 The O&M forecast presented in this evidence is a consolidation of the budgets prepared for 12 various departments within Union. The individual department budgets were developed using a 13 common set of assumptions as set out in the budget instructions as well as department specific 14 workload, service and operating requirements. The methodology used to allocate O&M between 15 the regulated and unregulated business is provided at Exhibit A2, Tab 2. The forecast is consistent with Union's goals of providing cost effective service to customers while maintaining 16 17 safety, system integrity and reliability, addressing customer service needs, government directives 18 and requirements, and environmental concerns. A summary of the operating budget process is

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#### 1/ 2013 TEST YEAR COMPARISON TO 2007 BOARD-APPROVED

- 2 Union's utility O&M forecast for the 2013 test year is forecast to be \$374.9 million. The forecast
- 3 reflects increases due to human resource costs, inflation, customer growth, compliance and safety
- 4 programs and is offset partially through productivity and a reduction of utility costs as resources
- 5 were re-directed to affiliate work, unregulated work and apportioned to capital work.

6

1

- 7 In addition, utility costs have increased by \$14.8 million from the 2007 Board-approved budget
- 8 for Demand Side Management ("DSM") compared to the DSM budget proposed in EB-2011-
- 9 0327. Table 1 provides a comparison of 2013 O&M forecast spending to 2007 Board-approved
- 10 levels.

11

# Table 1 Summary of Utility Increase Forecast 2013 vs. Board-approved 2007

| <u>Line</u> |   |         |
|-------------|---|---------|
| <u>No</u>   | Particulars (\$ Millions)                           |         |
|             |   |         |
| 1           | Forecast 2013 Utility O&M                           | 377.2   |
| 2           | Less Cross-Charge                                   | (2.3)   |
| 3           | Forecast 2013 Utility O&M Less Cross-Charge         | 374.9   |
| 4           | Less Board-approved 2007 Utility O&M (EB-2005-0520) | (325.6) |
| 5           | Less Incremental DSM (EB-2011-0327)                 | (14.8)  |
| 6           | Increase to Utility Costs excluding DSM             | 34.5    |

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- 1 The increase to utility costs excluding DSM is \$34.5 million or 10.6% over the 2007 Board-
- 2 approved costs. This equates to an average increase from 2007 Board-approved to 2013 of
- 3 approximately 1.8% per annum.

4

5 The primary drivers for the increase in O&M expense are outlined in Table 2 below.

Table 2
Summary of O&M Expense Changes by Major Driver
Forecast 2013 vs. Board-approved 2007

| <u>Line</u> |  |      |        |
|-------------|--|------|--------|
| <u>No</u>   | Particulars (\$ Millions)                        |      |        |
|             |  |      |        |
|             | Human Resource related cost increases            |      |        |
| 1           | Compensation                                     | 32.9 |        |
| 2           | Benefits   | 6.1  |        |
| 3           | Workforce Development and Enhancement Initiative | 2.6  | 41.6   |
| 4           | Inflation  |      | 17.5   |
| 5           | Customer Growth                                  |      | 12.2   |
| 6           | Integrity Management                             |      | 6.5    |
| 7           | Energy Technology & Innovation Canada            |      | 5.0    |
| 8           | Line Locates                                     |      | 3.9    |
| 9           | Productivity                                     |      | (22.5) |
| 10          | Capitalization                                   |      | (9.2)  |
| 11          | Affiliate Services                               |      | (8.0)  |
| 12          | Non-Utility Allocation                           |      | (7.8)  |
| 13          | Bad Debt Expense                                 |      | (5.0)  |
| 14          | Other  |      | 0.3    |
| 15          | Total  |      | 34.5   |

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| 1  | <u>Human Resources Related Costs</u>  |
|----|---|
| 2  | Human Resources costs have increased by approximately \$41.6 million between 2007 Board-          |
| 3  | approved costs and the 2013 test year forecast. This increase is primarily driven by salary and   |
| 4  | wage increases between 2008 and 2011 and projected salary increases for 2012 and 2013 of 3.0%     |
| 5  | and 3.5% respectively. In addition to salary and wage increases, costs also increased for pension |
| 6  | and benefits and the Workforce Development and Enhancement Initiative. Pension, benefits and      |
| 7  | compensation costs are discussed in detail in the evidence of Mr. Bohdan Bodnar, Ms. Pat Elliott  |
| 8  | and Mr. Chuck Conlon at Exhibit D1, Tab 3.  |
| 9  |   |
| 10 | The salary increases contained in the 2012 and 2013 forecast were 3.0% and 3.5% as reflected in   |
| 11 | the updated Economic Assumptions in Exhibit A2, Tab 3, Schedule 1, Appendix A. The budget         |
| 12 | instructions at Exhibit A2, Tab 3, Schedule 1, Appendices B and C were written prior to the       |
| 13 | updated assumptions and reflect an earlier assumption of 3.5% and 4.0% for each year.             |
| 14 |   |
| 15 | <u>Inflation</u>  |
| 16 | Union has assumed that inflation will increase costs other than salary, pension/benefits and DSM  |
| 17 | by \$17.5 million between the 2007 Board-approved and the 2013 test year. This is calculated      |
| 18 | using the actual Canada CPI inflation rate for the years 2007 through 2010 and using a projected  |
| 19 | average rate of inflation of 2.2%, 2.1% and 2.1% per annum for the years 2011 through 2013,       |
| 20 | respectively.   |

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| 1  | <u>Customer Growth</u>  |
|----|---|
| 2  | Customer growth-related costs are forecast to increase by \$12.2 million from 2007 to the 2013        |
| 3  | test year. The total number of general service customers forecast for 2013 is approximately           |
| 4  | 110,250 higher than the 2007 year end customer count. This reflects an actual increase of 54,469      |
| 5  | customers from year end 2007 to year end 2010 and a projected increase of 55,781 customers for        |
| 6  | the period 2011 through 2013. Total customers by service type and rate class is found at Exhibit      |
| 7  | C1, Summary Schedule 2. The annual variable O&M cost Union incurs when customers are                  |
| 8  | attached to Union's system is estimated to be approximately \$110 per customer, based on the          |
| 9  | 2007 cost study. The costs associated with adding customers includes costs of bill inserts,           |
| 10 | postage, meter reading and maintaining additional distribution services and meter sets.               |
| 11 |   |
| 12 | Integrity Management  |
| 13 | Union's costs in the 2013 test year are forecast to increase \$6.5 million over the 2007 actual costs |
| 14 | as a result of changes to the Integrity Management Program ("IMP"). This program is described in      |
| 15 | more detail in the evidence of Mr. Doug Alexander at Exhibit B1, Tab 6.                               |
| 16 |   |
| 17 | <u>Line Locates</u>   |
| 18 | Using internal and external resources to provide the physical location of Union's pipelines to        |
| 19 | excavators and homeowners is critical to mitigate third party damage and ensure public safety.        |
|    |   |

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awareness and ultimately increase the number of line locate requests. This increase in requests 1 2 has resulted in the line locate costs forecast for 2013 to be \$3.9 million higher than the actual 3 2007 costs. 4 5 Energy Technology & Innovation Canada 6 Union is a member of Energy Technology & Innovation Canada ("ETIC"). ETIC's vision is "to 7 ensure that natural gas and gas-enabled technologies remain a significant part of Canada's low 8 carbon energy future, through strategic investment in technology commercialization and 9 innovation". The 2013 forecast cost for ETIC is \$5.0 million. Details of this program are 10 described in the evidence of Mr. Bryan Goulden at Exhibit D1, Tab 10. 11 12 Productivity 13 For the years 2008 through 2011, Union completed several productivity initiatives. Actual 14 productivity experienced during this period is forecast to be \$15.9 million. For the years 2012 15 and 2013, Union has assumed annual productivity targets of 1% which accounts for an additional \$6.6 million. This results in a productivity gain of \$22.5 million for 2013 compared to 2007. 16 17 Details on productivity projects are described in the evidence of Mr. Dave Richards at Exhibit A2, Tab 5. 18

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| 1  | Capitalization   |
|----|--|
| 2  | Capitalized overheads, which includes capitalization and loadings has increased \$9.2 million        |
| 3  | between 2007 Board-approved costs and the 2013 test year forecast. This increase is the result of    |
| 4  | increased capital expenditures over the 2007 to 2013 period as well as general inflationary          |
| 5  | increases to the items that are capitalized (e.g., salaries are higher, pension/benefits are higher, |
| 6  | etc).  |
| 7  |  |
| 8  | Union has continued to rely on the capitalization rates as determined by an independent              |
| 9  | capitalization study by KPMG that was prepared for Union's 2007 rate case (EB-2005-0520).            |
| 10 |  |
| 11 | The capitalized overhead costs forecast in 2013 are 14.9% of total utility operating and             |
| 12 | maintenance costs. This is consistent with the 2007 Board-approved level of 15.0%.                   |
| 13 |  |
| 14 | Net Affiliate Services   |
| 15 | Changes to net Affiliate revenues and expenses in the 2013 test year relative to the 2007 Board-     |
| 16 | approved are expected to decrease by approximately \$8.0 million. The changes to Affiliate           |
| 17 | revenues and expenses since 2007 are described in evidence of Mr. Dave Hockin at Exhibit D1,         |
| 18 | Tab 7.   |
| 19 |  |

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#### 1 Non-Utility Allocation

- 2 Union's costs allocated to the non-utility business in 2013 are forecast to increase \$7.8 million
- 3 over the 2007 Board-approved amount. Annually, cost groups are reviewed to ensure an
- 4 appropriate allocation between regulated and unregulated work. The 2013 forecast assumes \$2.3
- 5 million for the excess utility space cross charge. The cross charge will be updated in the phase II
- 6 evidence.

7

# 8 Bad Debt Expense

- 9 Union's forecast of bad debt expense for each of 2012 and 2013 is \$6.6 million. This is a
- decrease of \$5.0 million from the amount included in rates approved by the Board in EB-2005-
- 11 0520. The reduction is mainly due to the decrease in cost of gas and improvements in the
- 12 collection process, resulting in a higher rate of payment from accounts in arrears.

13

- Table 3 shows the calculation of the forecast for 2012 and 2013 bad debt O&M expense. The
- 15 forecast for bad debt expense in the general service market is based on an average of the actual
- experience for the previous five years, 2006 to 2010 of 0.31%. The risk of uncollectible accounts
- in the contract market is dependent on economic circumstances. Accounts in the contract market
- are managed on an individual customer basis. Actual write offs in the contract market over the
- past five years range from \$0.0 million to \$0.6 million. The 2012 and 2013 forecast includes an
- 20 estimate of \$0.3 million for write offs in the contract market.

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Table 3
Bad Debt Expense

| Line |                                  | 2007            |                |                 |                 |
|------|----------------------------------|-----------------|----------------|-----------------|-----------------|
| No.  | Particulars (\$ millions)        | Board-          | 2011           | 2012            | 2013            |
|      |                                  | <u>Approved</u> | <u>Outlook</u> | <u>Forecast</u> | <b>Forecast</b> |
|      |                                  | (a)             | (b)            | (c)             | (d)             |
| 1    | Revenue - including ABC billings | 2,666.9         | 2,046.2        | 1,914.2         | 1,875.1         |
| 2    | Write off ratio - %              | 0.41            | 0.28           | 0.31            | 0.31            |
| 3    | General service provision        | 10.85           | 5.7            | 5.9             | 5.9             |
| 4    | Contract service provision       | <u>0.75</u>     | <u>0.5</u>     | <u>0.3</u>      | 0.3             |
| 5    | Bad debt provision               | 11.6            | 6.2            | 6.2             | 6.2             |
|      |                                  |                 |                |                 |                 |
| 6    | Collection costs                 | 0.5             | 0.2            | 0.2             | 0.2             |
| 7    | GST/HST non recovery             | 0.2             | <u>0.1</u>     | <u>0.2</u>      | 0.2             |
| 8    | Bad debt related expense         | 12.3            | 6.5            | 6.6             | 6.6             |

4

- 5 To manage the impact of changes in the cost of gas on bad debt expense Union is proposing to
- 6 update the bad debt expense as part of the Quarterly Rate Adjustment Mechanism similar to
- 7 unaccounted for gas, Company used gas, and gas inventory for resale. The bad debt expense in
- 8 the 2012 and 2013 forecast is at historic lows as a result of the current cost of gas. This forecast
- 9 is based on the January 1, 2011 weighted average cost of gas ("WACOG") of \$202.610 per
- 10 10<sup>3</sup>m<sup>3</sup>. An increase of 10% in WACOG will increase Union's bad debt expense approximately
- 11 \$0.4 million.

12

13

#### Full Time Equivalents ("FTE")

- 14 Union's 2013 test year forecast includes compensation and employee related expenses for
- approximately 2,248 FTE. This is an increase over the year-end 2010 actual of 37 FTE. This

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1 number reflects all employees working on utility operations, capital projects, unregulated 2 activities and DSM. 3 4 The most significant contributor to this increase relates to seasonal employees that are budgeted 5 in future years but that do not appear in the year end actual FTE count due to the timing of their 6 work engagement. 7 8 The total number of FTE's is derived by converting part-time roles into full-time equivalents 9 using hours worked and adding the number of full time roles. 10 11 2/ YEAR OVER YEAR CONTINUITY FOR O&M BUDGET VARIANCE A summary of the major variances by cost type have been shown for 2010 actuals, 2011 outlook, 12

2012 bridge year forecast and 2013 test year forecast relative to the 2007 Board-approved budget

13

14

in Table 4.

Table 4
Year Over Year Continuity for O&M

| Line<br><u>No.</u> | Particulars (\$ Millions)                | Actual <u>2010</u> (a) | Outlook 2011 (b) | Forecast <u>2012</u> (c) | Forecast 2013 (d) | Total (e) |
|--------------------|--|------------------------|------------------|--------------------------|-------------------|-----------|
| 1                  | 2007 Board-approved (EB-2005-0520)       | 325.6                  |                  |                          |                   | 325.6     |
| 2                  | Prior period                             |                        | 349.4            | 362.1                    | 373.6             |           |
| 3                  | Salaries/Wages                           | 23.4                   | (2.5)            | 7.2                      | 5.8               | 33.9      |
| 4                  | Benefits                                 | 15.2                   | 7.8              | (6.4)                    | (10.6)            | 6.0       |
| 5                  | Employee Training                        | (1.0)                  | 1.3              | 1.0                      | 0.2               | 1.5       |
| 6                  | Contract Services                        | 7.3                    | 3.5              | 2.9                      | 2.7               | 16.4      |
| 7                  | Consulting                               | 1.1                    | 1.3              | 2.3                      | 2.1               | 6.8       |
| 8                  | General                                  | 0.6                    | 0.4              | 0.0                      | 0.6               | 1.6       |
| 9                  | Company Used Gas                         | (2.5)                  | 0.5              | (0.5)                    | 0.0               | (2.5)     |
| 10                 | Utility Costs                            | 0.4                    | 0.8              | 0.0                      | 0.1               | 1.3       |
| 11                 | Communications                           | (1.2)                  | 0.5              | (1.0)                    | 0.1               | (1.6)     |
| 12                 | Demand Side Management Programs          | 4.6                    | 1.4              | 5.7                      | 0.6               | 12.3      |
| 13                 | Insurance                                | 1.5                    | 0.3              | (0.2)                    | 0.5               | 2.1       |
| 14                 | Computers                                | 0.7                    | 0.7              | 0.5                      | 0.3               | 2.2       |
| 15                 | Regulatory Hearing & OEB Cost Assessment | (2.9)                  | 0.5              | 1.6                      | (0.9)             | (1.7)     |
| 16                 | Affiliate Services                       | (6.9)                  | (1.0)            | (0.4)                    | 0.4               | (7.9)     |
| 17                 | Bad Debt                                 | (6.5)                  | 2.1              | (0.6)                    | 0.0               | (5.0)     |
| 18                 | Other                                    | (2.0)                  | 1.3              | 0.3                      | 1.3               | 0.9       |
| 19                 | Capitalization                           | (1.4)                  | (6.2)            | 0.2                      | (1.8)             | (9.2)     |
| 20                 | Non-Utility Allocation                   | (6.6)                  | 0.0              | (1.1)                    | (0.1)             | (7.8)     |
|                    |  | 23.8                   | 12.7             | 11.5                     | 1.3               | 49.3      |
| 21                 | Current period                           | 349.4                  | 362.1            | 373.6                    | 374.9             | 374.9     |

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| 2  | Union's 2013 O&M budget is \$374.9 million. This is an increase of \$1.3 million over the 2012    |
|----|---|
| 3  | forecast. The details of the variance between the 2013 O&M test year budget and the 2012          |
| 4  | bridge forecast are provided at Exhibit D3, Tab 3, Schedule 2 and major variances are             |
| 5  | summarized below.   |
| 6  |   |
| 7  | Salary and wages are forecast to increase \$5.8 million largely due to a 3.5% increase applied to |
| 8  | base salary.  |
| 9  |   |
| 10 | Contract services are forecast to increase \$2.7 million due to increased costs for the integrity |
| 11 | management program, line locate services and Enlogix CIS ("Banner") transactional fees.           |
| 12 |   |
| 13 | Consulting services are forecast to increase \$2.1 million largely due to the ETIC program and    |
| 14 | inflation.  |
| 15 |   |
| 16 | These increases are offset by a \$10.6 million forecast reduction in pension/benefit expenses due |
| 17 | to the changes in pension accounting as a result of the proposed shift to US GAAP accounting.     |
| 18 |   |

2013 Test Year Forecast vs. 2012 Bridge Year Forecast

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| 1  | 2012 Bridge Year Forecast vs. 2011 Outlook  |
|----|---|
| 2  | Union's O&M budget for 2012 is \$373.6 million. This is an increase of \$11.5 million over the      |
| 3  | 2011 outlook. The details of the variance between the 2012 forecast and the 2011 outlook are        |
| 4  | provided at Exhibit D4, Tab 3, Schedule 2 and major variances are summarized below.                 |
| 5  |   |
| 6  | Salaries and wages are forecast to increase \$7.2 million due to a forecast merit increase of 3%    |
| 7  | and an adjustment related to direct to capital assumptions that were included in the 2011 outlook.  |
| 8  |   |
| 9  | DSM programs are forecast to increase \$5.7 million as per Union's EB-2011-0327 application.        |
| 10 |   |
| 11 | Contract services are forecast to increase \$2.9 million largely due to increased costs for IMP and |
| 12 | line locates costs.   |
| 13 |   |
| 14 | Consulting services are forecast to increase \$2.3 million due to the ETIC program. These           |
| 15 | additional costs are partially offset by forecast decreases to pension and benefit costs of \$6.4   |
| 16 | million, largely driven by pension changes due to net interest cost, return on assets and           |
| 17 | amortization of actuarial losses.   |
| 18 |   |
| 19 | 2011 Outlook vs. 2010 Actual  |
| 20 | Union's O&M outlook for 2011 is \$362.1 million. This is an increase of \$12.7 million over the     |

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2010 actual. The details of the variance between the 2011 outlook and the 2010 actual are 1 2 provided at Exhibit D5, Tab 3, Schedule 2 and major variances are summarized below. 3 4 Pension and benefits costs are forecast to increase \$7.8 million largely due to continuing high 5 levels of medical price inflation and historic low-levels of long-term bond yields and pour capital 6 market returns. 7 8 Contract services are forecast to increase \$3.5 million due to increased costs for integrity work, 9 line locates and inflation. 10 11 Bad debt is forecast to increase \$2.1 million over 2010 actual. 12 13 These additional costs are partially offset by a forecast decrease in total compensation levels. 14 Salaries and wages are expected to increase due to merit changes, however this increase is 15 expected to be more than offset by a lower planned incentive payout and a forecasted shift of 16 \$2.5 million in salaries to charge direct to capital rather than through our capitalization processes. 17 18 These additional costs are also offset by increases in capitalization due to a larger capital 19 portfolio in the 2011 outlook compared to the 2010 actual. 20

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| 1  | 2010 Actual vs. 2007 Board-approved   |
|----|---|
| 2  | Union's actual O&M actual for 2010 was \$349.4 million. This represented an increase of \$23.8    |
| 3  | million or 7.3% over the 2007 Board-approved costs, which is approximately a 2.4% increase per    |
| 4  | annum. The details of the variances between the 2010 actual and the 2007 Board-approved costs     |
| 5  | are provided at Exhibit D6, Tab 3, Schedule 2 and major variances are summarized below.           |
| 6  |   |
| 7  | Salary and wage costs increased \$23.4 million for the 3 year period. This increase reflects      |
| 8  | annual merit increases and increases to the incentive payout.                                     |
| 9  |   |
| 10 | Pension and benefits costs increased \$15.2 million. Pension, benefits and compensation costs are |
| 11 | discussed in detail in the evidence of Mr. Bohdan Bodnar, Ms. Pat Elliott and Mr. Chuck Conlon    |
| 12 | at Exhibit D1, Tab 3.   |
| 13 |   |
| 14 | Contract Services increased \$7.3 million due to increased volumes of line locates and increased  |
| 15 | maintenance and integrity work. It also increased as a result of a major repair that was offset   |
| 16 | with recovery dollars.  |
| 17 |   |
| 18 | DSM programs increased \$4.6 million.   |
| 19 |   |
| 20 | These costs were partially offset by reductions in affiliate services, lower bad debt expense,    |

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- 1 lower Board costs and lower Company use gas costs. In addition, an incremental proportion of
- 2 total costs were directed to non-utility work.

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| 1  | PREFILED EVIDENCE OF  |
|----|---|
| 2  | BOHDAN BODNAR, VICE-PRESIDENT, HUMAN RESOURCES CANADA   |
| 3  | CHUCK CONLON, DIRECTOR, EMPLOYEE AND LABOUR RELATIONS EAST  |
| 4  | PAT ELLIOTT, CONTROLLER   |
| 5  |   |
| 6  | The purpose of this evidence is to provide an explanation for the Human Resource ("HR") costs       |
| 7  | from 2007 to 2013. This evidence is organized under the following headings:                         |
| 8  | 1/ Total Cash Compensation Costs  |
| 9  | 2/ Pension and Benefits   |
| 10 | 3/ Employee Future Benefit Costs  |
| 11 | 4/ Payroll/Human Resource Management System   |
| 12 | 5/ Workforce Demographics   |
| 13 |   |
| 14 | 1/ TOTAL CASH COMPENSATION COSTS  |
| 15 | The goal of Union's compensation strategy is to attract, motivate and retain high calibre employees |
| 16 | to ensure the Company's success. To help meet this goal, Union offers employees a total cash        |
| 17 | compensation package that consists of a fixed component (base salary – salaries and wages) and a    |
| 18 | variable, at risk pay component (Short-Term Incentive Plan – "STIP"). A small number of key         |
| 19 | leadership employees also have a long-term variable pay component ("LTIP") as part of their total   |
| 20 | compensation. Each of these compensation components is critical to the success of Union's total     |
| 21 | compensation package in the competition for talent and the retention of a high performing           |
| 22 | workforce. For more detail on Union's total cash compensation package, please refer to the Towers   |

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1 Watson "Union Gas 2013 Rate Application – Total Cash Compensation" letter provided at 2 Appendix A. 3 4 Compensation levels are based on market conditions to ensure Union's ability to compete for 5 required talent and to retain valued employees. Union's compensation philosophy continues to target total cash and total direct compensation levels to the 50<sup>th</sup> percentile in the marketplace at 6 target variable pay levels. To validate the competitiveness of its compensation levels, Union 7 8 compares its compensation levels to a cross-section of national companies of similar revenue size; 9 including energy utilities as well as organizations with operations in Ontario. This compensation 10 philosophy and approach to competitive market analysis has been supported by Union since 2001. 11 In fact, as stated in Appendix A, Towers Watson concluded that "Union Gas' salary increases and 12 target incentive levels are appropriately aligned with competitive market practice." 13 14 Base Pay Base salaries and wages form the foundation of Union's compensation program. Base salary 15 16 budgets are set with consideration given to Towers Watson's forecasts of salary increases, 17 negotiated wage settlements and consumer price index projections. Annual base salary increases for 18 non-union employees are administered against established guidelines including individual 19 performance, demonstrated growth and development, and are inclusive of increases to salary ranges. 20 Unionized employee wage increases are determined through collective agreements negotiated 21 through collective bargaining.

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- 1 Union's 2013 base salary budget is forecast to be \$174.8 million, an increase of \$24.9 million from
- 2 the 2007 actual total. This increase accounts for salary increases, salary progressions as employees
- develop their skills and promotions, changes in staffing and overtime, as well as the cost impacts
- 4 associated with an aging workforce as discussed later in this evidence. Table 1 provides a
- 5 comparison of Union's base salary and variable pay actual costs for years 2007 and 2010 and totals
- 6 for 2011 outlook and 2012 to 2013 forecast.

Table 1

Comparison of Salary & Wage Costs

| Line       |              | 2007          | 2010          | 2011           | 2012            | 2013            |
|------------|--------------|---------------|---------------|----------------|-----------------|-----------------|
| <u>No.</u> | (\$000's)    | <u>Actual</u> | <u>Actual</u> | <u>Outlook</u> | <u>Forecast</u> | <u>Forecast</u> |
|            |              | (a)           | (b)           | (c)            | (d)             | (e)             |
| 1          | Base Pay     | 149,843       | 159,441       | 163,036        | 169,622         | 174,756         |
| 2          | Variable Pay | 14,528        | 23,808        | <u>17,717</u>  | <u>18,328</u>   | <u>19,030</u>   |
| 3          | Total        | 164,371       | 183,249       | 180,753        | 187,950         | 193,786         |

12 Total salary and wage costs for all years in Table 1 are shown at Exhibit D1, Summary Schedule 2.

# Variable Pay

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Union's annual variable pay program, STIP, provides an opportunity for awards based on the successful achievement against corporate, business unit and individual/team objectives. All employees at all organizational levels, both union and non-union, participate in this variable pay plan. The variable pay program design for unionized employees is determined through the collective bargaining process. A document that describes Union's 2011 STIP plan is attached as Appendix B. Union believes one of the most effective ways to help improve efficiency or productivity of the Company is to link its employees to a combination of financial and operational results through a

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- 1 "balanced scorecard" method of performance management. The balanced scorecards are a
- 2 collection of metrics that are aligned with the business strategy of each operating unit. They ensure
- 3 Union is meeting the expectations of its external stakeholders (i.e. ratepayers, customers, investors,
- 4 regulators). They also ensure Union has safe, efficient, effective processes and a skilled,
- 5 knowledgeable workforce to carry out those strategies. Ratepayers benefit from specific employee
- 6 focus related to personal safety, operational safety, integrity, reliability, compliance and
- 7 productivity. Balanced scorecard metrics are reviewed annually based on history with a level of
- 8 stretch built in to ensure continuous improvement including productivity improvements. The
- 9 balanced scorecard method of performance management measures success from four broad
- 10 perspectives:

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- 12 1. Employee to ensure employees are equipped with the tools and skills needed to carry out
- Union's processes (e.g. safe work environment);
- 14 2. Process Excellence to ensure efficient processes are in place to deliver on customers'
- expectations;
- 16 3. Customer to ensure customers' expectations are being fulfilled and compliance requirements
- are met; and,
- 4. Financial to ensure shareholders' expectations are met.
- The balanced scorecard method provides alignment for employees at all organizational levels. An
- 21 overview which describes the purpose, structure and benefits of the Operations Balanced Scorecard
- is filed at Appendix C.

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1 Annual variable pay plans such as STIP are common in the marketplace where Union competes for 2 talent. Without an annual, variable pay plan, Union would need to increase base salary levels to 3 retain existing employees and to compete for new talent since its competitors' total cash 4 compensation packages include variable pay. A shift away from variable pay in favour of increased 5 base salaries would increase Union's fixed costs and reduce Union's ability to align employee 6 performance with business priorities and reward employees for successful performance results. 7 Therefore, including a variable pay component within the total compensation package at Union is a 8 reasonable and prudent methodology for compensating employees. 9 10 As mentioned previously, approximately 30 executive and leadership employees at Union 11 participate in an additional variable pay plan, the Long-Term Incentive Program ("LTIP"). This plan 12 is a stock-based plan consisting of two types of awards: performance share units and phantom stock 13 units. Effective for 2011, performance share units account for 60% of the participants' LTIP 14 opportunity (increased from 50%). These units are subject to vesting, after a specified performance goal relative to a peer group of energy companies has been achieved during continuous 15 16 employment. Phantom stock units account for the remaining 40% of the participants' LTIP 17 opportunity. Phantom stock units vest on the third anniversary of the grant date during continuous 18 employment. 19 20 Participation in LTIP is determined by the Compensation Committee of the Board of Directors of 21 Spectra Energy and is restricted to the top, key decision makers in the Company based on the 22 following criteria: the position has a key corporate or business unit role; the employee manages

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- 1 major projects with strategic impact; the function contributes significantly to the bottom line; and,
- 2 the marketplace supports long-term incentive compensation for the position.

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- 4 The intent of this plan is to provide a balance between near-term performance and long-term
- 5 success. This plan enables senior leadership participants to be rewarded for creating long-term
- 6 value to the benefit of shareholders and ratepayers. It also aids in retention of key executive and
- 7 leadership talent.

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- 9 Table 2 shows the actual average employee salary and incentive total for the year 2010, 2011
- outlook total and forecast totals for 2012 and 2013. A more detailed description of the variances in
- salaries and wages year-over-year is provided at Exhibit D3, Tab 3, Schedule 2 2013 vs. 2012;
- 12 Exhibit D4, Tab 3, Schedule 2 2012 vs. 2011; and, Exhibit D5, Tab 3, Schedule 2 2011 vs.
- 13 2010. Table 2 is calculated using salary data that includes both O&M and capital salaries and the
- related full-time equivalents ("FTE") for the years summarized.

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Table 2
Average Employee Total Cash Compensation Comparison (2010-2013)

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| Line       |                  | 2010          | 2011           | 2012            | 2013            |
|------------|------------------|---------------|----------------|-----------------|-----------------|
| <u>No.</u> | Particulars (\$) | <u>Actual</u> | <u>Outlook</u> | <u>Forecast</u> | <u>Forecast</u> |
|            |                  | (a)           | (b)            | (c)             | (d)             |
| 1          | Average Salary   | 77,727        | 76,429         | 78,671          | 81,351          |
| 2          | Average Variable | 10,769        | 7,711          | 7,903           | 8,213           |
| 3          | Total            | 88,496        | 84,140         | 86,574          | 89,564          |
| 4          | Year over year   |               | (4.9%)         | 2.9%            | 3.5%            |

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#### 2/ PENSION AND BENEFITS

- 2 Union provides a comprehensive pension and benefits program that is essential to attract and retain
- 3 qualified employees. Union provides a common platform of pension and benefits to all employees,
- 4 both union and non-union.

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- 6 In addition to statutory programs and a short-term disability plan, the program provided by Union
- 7 consists of:
- 8 i) Benefit Choices A flexible benefits program for all active employees, with benefit options
- 9 selected by each employee;
- 10 ii) Employee Savings Plan A voluntary employee savings plan with matching employer
- 11 contributions dependent on years of service;
- 12 iii) Pension Choices A choice of a Defined Benefit ("DB") or Defined Contribution ("DC")
- pension plan at the election of each employee; and,
- 14 iv) Post-Retirement Benefits A retiree benefits program providing basic life insurance and
- medical benefits not covered by the Ontario Health Insurance Program.

- 17 To validate the competitiveness of its programs, Union compares its programs to a cross-section of
- 18 national companies of similar revenue size; including energy utilities as well as organizations with
- operations in Ontario. The objective is to provide programs that target the median in terms of
- 20 employer provided value as compared to programs offered by this comparator group of companies,
- and is designed to manage and contain costs consistent with the market and economic environment.
- 22 This philosophy and approach to competitive market analysis has been supported by Union since at
- 23 least 2001.

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- 1 Union has retained Towers Watson to provide independent, expert commentary on Union's
- 2 employee benefit arrangements. Please refer to Appendix D for Towers Watson's "Benefit
- 3 Programs" letter.

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### Benefit Costs

- 6 Benefit costs for 2013 are forecast to be approximately \$33.7 million an increase of \$8.5 million
- 7 from the amount included in Union's Board-approved 2007 rates. Table 3 provides a comparison of
- 8 actual and forecast benefit costs to the costs approved by the Board in EB-2005-0520.

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|            |                          | Table           | 3             |                |                 |                 |
|------------|--------------------------|-----------------|---------------|----------------|-----------------|-----------------|
|            |                          | Comparison of E | Benefit Cos   | <u>ts</u>      |                 |                 |
| Line       |                          | Board           | 2007          | 2011           | 2012            | 2013            |
| <u>No.</u> | (\$ millions)            | <u>Approved</u> | <u>Actual</u> | <u>Outlook</u> | <b>Forecast</b> | <b>Forecast</b> |
|            |                          | (a)             | (b)           | (c)            | (d)             | (e)             |
| 1          | <b>Employee Benefits</b> | \$25.2          | \$26.7        | \$30.5         | \$32.2          | \$33.7          |

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The Benefit Choices program was designed to manage overall benefit costs and to share costs with employees. Changes are made each year to the price tags for the benefit options to maintain the

target level of cost sharing of benefit costs between Union and its employees.

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In common with other employers, Union has experienced benefit cost increases significantly in excess of consumer price inflation. However, Union has pro-actively managed its benefit costs and Union's cost increases have been materially below industry norms.

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To continue to manage and control employee benefit costs and benefit delivery costs;

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1 i) In 2009, Union introduced a prescription drug card that permits more effective cost 2 management and analysis of drug costs, which typically account for 60% to 70% of overall 3 employee medical costs; and, 4 ii) In 2010, Union undertook a comprehensive marketing of its group insurance and 5 administration arrangements for employee benefits. As a result of this exercise, Union 6 secured premium reductions and guarantees as well as improved administrative terms and 7 conditions. 8 9 The Employee Savings Plan ("ESP") has not changed since 2007. Participation in the ESP is 10 voluntary. The Company's matching contributions are based on the employee's years of service up 11 to a maximum of 5% of their annual base salary. 12 13 3/ EMPLOYEE FUTURE BENEFIT COSTS 14 Union sponsors five legacy defined benefit registered pension plans and one registered pension plan 15 ("Pension Choices") with both a defined benefit provision ("DB") and defined contribution 16 provision ("DC"). The five legacy DB pension plans are all closed to new entrants; newly hired 17 employees are admitted to Pension Choices. Eligible employees participate in only one of the DB or 18 DC pension plans, based on each employee's election at the time of plan enrollment. 19 20 Pension and post-retirement benefit costs for 2013 are forecast to be approximately \$28.0 million; a 21 decrease of \$2.4 million from the amount included in Union's Board-approved 2007 rates. Table 4 22 provides a comparison of the forecast pension and benefit costs for 2013 to the costs approved by

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the Board in EB-2005-0520.

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| 1 | Table 4                                     |
|---|---|
| 2 | Comparison of Employee Future Benefit Costs |
| 3 |   |

| Line<br>No. | (\$ millions)                       | Board-<br>Approved<br>(a) | 2007<br><u>Actual</u><br>(b) | 2011<br>Outlook<br>(c) | 2012<br>Forecast<br>(d) | 2013<br>Forecast<br>(e) |
|-------------|-------------------------------------|---------------------------|------------------------------|------------------------|-------------------------|-------------------------|
| 1           | Defined Benefit Pension             | \$19.3                    | \$21.5                       | \$35.8                 | \$26.8                  | \$15.7                  |
| 2           | Post-Retirement Benefits            | 8.3                       | 5.4                          | 7.5                    | 8.0                     | 6.7                     |
| 3           | <b>Defined Contribution Pension</b> | <u>2.8</u>                | 2.8                          | 4.9                    | 5.3                     | <u>5.6</u>              |
| 4           | Total                               | <u>\$30.4</u>             | <u>\$29.7</u>                | <u>\$48.2</u>          | <u>\$40.1</u>           | <u>\$28.0</u>           |

# 5 <u>Defined Benefit Pension</u>

- 6 The DB pension costs for 2013 are forecast to be approximately \$15.7 million, a decrease of \$3.6
- 7 million from the amount included in Union's approved 2007 rates. The decrease in DB costs is the
- 8 result of the change in accounting to U.S. GAAP as well as the key assumptions used to determine
- 9 the DB pension expense.

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- 11 The expense for DB pension and post-retirement benefits for 2012 and 2013 is determined in
- accordance with U.S. Financial Accounting Standards Board's ASC 715. For years 2007 through
- 13 2011, the expense is determined based on Section 3461 of the Canadian Institute of Chartered
- Accountants ("CICA") Handbook. The change to U.S. GAAP results in a decrease in the net
- pension cost of \$2.2 million. Discussion of the affect of the change in accounting from Canadian
- 16 GAAP to U.S. GAAP is discussed further at Exhibit A2, Tab 4.

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1 Schedule 1 has been provided to show the change in net pension costs from 2011 under Canadian 2 GAAP to 2013 net pension cost under U.S. GAAP. 3 4 The DB pension cost is a calculation dependent on a number of factors, including the discount rate 5 used to measure the pension liability, the value of the plan assets, and the rate of return on plan 6 assets. The estimate of the DB pension cost for 2012 and 2013 is based on the same key assumptions finalized at year-end 2010 and used in the preparation of the 2011 net periodic cost, a 7 8 discount rate of 5.25% and a rate of return on assets of 7.0%. 9 10 Sensitivity to Key Assumptions 11 Since setting this estimate that was used in the forecast, economic conditions have changed. 12 Discount rates have decreased and return on assets through to October have been below 7.0%; the 13 impact will be to increase the net pension costs relative to the forecast. A 100 bps decrease in 14 discount rates will increase the net DB pension cost by \$7.0 million; a 100 bps decrease in the return 15 on assets in 2011 will increase the net DB pension cost in 2013 by \$5.0 million. 16 17 Union is proposing that the DB pension costs to be included in base rates for 2013 be based on the 18 assumptions finalized at year-end 2011, as actual asset returns for 2011 will be available at that time. 19 Based on current market conditions, the discount rate is expected to decrease 60 bps and assuming

the assets earn 1.0% in 2011, the net pension cost will increase in 2013 by \$8.0 million.

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#### 1 Post-Retirement Benefits

- 2 The post-retirement benefit costs for 2013 are forecast to be approximately \$6.7 million, a decrease
- 3 of \$1.6 million from the amount included in rates approved in 2007. The decrease in DB costs is
- 4 primarily the result of the change in accounting to U.S. GAAP.

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#### Defined Contribution Pension

- 7 The DC pension costs for 2013 are forecast to be approximately \$5.6 million, an increase of \$2.8
- 8 million from the amount included in rates approved in 2007. Union makes contributions to the DC
- 9 pension plan ranging from 3.5% to 9.5% of salary, based on age and service of each member. The
- 10 contributions payable by Union are expensed as pension costs in the period incurred. Approximately
- \$1.1 million of the increase in DC costs is due to increased employer contribution rates of 0.75% in
- 12 each of 2009 and 2010.

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- 14 The actual costs incurred by the Company increase each year as the number of employees who
- participate increase, and age and years of service move up the scale. Table 5 details Union's
- increasing costs as a result of the increased age, years of service and the corresponding rate of
- 17 Company contribution. Union anticipates this increasing cost trend to continue for 2011, 2012 and
- 18 2013. Union estimates a \$0.4 million increase in 2012 and \$0.3 million increase in 2013 in its DC
- 19 pension cost. Company contributions to the plan will be escalated based on employee age and
- 20 continuous service as of the previous year.

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Table 5
<u>Defined Contribution Pension Plan</u>

| <u>Year</u> | # of<br>Employees | Average Rate of Contribution | Average<br><u>Age</u> | Average Years of Service | Defined Contribution <a href="Pension Expense">Pension Expense</a> |
|-------------|-------------------|------------------------------|-----------------------|--------------------------|--|
| 2006        | 874               | 4.09%                        | 42.69                 | 12.72                    | \$2.6 million  |
| 2007        | 901               | 4.05%                        | 43.15                 | 13.09                    | \$2.8 million  |
| 2008        | 932               | 4.26%                        | 43.54                 | 13.33                    | \$3.1 million  |
| 2009        | 947               | 4.95%                        | 44.27                 | 13.90                    | \$3.7 million  |
| 2010        | 940               | 5.86%                        | 45.06                 | 14.73                    | \$4.5 million  |

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#### 4/ PAYROLL/HUMAN RESOURCE MANAGEMENT SYSTEM

The EB-2005-0520 Board-approved Settlement Agreement included Union's plan to contract with a third party vendor for Payroll and Human Resource Management System ("HRMS") services. The

plan was accepted as a cost-effective alternative to developing an internal system solution. As

- proposed, outsourcing was expected to create a number of benefits. The benefits were based on the
- 10 premise that outsourcing would prevent the need for costly system upgrades; allow internal Human
- 11 Resource employees to focus on business-related work; and, it allowed Union to leverage the
- 12 purchasing power of Duke Energy at the time. The plan was also intended to create a significant
- reduction in Company employees dedicated to the task of processing payroll and maintaining a
- 14 HRMS database.

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However, the third party vendor model proved unsustainable because service level requirements were not fulfilled. Union cannot compromise service levels for Payroll and the HRMS. Service levels must be achieved for Union to meet its statutory obligations; such as those required by the Ontario Pension Act, the Employment Standards Act and the Canada Revenue Agency. Access to accurate and timely information is critical for informed decision-making regarding Human Resource

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1 processes; such as workforce planning, compensation, pension and benefits. A comprehensive 2 HRMS database is needed to support business applications; such as Environment, Health & Safety, 3 Accounts Payable and Financial reporting. 4 5 The third party contract arrangement did not provide the functionality expected or the flexibility 6 required by a company of Union's size and complexity. For example, manual interventions were 7 required to implement and fulfill Union's Collective Agreement obligations; such as processing 8 wage increases negotiated for unionized employees. 9 10 Staff reductions were achieved initially. In June 2006, only two employees were remaining. These 11 employees had accountability for managing this third party vendor relationship. However, these 12 staff reductions were not sustained. Additions to headcount were required to support manual 13 processes that existed with this vendor, conduct quality control audits and, ensure regulatory 14 requirements such as those required by the Canada Revenue Agency, were met. By 2007, a total of 15 17 employees were assigned responsibility for managing the relationship and performing the Payroll 16 & HRMS functions to meet service requirements. These necessary additions to headcount prevented 17 Union from achieving the anticipated annual salary savings of approximately \$1.0 million as 18 highlighted in the evidence filed in EB-2005-0520. 19 20 Consequently, a decision was made to terminate the third party vendor arrangement. Union will be 21 sourcing Payroll/ HRMS through a Service level Agreement with Spectra Energy utilizing SAP on a 22 go-forward basis. The adoption of SAP will serve Union well as it has a large IT infrastructure 23

footprint. The number of interfaces and bolt-on system solutions within Union will be reduced with

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1 the adoption of an enterprise-wide IT solution. SAP provides the functionality, business application 2 integration and the flexibility required to achieve the regulatory requirements and meet the needs of 3 an organization such as Union. 4 5 SAP will be implemented across Spectra Energy business units. The cost of implementation will be 6 shared amongst the other business units within the broader company. In the test year, costs resulting 7 from the elimination of the third party vendor costs are expected to largely offset the costs 8 associated with the SAP solution. A small savings of \$24,000 is forecast for 2013. 9 10 5/ WORKFORCE DEMOGRAPHICS 11 Consistent with the evidence filed in EB-2005-0520, an aging workforce continues to be one of the 12 most significant Human Resource issues facing organizations. Union continues to invest in a 13 prudent manner to ensure a skilled and competent workforce is in place to provide the services 14 expected by its ratepayers, achieve compliance required by the Regulatory framework and ensure 15 the protection of public safety. 16 17 This shift in workforce demographics to an increasingly aging workforce suggests a higher volume of retirements will need to be addressed. At Union, 44% of existing employees will be eligible to 18 19 retire within the next five years. This is even more pronounced in some specific front line roles such 20 as Utility Services where 50% of such personnel will be eligible to retire within the next five years. 21

As stated in EB-2005-0520, the impact of an aging workforce is especially acute for certain front

line technical roles, where it can take up to four years to train a fully competent employee. For the

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- period of 2005 to 2010, a total of 123 new Utility Service Representatives ("USR") were trained.
- 2 An additional 36 USRs will commence training in 2011.

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- 4 From a Human Resource perspective, this escalated proportion of "near-retirement" workers
- 5 requires that significant workforce planning and a proactive replacement plan need to be in place to
- 6 ensure continuity in the maintenance and operation of a safe and reliable gas distribution system.

- 8 Union maintains that the costs resulting from an aging workforce are necessary to ensure it is well
- 9 positioned to deal with the challenges noted above. However, Union will manage these costs within
- its proposed budgets.

Filed: 2011-11-10 EB-2011-0210 Exhibit D1 Tab 3 Schedule 1

# Reconciliation of Pension Expense 2011 Canadian GAAP - 2013 US GAAP (\$ millions)

| Line<br>No. |                            | Pension | Post-<br>Retirement<br>Benefits | Total |
|-------------|----------------------------|---------|---------------------------------|-------|
| 1           | 2011 Canadian GAAP         | 35.0    | 7.9                             | 42.9  |
| 2           | Transitional Obligation    | (1.6)   | (1.7)                           | (3.3) |
| 3           | _                          | ` '     | (1.7)                           | , ,   |
|             | Change in Measurement Date | (0.6)   |                                 | (0.6) |
| 4           | 2011 US GAAP *             | 32.8    | 6.2                             | 39.0  |
| 5           | Current service cost       | 0.3     | 0.1                             | 0.4   |
| 6           | Net interest cost          | (2.9)   | 0.1                             | (2.8) |
| 7           | Expected return on assets  | (3.9)   | -                               | (3.9) |
| 8           | Amortization               | (2.6)   | -                               | (2.6) |
| 9           | 2012 US GAAP *             | 23.7    | 6.4                             | 30.1  |
| 10          | Current corrige and        | 0.2     | 0.1                             | 0.4   |
| 10          | Current service cost       | 0.3     | 0.1                             | 0.4   |
| 11          | Net interest cost          | (2.8)   | 0.2                             | (2.6) |
| 12          | Expected return on assets  | (3.7)   | -                               | (3.7) |
| 13          | Amortization               | (2.1)   |                                 | (2.1) |
| 14          | 2013 US GAAP *             | 15.4    | 6.7                             | 22.1  |

<sup>\*</sup> US GAAP for Canadian Reporting



Filed: 2011-11-10 EB-2011-0210

Exhibit D1

175 Bloor Street East
South Tower, Suite 1701 Tab 3
Toronto, Ontario M4W 3T6
Canada Appendix A

T +1 416 960 2700

towerswatson.com

#### **Private and Confidential**

October 26, 2011

Mr. Bohdan Bodnar Vice President, Human Resources Canada Spectra Energy Transmission #1100 – 1055 West Georgia Street Vancouver, BC V6E 3P3

Mr. Chuck E. Conlon Director, Employee and Labour Relations, East Spectra Energy Transmission 50 Keil Drive North Chatham, ON N7M 5M1

Dear Bohdan and Chuck:

#### UNION GAS 2013 RATE APPLICATION - TOTAL CASH COMPENSATION

This letter has been prepared for Union Gas Limited (the "Company") in support of its 2013 rate application, and provides information on:

- The Company's changes in base salary from 2007 2011, with an outlook for 2012 2013; and
- Eligibility for participation in the Company's short-term incentive plan and the level of short-term incentive targets.

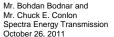
Total cash compensation for regular full-time employees consists of base salary and short-term incentive compensation. The purpose of the short-term incentive is to provide employees with an element of pay at risk, as it is paid only in recognition of success against assigned corporate, business unit and individual / team objectives. Performance measures and associated weights are reviewed and revised annually to align with current business objectives. For each measure, a minimum performance threshold is established; if actual performance is below the threshold, no payout for that element will occur.

The inclusion of a short-term incentive within the structure of the Company's total cash compensation, and the performance measures associated with the short-term incentive plan are consistent with competitive market practice among Utility and Power Services companies, including those used in our analysis.

#### **BASE PAY TRENDS**

#### Methodology

In 2007, the Company's costs were reviewed when rates were approved by the Ontario Energy Board. While 2010 will be used as the base year to compare the trend in compensation costs between Union





Gas Limited and the competitive labour market, for historical context we have provided a summary of average actual (and projected) salary increases for both Union Gas and companies in the Utility and Power Services sector (2007 – 2011). A summary of this data can be found in Appendices I & II.

Base salary is the foundation upon which total compensation is typically based in the marketplace. For this analysis and commentary, the Company's workforce is divided into four groups – Executive, Management, Salaried Professional, and Unionized. This letter focuses on trends in base pay from 2010 - 2011 using data from a custom sample of companies ("Comparator Group") participating in Towers Watson's 2010/2011 Salary Budget Survey with revenues between \$1B -\$5B (approximately half-to-double the revenue of Union Gas). The trend in base salary movement since 2010 will provide a reasonable indication of the degree to which the Company's total cash compensation (salary + incentives) has kept pace with the competitive market.

Most organizations do not project salary increase budgets beyond one year. Consequently, our estimate of salary projections for 2012 and 2013 is based on the current environment (i.e., 2010 actual increases and 2011 projections), our reviews of economic forecasts, and historical trends in salary increases.

#### **Current and Projected Salary Increases**

When setting base salary budgets, Union Gas considers salary increase forecasts reported by external compensation consultants (such as Towers Watson), consumer price index projections, and negotiated wage settlements with unionized labour. Base salary increases for non-union employees are then administered against established guidelines that consider an employee's individual performance, demonstrated growth and development. As a result, in some cases actual increases may fall below budget.

Over the period covered by our analysis, overall Union Gas' salary budgets have aligned with the competitive market. While average actual salary increases may vary slightly (above or below) market for a particular employee level, in aggregate increases have been consistent with market trends.

#### **Executives**

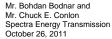
For 2010, the actual median increase for executive base salaries within the Comparator Group was 3.0%, as compared to the Company's 2010 average actual salary increase of 3.75%. The projected 2011 salary increase for executives is 3.0% in the Comparator Group, resulting in a cumulative market increase of 6.0% from 2010 to 2011. By comparison, the Company's 2011 average salary increase for executives is 2.90%, resulting in a cumulative increase of 6.65% over the same period.

#### **Managers**

For 2010, the actual median increase for management base salaries within the Comparator Group was 3.0%, as compared to the Company's 2010 average actual salary increase of 3.11%. The projected 2011 salary increase for managers is 3.0% in the Comparator Group, resulting in a cumulative market increase of 6.0% from 2010 to 2011. By comparison, the Company's 2011 average salary increase for managers is 3.15%, resulting in a cumulative increase of 6.26% over the same period.

#### **Salaried Professionals**

For 2010, the actual median increase for salaried professional base salaries within the Comparator Group was 2.9%, as compared to the Company's 2010 average actual salary increase of 2.89%. The projected 2011 salary increase for Production and Technical/ Administrative Support (collectively salaried professionals) is 3.0% in the Comparator Group, resulting in a cumulative market increase of 5.9% from





2010 to 2011. By comparison, the Company's 2011 average salary increase for salaried professionals is 2.85%, resulting in a cumulative increase of 5.74% over the same period.

#### **Unionized Employees**

For 2010, the average wage rates for the Company's unionized employees increased by a total of 3.0%. This average adjustment is consistent with marketplace movement during this period for Salaried Professionals. The Company's 2011 wage rate increase for unionized employees is 3.0%.

#### Forecast Beyond 2011

In February 2011, Towers Watson provided a memo to Spectra Energy (dated February 17, 2011) regarding salary escalation factors for non-union employees for the 2011 – 2013 time frame. Taking into account historical salary increases, and economic forecasts for the Utility and Power Services and Oil and Gas industries, Towers Watson recommended a preliminary salary projection range of 3.0% - 4.0% for 2012 and 2013.

For this analysis, we have provided updated economic forecasts produced by the Bank of Canada and major Canadian Banks. The most recent report from these sources indicates that the Canadian economy has been recovering at a quicker pace than anticipated, but this growth is expected to moderate. These forecasts continue to align with recommendations we made to Spectra Energy in February, 2011:

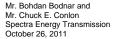
#### Observations and Predictions for Canada:

- The Bank of Canada projects that the economy will "expand 2.9 per cent in 2011 and 2.6 per cent in 2012. Growth in 2013 is expected to equal that of potential output, at 2.1 per cent." The Bank states that "recent economic activity in Canada has been stronger than the Bank had anticipated," and that the Canadian economy will return to capacity in mid-2012, two quarters ahead of earlier projections. (Bank of Canada Monetary Policy Report April 2011).
  - The Bank expects inflation to stabilize within its targeted range, noting that "the effects of higher world prices for energy and other commodities on Canadian inflation have been tempered by the appreciation of the Canadian dollar." Inflation is expected to be 2.4% in 2011, very close to target at 2.1% in 2012, and within the 1-3% range thereafter.
- Bank of Montreal's May 4, 2011 report indicates that "Canada's economy will likely grow 2.9% in 2011 [and] growth should moderate to 2.7% in 2012 in response to an expected stronger dollar, higher interest rates and more restrictive fiscal policy." (North American Outlook report, May 4<sup>th</sup>, 2011).
- Toronto Dominion Bank's March 16, 2011 forecast states that the "outlook is for solid Canadian economic growth of 3.0% in 2011, followed by a slowdown to 2.5% in 2012." (Quarterly Economic Forecast, March 16, 2011).

#### Provincial Economic Forecasts

Consensus estimates agree that GDP growth in Ontario is poised to stabilize after a strong manufacturing-led recovery, and as government stimulus spending winds down.

■ Toronto Dominion Bank's Provincial Economic Forecast estimates that "real GDP growth is forecast to clock in at 2.9% in 2011 and 2.4% in 2012." Two headwinds identified by TD include the strength of the Canadian dollar through 2011, and crude oil prices in the range of US\$95-100, which will





adversely affect the goods-producing sector in Ontario. (TD, Provincial Economic Forecast, April 4, 2011).

■ RBC's projections are slightly more optimistic: "We forecast Ontario's real GDP to rise modestly to 3.1% in 2011 from 2.8% in 2010, thereby marking the province's best performance since 2002. The even better news is that the losses during the tough recession of 2008-2009 will be fully recovered in the course of 2011, allowing Ontario's economy to enter the expansion phase of the cycle... This expansion will continue into 2012 when a 3.1% growth rate is forecasted." (RBC, Provincial Outlook, March 2011).

#### **INCENTIVE PROGRAM**

#### Methodology

We have compared short-term incentive eligibility and average short-term incentive targets (expressed as a percentage of salary) for three of the four employee groups (Executive, Management, and Salaried Professionals). Comparisons have been made against a National comparator group, defined as companies participating in Towers Watson's 2010 Compensation Data Bank with revenues between \$1B - \$5B.

#### **Executives**

Within the National comparator group, close to 100% of executives in comparable salary bands are eligible to participate in short-term incentive plans. Based on 2010 data, the average incentive target for the Company's executives is 36%, and is consistent with the market median target of 35% for the National comparator group.

#### **Managers**

Within the National comparator group, approximately 80% of managers in comparable salary bands are eligible to participate in short-term incentive plans. Based on 2010 data, the average incentive target for the Company's managers is 14%, compared with a range of 10% to 15% at market median for the National comparator group.

#### **Salaried Professionals**

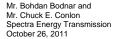
Within the National comparator group, approximately 75% of salaried professionals in comparable salary bands are eligible to participate in short-term incentive plans. Based on 2010 data, the average incentive target for the Company's salaried professionals is 8%, compared with 10% at market median for the National comparator group.

#### **OPINION**

#### **Base Pay**

Based on available forecasts, there is general consensus that the Canadian market will continue to recover at a moderate pace, with the bulk of the growth being driven by natural resource-rich provinces such as Alberta where commodity prices are rising and significant capital expansion is anticipated. This will have a positive impact on the labour market nationally.

We note that Union Gas' average actual salary increases trailed other Utility and Power Services companies in Canada between 2007 – 2009. Though Union Gas' increases were slightly higher in 2010,





this is not unexpected in light of their lower positioning in the prior years. Union Gas' 2011 increases are consistent with market projections in the Utility and Power Services sector. In relation to the Comparator Group, on an aggregate basis Union Gas' salary increases for 2010 and projected 2011 are competitively positioned.

#### **Incentives**

Short-term incentives are a common component of total cash compensation among comparable market organizations. In our opinion, the existence of Union Gas' short-term incentive plan and the target incentive levels for all participating employees are consistent with market practice. Their plan is essential to ensure the Company continues to attract, motivate and retain talent, which in turn will enhance Union Gas' ability to effectively serve customers in a competitive market environment.

In summary, based on our analysis, it is our opinion that over the period covered in our analysis, Union Gas' salary increases and target incentive levels are appropriately aligned with competitive market practice.

\* \* \* \* \* \*

We trust that this letter provides you with the information you require at this time. Please contact me if you have any questions you wish to discuss.

Sincerely,

Elizabeth Greville

Director

416-960-2754

cc: Ashley Witts - Towers Watson / Vancouver



# Appendix I – Union Gas Average Actual Salary Increases

| Employee Group         | Average Actual Salary Increases |       |       |       |       |  |
|------------------------|---------------------------------|-------|-------|-------|-------|--|
| Employee Group         | 2007                            | 2008  | 2009  | 2010  | 2011  |  |
| Executives             | 3.21%                           | 4.75% | 2.50% | 3.75% | 2.90% |  |
| Managers               | 3.59%                           | 3.88% | 2.46% | 3.11% | 3.15% |  |
| Salaried Professionals | 3.31%                           | 3.51% | 2.42% | 2.89% | 2.85% |  |
| Unionized              | 2.88%                           | 2.97% | 2.50% | 3.00% | 3.00% |  |



# Appendix II - Actual and Projected Salary Increases in Utility & Power Services Industry

| Employee Group                      | Median Actual Salary Increases <sup>1</sup> |      |      |      |       |  |
|-------------------------------------|---|------|------|------|-------|--|
| Employee Group                      | 2007  | 2008 | 2009 | 2010 | 2011E |  |
| Utility & Power Services            |   |      |      |      |       |  |
| Executives                          | 5.8%  | 5.8% | 3.0% | 2.5% | 3.0%  |  |
| Managers                            | 5.5%  | 5.4% | 3.5% | 2.6% | 3.0%  |  |
| Salaried Professionals <sup>2</sup> | 4.2%  | 4.3% | 3.6% | 2.6% | 3.0%  |  |

<sup>&</sup>lt;sup>1</sup> Includes employees w ho do not receive an increase

<sup>&</sup>lt;sup>2</sup> As of 2007, Salaried professionals were defined as Production and Technical/Administrative Support employees

Filed: 2011-11-10 EB-2011-0210 Exhibit D1 Tab 3 Appendix B



# SHORT-TERM INCENTIVE PLAN (STIP)

C'2011

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#### **INTRODUCTION:**

Each year the company sets performance objectives aimed at ensuring our continued business success. All employees have the ability to influence our success through a combination of corporate, business unit and individual or team performance measures. The successful achievement of these objectives is rewarded through our Short-Term Incentive Plan (STIP).

STIP is an annual variable pay program that is a part of employees' total cash compensation package (base salary + STIP). STIP target incentive levels vary according to market trends. Employees have the opportunity to exceed the target award level through higher demonstrated performance and corporate results.

#### STIP PERFORMANCE MEASURES OVERVIEW:

STIP is designed to reward employees who meet or exceed objectives that advance Union Gas' strategic initiatives and corporate values. STIP objectives fall into three major categories:

- 1. Corporate Performance Measures
- 2. Business Unit Measures
- 3. Individual and/or Team Performance Measures

Corporate and Business Unit performance measures are reviewed and established each year. These measures unite employees on common goals and also foster collaborative efforts between business units.

Individual and Team performance measures should be set and mutually agreed to by each employee and their manager. Performance measures are intended to provide focus and clarity to the year's business priorities.

At year-end, performance against each measure will be assessed and a value assigned along a predefined performance continuum.

#### 2011 STIP PERFORMANCE MEASURES AND WEIGHTS:

| Measure                           | Weight | Minimum   | Target  | Maximum |  |  |  |
|-----------------------------------|--------|---|---------|---------|--|--|--|
| Spectra Energy EPS <sup>1</sup>   | 20%    | \$1.45  | \$1.65  | \$1.90  |  |  |  |
| SET EBIT <sup>2, 3, 4</sup>       | 25%    | \$1,683   | \$1,744 | \$1,866 |  |  |  |
| Union Gas EBIT <sup>2</sup>       | 20%    | C\$396  | C\$410  | C\$439  |  |  |  |
| SET EHS Blended Scorecard         | 10%    | See Appendix 1  |         |         |  |  |  |
| Union Gas Operations<br>Scorecard | 10%    | See Appendix 2  |         |         |  |  |  |
| Individual or Team                | 15%    | Determined in conjunction with your Business Unit management. |         |         |  |  |  |

Note: For unionized employees, the terms of their incentive plan are outlined in their collective bargaining agreement.

## **Award Achievement Range:**

As shown above, each STIP measure is defined with a Minimum, Target and Maximum expected performance result. The achievement range details for all of the various measures are as follows:

| Measure   | Minimum | Target | Maximum |
|---|---------|--------|---------|
| All STIP Measures (Corporate and Business Unit financials, EHS, Operations Scorecards and | 50%     | 100%   | 200%    |
| Individual/Team Objectives)   |         |        |         |

NOTE: Achievement of less than 50% on any performance measure will result in a payout of 0% for that measure.

<sup>&</sup>lt;sup>1</sup> On-going diluted earnings per share

<sup>&</sup>lt;sup>2</sup> Millions

<sup>&</sup>lt;sup>3</sup> 45% of FX impact from budgeted exchange rate of \$1.05 shall be removed for calculating goal performance. Normal on-going asset optimization will be included for calculating goal performance. Represents ongoing Spectra Energy EBIT, excluding DCP Midstream.

<sup>&</sup>lt;sup>4</sup> EBIT for SET will be calculated on a commodity price neutral basis

## 2011 STIP TARGETS BY GRADE LEVEL:

| Grade Level | STIP Target as a % of<br>Annual Salary (100%<br>achievement) |
|-------------|--|
|             | ,  |
| 14          | 25% - 30%  |
| 13          | 20% - 25%  |
| 12          | 20%  |
| 10 – 11     | 15%  |
| 7 – 9       | 10%  |
| 1 – 6       | 6%   |

#### **DETAILED STIP GUIDELINES**

#### STRUCTURE OF YOUR INCENTIVE

- Your incentive payment is determined by multiplying the total achievement percentage by your incentive-eligible earnings.
- Incentive-eligible earnings includes: December 31, 2011 annualized base salary plus actual earnings of: overtime, callout pay and shift differentials if applicable.
- Your incentive opportunity is based on your incentive target, the actual result of each performance measure and the weightings for each of those measures.
- Incentive payments are taxable income.
- In Canada, employees are given the opportunity to direct all or a portion of their incentive payment into their DC account.

## STIP ELIGIBILITY GUIDELINES:

## WHO IS ELIGIBLE?

• All Union Gas regular full-time and part-time non-union employees are eligible to participate in STIP.

## NOTE: The following "Eligibility Exceptions":

- i. For employees retiring, see "Retirement"
- ii. For employees terminating employment with the Company, see "Termination"
- iii. For employees moving within the Spectra Energy family of companies, see "Company Transfers"

#### **NEW HIRES**

• Employees hired into a STIP-eligible role during the calendar year will have any approved STIP payment pro-rated based on their hire date and active time worked in the STIP-eligible role during the calendar year.

## **JOB CHANGES**

- Employees who transfer into a STIP-eligible role during the calendar year will be eligible for a pro-rated STIP award based on the effective date of the job change and active time worked in the STIP-eligible role during the calendar year.
- Employees who are promoted from one STIP target level to a higher STIP target level will receive a STIP payment based on the number of days at each STIP target level.
- Employees who move to a role with a lower STIP target level will receive a STIP payment based on the number of days at each STIP target level.
- All other job changes will be administered as per the terms of the Employment Offer.

## **COMPANY TRANSFERS**

- Employees moving within the Spectra Energy Business Units will be treated as transfers and will remain eligible for STIP during the calendar year the transfer occurs.
- STIP payments will be pro-rated according to the applicable Business Unit measures defined under the Short Term Incentive Plan for each STIP-eligible role held during the calendar year.

## SEPARATION FROM COMPANY

#### RETIREMENT

- Employees who retire during the calendar year will remain eligible for a pro-rated STIP payment for time worked up until their retirement date.
- STIP awards earned in the year of retirement are not included in pensionable income.

#### **TERMINATION**

- Employees who voluntarily terminate employment prior to the end of a calendar year (on or prior to December 31) will forfeit any STIP eligibility for that calendar year.
- Employees who voluntarily terminate employment after the end of the calendar year (after December 31) will remain eligible for a STIP award for the preceding calendar year.

#### DEATH

• STIP payment will be pro-rated based on active time worked during the calendar year.

#### LEAVES OF ABSENCE

Union Gas recognizes a variety of Leaves of Absence from work. As a general rule for STIP eligibility purposes, employees who participate in a Leave of Absence during a calendar year:

- Are eligible for a pro-rated STIP award while on "Active" payroll status during the calendar year.
- Are ineligible for STIP award while on "Inactive" payroll status during the calendar year.

## SHORT TERM DISABILITY (STD)

• When on Short Term Disability (STD) an employee remains on Active payroll status; therefore STIP eligibility continues to accrue while on STD.

## LONG TERM DISABILITY (LTD)

• When on Long Term Disability (LTD) an employee moves to Inactive payroll status; therefore STIP eligibility does not continue to accrue while on LTD.

## PREGNANCY AND PARENTAL LEAVE OF ABSENCE

- Employees who are absent during the calendar year due to a leave of absence for pregnancy and/or parental leave, will be given up to 52 weeks credit towards their annual STIP entitlement
- Birth Mothers may receive up to 52 weeks credit for STIP entitlement (17 weeks pregnancy leave and 35 weeks parental leave) if the pregnancy and/or parental leave is taken in accordance with the provisions of the Employment Standards Act, Ontario, and the company policy, "Pregnancy, Parental and Adoption Leave of Absence".
- The Non-Birth mother/parent, and the adoptive parents, may receive up to 37 weeks credit for STIP entitlement if the parental leave is taken in accordance with the provisions of the Employment Standards Act, Ontario, and the company policy, "Pregnancy, Parental and Adoption Leave of Absence".
- Periods of absence for pregnancy, parental or adoption leave beyond those provided under the Employment Standards Act, Ontario, will not receive credit for STIP entitlement.

## EDUCATION AND PERSONAL LEAVE OF ABSENCE

• Employees who are absent during the calendar year due to an Education Leave or Personal Leave of Absence will be eligible for a pro-rated STIP award based on their actual time worked and Active payroll status during the calendar year.

## MILITARY LEAVE OF ABSENCE

 Employees on Military Leave during the calendar year remain eligible for a full STIP award.

#### BENEFITS

#### **FLEX BENEFITS**

• Incentive plan payments will not be used as a basis for determining benefit entitlement for Life Insurance, Sick Pay or Long Term Disability Insurance coverage.

#### PENSION PLAN

- Incentive plan payments are considered pensionable income across Spectra Energy as follows:
  - ➤ For all Pension Choices Plans, STIP payments received during the previous 12-month period from July 1 to June 30 will be included in pensionable earnings for the following calendar year.
    - → For example: STIP payment received during the period July 1, 2009 to June 30, 2010 will be included in pensionable earnings for calendar 2011.
  - ➤ For employees in the "Grandfathered" Pension Plan, STIP payments will be included in pensionable earnings and are deemed as received in the year awarded; with the exception of the Westcoast Energy Inc. Employees' Retirement Plan for which STIP is not considered pensionable.
  - ➤ Incentive plan payments received after retirement will not have pension deductions taken and will not be included in pensionable income.

## **EMPLOYEE SAVINGS PLAN (ESP)**

• Incentive plan payments are not considered eligible earnings for ESP.

## **GENERAL**

- Provisions of the Short Term Incentive Plan are reviewed annually. Union Gas and Spectra Energy reserves the right to modify; amend; or terminate this Plan at any time. In the event of a dispute, the Spectra Energy Corp Annual Incentive Plan document rules.
- Specific terms and conditions affecting STIP payments, in accordance with Plan principles, may be published from time to time and take precedence over this document.
- Changes may be published in this booklet or as an addendum to the Plan.
- Awards may be reduced or cancelled if a participant has engaged in misconduct with respect to his/her employment or has failed to adequately perform the duties and responsibilities of his/her employment assignment, or for any other reason determined to be appropriate by the President and CEO Spectra Energy or their designate.

# **Union Gas Balanced Scorecard Overview**

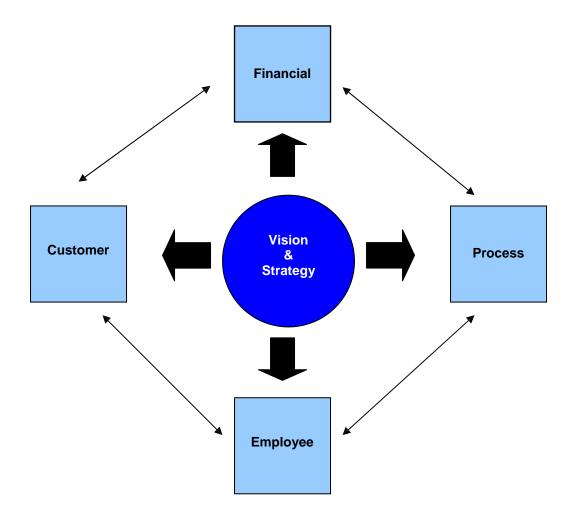
## Purpose of Balanced Scorecards at Union Gas

Balanced Scorecards at Union Gas are used to translate strategy into measures with a goal of driving high performance. Scorecards are used by several functional areas within the company.

## Structure of the Scorecards at Union Gas

The Union Gas scorecards follow Kaplan and Norton's viewpoint<sup>1</sup> of translating strategy into action through the use of four different perspectives financial, customer, process, and employee. As shown in the graphic below, within each perspective, there is a combination of financial and non-financial measurements. There is also a balance between measures that result from *past* performance and measures that *drive* future performance.

<sup>1</sup> Robert S. Kaplan, Marvin Bower Professor of Leadership Development at Harvard Business School and David P. Norton, Management Consultant and President of the Balanced Scorecard Collaborative, Inc. Kaplan and Norton first introduced the "Balanced Scorecard" in 1992 with an article in the Harvard Business Review. The Balanced Scorecard is a management system that does not only rely on financial information but also non-financial key performance indicators."



- 1. Financial Perspective: The major financial objective for most functional areas within Union Gas is to control costs through increasing productivity and efficiency. Most measurements within this perspective are cost-focused and enable the company to continuously improve its results on these indicators.
- 2. Customer Perspective: Union Gas strives for operational effectiveness in order to achieve a mutually agreeable balance between the service level desired by customers and the cost customers are willing to pay for that service level. The measurements within this perspective are focused on customer satisfaction. Service Quality Indicators (SQIs) such as promises kept, customer satisfaction, and gas line break frequency, drive behaviour that continuously delivers reliable and consistent service to customers.

- 3. Process Perspective: Union Gas aspires to continually improve existing internal processes. Certain measures within this perspective have mandatory target levels due to legislative compliance. The remaining measures, such as, Emergency Response, Environmental Spills, Telephone Response, and Mean Time Between Failures, are measured to ensure Union Gas operates under consistent and repeatable processes while meeting committed SQI targets. This translates into improved efficiency of internal processes.
- **4. Employee Perspective:** Union Gas strives to create an environment that is conducive to carrying out cost-effective processes while embracing high quality and a zero injury and work-related illness culture. Safety is critical within Union Gas. The measurements within this perspective are aimed at accomplishing these priorities.

#### Benefits of the Balanced Scorecards at Union Gas

The Balanced Scorecard translates the strategies of the company into measurable indicators that drive performance and efficiency. The financial focus on cost control ensures operational efficiency resulting in lower Operating and Maintenance costs. A customer perspective focused on delivering a reliable, consistent, and cost effective service experience to customers ensures that customers are satisfied at mutually agreeable levels of service and cost. A process perspective focused on the development of consistent and repeatable internal processes ensures that employees remain committed to meeting SQI targets. Finally, an employee perspective focused on creating an environment of high quality and safety ensures a reputation for reliability. The transparency of all the measurements within each perspective drives a focus on continuous improvement which ultimately translates into improved efficiencies throughout the entire company.

## Target Setting of the Balanced Scorecards at Union Gas

Measurements are established and evaluated annually in order to drive behaviour and continuous improvement in key areas that align with the strategic objectives of the company. Strategic initiatives are identified annually and stretch targets are incorporated where improvement is necessary to drive long term performance change.

## **Balanced Scorecard Performance at Union Gas**

Union Gas has multiple scorecards, each cascading to the department or district level:

- Distribution Operations
- Engineering, Construction & STO (Storage & Transmission Operations)
- Marketing & Customer Care.

Every scorecard incorporates different objectives, measurements, resulting in a range of total scores throughout the company. Historically, total scores have varied across the groups in the range of approximately 95 to 127 in 2009 and 94 to 137 in 2010. The division of groups and the range of scores throughout the company allows for learning and the identification of best practices specific to each group.

Filed: 2011-11-10 EB-2011-0210 Exhiibit D1 Tab 3 Appendix D

Private and Confidential

October 26, 2011

Mr. Bohdan Bodnar Vice President, Human Resources Canada Spectra Energy Transmission #1100 - 1055 West Georgia Street Vancouver, BC V6E 3P3

Dear Bohdan:

#### **UNION GAS 2013 RATE APPLICATION - BENEFIT PROGRAMS**

This letter report has been prepared for Union Gas ("Union") in connection with its 2013 rate application before the Ontario Energy Board. The report provides information with respect to the competitiveness and costs of Union's employee benefit programs, including pensions, other post-retirement benefits and health and welfare benefits.

## **Pensions and Benefits Program Design**

Over a period of years culminating in 2005, Union designed and implemented a common pension and benefits platform for all employees, including management, salaried and bargaining unit employees. The common platform has been designed to manage program costs, both benefit costs and benefit delivery costs, as well as to facilitate the efficient deployment of human resources.

The common benefits platform was designed to maintain Union's competitive position around the average of a comparator group of companies adopted by Union for the purpose of benchmarking the competitiveness of its pensions and benefit programs. The common benefits platform reflects emerging best practices and incorporates enhanced benefits cost management features, including employee cost sharing.

Union regularly reviews and confirms the competitiveness of its programs, and also regularly reviews benefits costs relative to appropriate industry benchmarks.

#### **Pensions**

Union sponsors both defined contribution (DC) and defined benefit (DB) pension plans for all employees. The ongoing pension plan ("Pension Choices") to which newly hired employees are admitted, has both DB and DC components, and covers both exempt and bargaining unit employees. In addition, Union sponsors five legacy DB pension plans which are all closed to new entrants. Each employee participates in only one of the DB or DC pension plans, based on each employee's election at the time of plan enrolment.

Union's cash contributions to the Pension Choices DC plan are expressed as a percentage of pay depending on each participating employee's age and years of service. For this reason, Union's total DC pension cash costs are a function of the covered payroll and employee demographics, and will change in

line with changes in these factors. The accounting expense for the DC component of Pension Choices is exactly equal to Union's DC cash costs.

Following a competitive review undertaken in 2008 and 2009, Union confirmed that the Pension Choices DC plan was no longer competitive relative to comparable programs sponsored by Union's peer group. In addition, Union wished to ensure that, on a prospective basis, the DB and DC choices under the Pension Choices plan would continue to be balanced, reflecting known and expected changes in the future economic environment and employee mortality.

For these reasons, Union increased the employer contribution rates under the Pension Choices DC plan by 0.75% of pay effective July 1 in each of the years 2009 and 2010.

The accounting expense for DB pensions is determined in accordance with the standards of the Canadian Institute of Chartered Accountants (CICA), specifically, Section 3461 of the CICA Handbook ("Canadian GAAP"). This is in accordance with the direction of the Ontario Energy Board in 1999. Effective in 2012, Union adopted US GAAP for financial reporting and proposes to use US GAAP for accounting for pensions and other post-employment benefits in the 2013 test year.

Union's DB pension accounting expense under Canadian GAAP has varied significantly in the period from 2007 through 2010. The primary drivers of the levels and changes in DB pension expense between 2007 and 2013 are:

- Historic low levels of long-term government and corporate bond yields. Long-term Government of Canada bonds currently yield around 3.0%, close to 60-year historical lows;
- actuarial losses due to volatile capital market returns in prior periods, particularly the very significant declines in capital markets that occurred in 2008 as a result of the global financial crisis;
- material reductions in pension accounting expense due to significantly increased cash funding contributions to the pension plans by Union, as required by the Ontario Pension Benefits Act; and
- higher ongoing costs and the recognition of actuarial losses due to the adoption of updated mortality tables reflecting significant improvements in retirees' life expectancies.

A number of economic and demographic actuarial assumptions are required to determine the accounting expense for DB pensions. In response to changes in the economic environment, and in accordance with generally accepted accounting principles, Union continues to evaluate economic conditions to determine its best estimate economic assumptions for accounting for DB pensions. In particular, in forecasting the 2013 DB pension accounting expense, the key economic assumptions are the discount rate and the expected rate of return on assets.

The discount rate is used to determine the present value of expected future benefit payments. Canadian and US GAAP require that the discount rate be based on long-term Canadian AA Corporate bond yields, which continually change in line with market interest rates. In determining the rate to be used, Union relies upon bond yield data provided by Towers Watson. In turn, Towers Watson relies upon external, independent sources to assist with developing a yield-curve applicable to Canadian AA Corporate bonds.

The expected rate of return on assets is used to determine the total expected investment return (interest, dividends and capital appreciation) that will be earned by the DB pension fund assets. As the investment return is an offset to the cost of a DB pension plan, the greater the expected return on the pension fund assets, the lower will be the DB pension accounting expense, and vice versa.

Union determines the expected return on assets taking into account the investment policy for the DB pension funds, Towers Watson's economic outlook for capital markets, as well as benchmark data for

other similarly situated Canadian organizations. Union has determined that a decrease in this assumption is warranted.

In common with the DB pension plans sponsored by the majority of Canadian organizations, the funded status of Union's DB plans has declined over recent years. In light of the funded status of Union's DB pension plans, as determined in actuarial valuations, and in accordance with the requirements of the Ontario Pension Benefits Act and Regulation, Union has been required to make significantly increased cash contributions to the DB pension funds, over the period since 2007. These additional cash contributions have increased the assets of the DB plans, and the expected rate of return on assets, therefore, is applied against a higher asset base, increasing the expected return on assets and decreasing the pension accounting expense.

The Canadian population continues to experience improvements in longevity due to declining rates of mortality at older ages. This results in significantly increased costs for retirees' pensions and benefits. In determining its benefits accounting costs, Union has adopted updated mortality tables to reflect these improvements. Specifically, for the purpose of the 2013 test year, Union is using 90% of the rates of the Universal Pensioner 1994 ("UP1994") Mortality Table with fully generational projection. In 2007, Union used 100% of the UP1994 rates with rates projected to 2015. The impact of this change in assumption may be demonstrated by noting that the life expectancy of a 65 year old male is 85.5 years under the new table compared to 84.0 years under the prior table. The corresponding life expectancies for 65 year old females under the new and old tables are 87.9 years and 86.6 years, respectively.

## **Post- Retirement Benefits Other Than Pensions**

In 2006, Union completed the implementation of a revised, common retiree benefits platform for all employees, including management, salaried and bargaining unit employees. The new program was designed in response to retiree benefit costs increasing much faster than consumer price inflation, and in order to better manage medical and dental costs and reduce overall benefits delivery costs The new program is a combination of a defined contribution (DC) and defined benefit (DB) program, compared to Union's legacy programs which were entirely DB.

The program comprises a flat dollar amount of life insurance, a DC Health Spending Account and a DB medical plan that contains a number of cost management features, including a significant per person annual deductible (\$1,200 per year).

The accounting expense for post-retirement benefits is also determined in accordance with Canadian GAAP. A number of actuarial assumptions are used in determining the accounting expense for post-retirement benefits. In particular, in forecasting the 2013 accounting expense for post-retirement benefits, the key economic assumptions are the discount rate and the health care cost trend rate.

In accordance with generally accepted accounting principles, Union continues to evaluate economic conditions to determine its best estimate assumptions for accounting for post-retirement benefits. The discount rate is used to determine the present value of expected future benefit payments. Canadian and US GAAP require that the discount rate be based on long-term Canadian AA Corporate bond yields, which continually change in line with market interest rates. In determining the rate to be used, Union relies upon bond yield data provided by Towers Watson. In turn, Towers Watson relies upon external, independent sources to assist with developing a yield-curve applicable to Canadian AA Corporate bonds.

The ultimate cost of providing extended health care benefits to retired employees will depend, in part, on how much the cost of medical services increases. The nature and extent of recent and expected medical cost increases in Canada generally, and for Union in particular, are further discussed under "Health and Welfare Benefits, below.

As previously noted under the Pensions section, the Canadian population continues to experience improvements in longevity due to declining rates of mortality at older ages. This results in significantly increased costs for retirees' benefits. While such increases continue to impact retiree benefits under Union's legacy retiree benefit programs, the impact of such increases on the benefits of employees retiring since 2005 has been significantly mitigated by the design of Union's common retiree benefits program.

## **Health and Welfare Benefits**

Union sponsors a flexible benefits program known as Benefit Choices. Benefit Choices is a common platform that applies to all employees, including management, salaried and bargaining unit employees.

The benefits provided under Benefit Choices include:

- Life and accident insurance;
- Short and long-term disability benefits; and
- Medical and dental benefits.

The Benefit Choices program was specifically designed to manage overall costs and to share costs with employees. Employees are provided with flex credits which they use to purchase benefits from a menu of choices. The price tags for each benefit are reviewed each year and adjusted based on claims experience and to maintain Union's target level of employer/employee cost-sharing.

Benefit costs in Canada have increased significantly since 2007. The primary driver of such cost increases has been increases in prescription drug costs which typically account for 60% to 70% of the medical costs covered by employer sponsored plans. A recent Canadian insurance industry study indicated that the average annual increase in prescription drug plan costs in the four year period ending in 2010 was 14.4% per year. The average increases in prescription drug plan costs in each of the prior years have been as follows:

- 2007 13.9%
- 2008 13.8%
- 2009 14.8%
- 2010 15.0%

Union has implemented various cost management strategies under the Benefit Choices common platform, including the introduction of an employee drug card to manage prescription drug plan costs. As a result, Union's overall benefit plan costs, while increasing at a much higher rate than consumer price inflation, have increased at rates below Canadian industry. The comparable average annual increase in Union's drug plan costs in the four year period ending in 2010 was 8.0% per year.

For the purpose of forecasting health care costs for active and retired employees in 2013, Union has generally used a health care trend rate of 8.0% per year and a dental care trend rate of 5.0% per year.

Insurance premiums and benefit program administration costs charged by insurance carriers can represent a significant overhead in delivering employee benefit programs. In 2010, Towers Watson assisted Union in conducting a comprehensive insurance marketing to ensure the competitiveness of its

programs and rates. This marketing exercise resulted in improved premium rates, guarantees and benefit administration charges.

## **Employee Savings Plan**

Since 2007, there have been no changes to the Employee Savings Plan, The Plan is a voluntary employee savings plan with matching employer contributions dependent on each employee's years of service.

## **Opinion**

Union's pension and benefits costs continue to increase at rates in excess of increases in the consumer price index. The primary drivers of these increases are a continuation of historic low levels of long-term bond yields, poor capital market returns, continuing high levels of medical price inflation and improvements in retiree mortality. None of these factors is unique to Union and, in my opinion and based on my experience, the levels of increases in Union's costs are consistent with the economic environment and in line with increases experienced by other similarly situated employers in Canada.

The accounting estimates discussed herein have been made in accordance with Section 3461 of the Canadian Institute of Chartered Accountants (CICA) Handbook, and with the US Financial Accounting Standards Board's ASC 715, with which I am familiar. The assumptions used were determined by Union management as their best estimates of long-term expectations, after discussions with Towers Watson, and are in accordance with accepted actuarial practice.

In my opinion, for the purposes of the accounting estimates discussed in this letter, the data on which the estimates are based are sufficient and reliable, and the methods employed are in accordance with the requirements of the applicable accounting standards.

Sincerely,

Ashley W. Witts Account Director

JSK/WW

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| 1        |                                 | PREFILED EVID                                   | ENCE OF                                  |  |  |
|----------|---------------------------------|---|--|--|--|
| 2        |                                 | KEN HORNER, SENIOR                              | TAX SPECIALIST                           |  |  |
| 3        |                                 |   |  |  |  |
| 4        | The purpose of this ev          | idence is to discuss Union's in                 | come and property tax forecasts. Union's |  |  |
| 5        | utility 2013 tax forecas        | sts are as follows:                             |  |  |  |
| 6<br>7   |                                 | Table 1<br>2013 Tax For                         | <u>recast</u>                            |  |  |
|          | Line<br><u>No.</u>              | (\$ millions)                                   |  |  |  |
|          | 1<br>2<br>3                     | Property tax<br>Income tax<br>Total             | \$ 64.0<br><u>8.4</u><br><u>\$ 72.4</u>  |  |  |
| 8<br>9   | INCOME TAX                      |   |  |  |  |
| 10       | Union's 2013 income             | tax expense forecast is compris                 | sed of the following:                    |  |  |
| 11<br>12 | Table 2 2013 Income Tax Expense |   |  |  |  |
|          | <u>Line</u><br><u>No.</u>       | (\$ millions)                                   |  |  |  |
|          | 1<br>2<br>3                     | Tax on income<br>Deferred tax drawdown<br>Total | \$ 23.6<br>(15.2)<br>\$ 8.4              |  |  |

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| _ |    |          |                 |           | -           |
|---|----|----------|-----------------|-----------|-------------|
| 1 | 1/ | Horecast | Methodology -   | - Tav ∩t  | Income      |
| 1 | 1/ | Torcast  | Michidudide y - | - I an Oi | 1 111001110 |

- 2 Tax on income is calculated by applying the combined federal and provincial tax rate for a given
- 3 year to taxable income. Taxable income is calculated by adjusting utility income before interest
- 4 and taxes for interest expense, utility permanent difference and utility timing difference. Only
- 5 legislated tax rates are used in the calculation of tax on income.

6

- 7 The tax on income calculations are found at; Exhibit D3, Tab 5, Schedule 1; Exhibit D4, Tab 5,
- 8 Schedule 1; Exhibit D5, Tab 5, Schedule 1 and Exhibit D6, Tab 5, Schedule 1 for the years 2013
- 9 through 2010, respectively. The calculation of Capital Cost Allowance ("CCA") is found at
- Exhibit D3, Tab 5, Schedule 2; Exhibit D4, Tab 5, Schedule 2; Exhibit D5, Tab 5, Schedule 2
- and Exhibit D6, Tab 5, Schedule 2 for the years 2013 through 2010, respectively.

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## 2/ Deferred Tax Drawdown

- In 1997, Union changed its accounting for income taxes for utility operations from the tax
- 15 allocation method to flow through tax accounting. The change to flow through tax accounting
- was adopted for rate-making purposes on a prospective basis in E.B.R.O. 493/494. The tax
- allocation method of tax accounting used for rate-making purposes prior to E.B.R.O. 493/494
- resulted in an accumulated deferred tax balance. In the E.B.R.O. 499 ADR Settlement Agreement
- 19 parties agreed that the accumulated deferred tax balance would be used to reduce Union's cost of
- service in future years. The 2013 test year forecast deferred tax drawdown is \$15.169 million.
- 21 The deferred tax drawdown schedule has been provided in Appendix A.

# PROPERTY TAX

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2 Union's corporate forecast of its property tax expense for 2013 is \$65.4 million. The corporate 3 forecast is then reduced by the property taxes associated with the unregulated storage to arrive at 4 the 2013 utility property tax expense of \$64.0 million. The methodology used to determine the 5 property taxes associated with unregulated storage can be found at Exhibit A2, Tab 2. 6 7 Forecast Methodology – Corporate Property Tax 8 Property tax expense consists of two components. The first component is Union's estimated 9 base calendar year tax amount. This amount is added to Union's estimated tax on special/major 10 projects to arrive at its total property tax expense for the 2013 year. 11 12 To calculate the estimated base calendar year tax amount, Union applies inflation to its actual 13 total property taxes for Union's facilities paid in the prior year. 14 15 Property tax forecasts for special or major projects (i.e. Dawn to Parkway) are separately 16 calculated by forecasting the assessment base and multiplying this base by the tax rate(s) for the 17 specific jurisdictions where these projects are located, adjusted for inflation. 18 19 Beginning in 2012, the forecast includes an additional \$0.160 million due to a recent Assessment 20 Review Board ("ARB") decision (ARB – June 30, 2011 – File # WR 102472) in Ontario

between Enbridge Gas Distribution ("EGD") and the Municipal Property Assessment

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- 1 Corporation ("MPAC"). This decision changes the property tax classification of odorant injection
- 2 stations from commercial to industrial, increasing Union's annual property tax obligations on
- 3 these stations.

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## **UNION GAS LIMITED**

Comparison of Accounting Expenses To Deductions for Tax  $\underline{2010\text{-}2018}$ 

| Fiscal | Accounting | Tax        |                | Tax        | Drawdown | Deferred  |
|--------|------------|------------|----------------|------------|----------|-----------|
| Year   | Expenses   | Deductions | Difference (1) | Amount (2) | Utilized | Tax       |
|        |            |            |                |            |          |           |
| 2009   |            |            |                |            |          | (126,929) |
| 2010   | (62,700)   | 26,271     | (36,429)       | (17,041)   | (17,041) | (109,888) |
| 2011   | (58,518)   | 24,765     | (33,753)       | (15,790)   | (15,790) | (94,098)  |
| 2012   | (55,106)   | 23,394     | (31,713)       | (14,835)   | (14,835) | (79,263)  |
| 2013   | (54,564)   | 22,137     | (32,426)       | (15,169)   | (15,169) | (64,094)  |
| 2014   | (49,760)   | 20,978     | (28,783)       | (13,465)   | (13,465) | (50,629)  |
| 2015   | (48,881)   | 19,904     | (28,977)       | (13,556)   | (13,556) | (37,074)  |
| 2016   | (46,909)   | 18,905     | (28,004)       | (13,100)   | (13,100) | (23,973)  |
| 2017   | (46,064)   | 17,972     | (28,091)       | (13,141)   | (13,141) | (10,832)  |
| 2018   | (43,006)   | 17,098     | (25,908)       | (12,120)   | (10,832) | (0)       |

## Note:

- (1) Difference column represents total accounting expenses less total deductions allowed for tax purposes.
- (2) Tax Amount is the difference column times the average tax rate (46.78%) in the years of accumulating deferred taxes.

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# 2 KEITH BOULTON, DIRECTOR, ENERGY CONSERVATION STRATEGY 3 4 Introduction 5 The purpose of this evidence is to summarize the approvals Union is seeking from the 6 Board in its EB-2011-0327 application for a new Demand Side Management ("DSM") 7 Framework for 2012 to 2014 which was filed on September 23, 2011 and to describe the 8 impacts the EB-2011-0327 application is expected to have on Union's 2013 forecast. 9 Specifically, Union's EB-2011-0327 application requested Board approval for the: 10 11 i) Resource Acquisition, Large Industrial Rate T1/Rate 100, Low-income and 12 Market Transformation Programs; 13 ii) DSM budgets and associated calculation methodology for 2012, 2013 and 2014; 14 iii) DSM scorecard targets and associated target adjustment methodology for 2012, 15 2013 and 2014; 16 iv) DSM incentive amounts and associated calculation methodology for the years 17 2012, 2013 and 2014; v) Continuation of the Lost Revenue Adjustment Mechanism ("LRAM") Deferral 18 19 Account ("LRAMDA") and Demand Side Management Variance Account 20 ("DSMVA"); 21 vi) Stakeholder Terms of Reference; and,

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1 vii) Evaluation Plans. 2 3 In addition, within Union's EB-2011-0025 application for 2012 rates, Union requested 4 the implementation of the new DSM Incentive Deferral Account ("DSMIDA"). 5 6 BACKGROUND 7 Union has been engaged in DSM since 1997. While DSM based activities produce net 8 bill savings for ratepayers as defined by the Total Resource Cost ("TRC") test, DSM also 9 has a cost that must be recovered in delivery rates. Union's total DSM budget is funded 10 by ratepayers. The volume of natural gas saved as a result of DSM activities is 11 eventually reflected in Union's demand forecast which causes delivery rates to be higher 12 than they would otherwise be. In addition, DSM incentive payments to Union for 13 achieving certain results are recorded in a deferral account and recovered from ratepayers 14 at a later date. Finally, through the LRAM, Union recovers/rebates margin differences 15 which relate to DSM volume savings being different than forecast. 16 17 Table 1 details the volumes that have been saved, by customer type, from 1997 to 2010 as 18 a result of Union's DSM activity. It also presents the O&M costs of Union's DSM 19 programs and the corresponding TRC net benefits calculated on the volume savings over 20 this time period.

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Table 1DSM Program Impacts

DSM Volume Savings (10<sup>3</sup> m<sup>3</sup>)<sup>(1)</sup> Total (\$000s) Distribution TRC Net Actual Benefits (2) Year Residential Commercial Contract Total Expenditures (b) (d) (e) (a) (c) (f) 1997 4,847 2,211 14,027 21,085 \$76,294 \$2,849 1998 11,780 9,302 6,422 27,504 38,000 3,064 1999 9,410 8,869 12,689 30,968 41,943 3,661 3,992 15,672 32,345 4,421 2000 12,681 43,869 2001 13,233 8,485 26,308 48,026 47,776 3,496 2002 11,622 13,581 17,692 42,895 76,194 3,005 2003 12,459 10,733 15,667 38,859 47,364 3,855 2004 5,430 19,132 34,585 59,147 70,167 5,905 2005 5,062 17,054 42,678 64,794 97,106 8,092 2006 12,416 27,334 50,725 90,475 184,677 12,882 2007 5,605 18,183 32,066 55,854 215,895 16,131 2008 7,838 14,469 39,544 61,851 262,754 20,259 2009 7,263 25,932 59,411 92,606 308,255 22,222 2010 4,949 14,645 101,522 121,116 284,132 21,532 Total 124,595 193,922 469,008 787,525 \$1,794,426 \$131,374

#### Note:

- (1) 1997 2010 are actual volumes (2010 audited pending Board approval).
- (2) TRC net benefits are calculated based on the input assumptions in effect for the year considered.3

# 4 TARGETS AND THE LRAM

- 5 Early in 2014, Union will evaluate its actual 2013 DSM performance against its targets as
- 6 specified by the scorecards filed in EB-2011-0327. It will then submit its Annual Report for
- 7 audit by an independent auditor in accordance with the 2012-2014 DSM Guidelines. The
- 8 distribution margins related to the variance between the actual volume savings achieved and the
- 9 target savings included in rates will be recorded in the LRAMDA.

## 1 **DSM BUDGET AND THE DSMVA**

- 2 For 2013, the total DSM budget will be equal to the 2012 budget of \$30.954 million, plus
- 3 inflation as defined by the four quarter rolling average of the GDP-IPI at Q2, 2012. Union
- 4 proposes to recover these costs in 2013 rates.

5

- 6 Union will record the difference between actual expenditures and the budget included in
- 7 rates in the DSMVA. Union can also recover amounts spent on DSM activities in excess
- 8 of the approved budget provided that it has achieved its overall scorecard target (i.e.
- 9 100%) on a pre-audited basis for one or more of its scorecards. Amounts recorded in the
- 10 DSMVA shall be the actual over or under spending, provided that over spending does not
- 11 exceed 15% of the approved DSM budget.

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## **DSM INCENTIVE**

- 14 In EB-2011-0327, Union proposed a maximum DSM incentive amount available for the
- 15 2012 program year of \$10.450 million. For 2013, this amount will be increased by
- inflation as defined by the four quarter rolling average of the GDP-IPI at Q2, 2012.

- 18 Upon completion of the plan year, the DSM incentive will be calculated and recorded in
- the DSMIDA.

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# PREFILED EVIDENCE OF

| 2  | LINDA VIENNEAU, MANAGER PLANT ACCOUNTING   |
|----|--|
| 3  |  |
| 4  | The purpose of this evidence is to provide the impact of the 2011 Depreciation study and   |
| 5  | amortization of Regulatory Overhead Assets. The depreciation study can be found at         |
| 6  | Exhibit D2.  |
| 7  |  |
| 8  | Attached as Appendix A is a summary of the provision resulting from this study. Page 1 of  |
| 9  | the Appendix provides a summary of the results of the updated provision as compared to     |
| 10 | the provision using the 2004 rates from the 2003 Updated Depreciation Study filed under    |
| 11 | RP-2003-0063 Exhibit D2, Tab 2   |
| 12 |  |
| 13 | Pages 2 and 3 of Appendix A provide a more detailed comparison to the RP-2003-0063         |
| 14 | study. The provisions from the current study are summarized in columns (a), (b) and (c).   |
| 15 | These are the same details as provided in Exhibit D3, Tab 4, Schedule 1.                   |
| 16 |  |
| 17 | The determination of the provision using the 2004 rates is outlined in columns (d) through |
| 18 | (f) of Appendix A. Updated rates resulting from the study can be found in column (b) in    |
| 19 | Appendix A and correspond to the rates found in Foster Associates Inc. 2011 Depreciation   |
| 20 | Study, Page 16, Statement A, Column G.   |
| 21 | The impacts of the above changes are reflected in column (g) of Appendix A. The updated    |
| 22 | rates result in a provision for depreciation and amortization of \$196.5 million, which    |

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- represents a decrease of \$14.5 million from the amounts using the 2004 rates. For ease of
- 2 accounting the Communication Structure Assets have been transferred to the
- 3 Communication Equipment Assets with about a \$0.004 million increase in depreciation.

- 5 As part of the Union Gas International Financial Reporting Standards conversion project, it
- 6 was determined that indirect overhead costs ("OH") are capital within a regulatory
- 7 environment, but are expensed in an unregulated environment. As a result, OH was no
- 8 longer distributed to individual assets, but capitalized to a single asset per functional
- 9 category as Regulatory Overhead Assets. Regulatory Overhead Assets are amortized over
- the average life of the assets within each functional category that attract overheads. This
- change was implemented in 2010.

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# UNION GAS LIMITED

# Provision for Depreciation, Amortization and Depletion Calendar Year Ending December 31, 2013

|      |   | Depreciation   | Depreciation | Variance   |
|------|---|----------------|--------------|------------|
| Line |   | Using          | Using        | From       |
| No.  | Particulars (\$000's)   | Proposed Rates | 2004 Rates   | 2004 Rates |
|      |   | (a)            | (b)          | (c)        |
| 1    | Total provision for depreciation and amortization before adjustments (per page 3) | 198,732        | 213,282      | (14,550)   |
| 2    | Adjustments: vehicle depreciation through clearing                                | 2,265          | 2,265        | -          |
| 3    | Provision for depreciation amortization and depletion                             | 196,467        | 211,017      | (14,550)   |

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# UNION GAS LIMITED Provision for Depreciation, Amortization and Depletion Calendar Year Ending December 31,2013

| Line No. | Particulars (\$000's)                                    | Average Plant (1) (a) | Proposed Rate (%) (b) | Proposed Provision (c) | Average Plant (1) (d) | 2004<br>Rate<br>(%)<br>(e) | Provision Using 2004 Rate (f) | Variance<br>From<br>2004 Rate |
|----------|--|-----------------------|-----------------------|------------------------|-----------------------|----------------------------|-------------------------------|-------------------------------|
|          |  |                       |                       |                        |                       |                            |                               |                               |
|          | Intangible plant:  |                       |                       |                        | 1 221                 |                            |                               |                               |
| 1        | Franchises and consents                                  | 1,321                 |                       | 63                     | 1,321                 |                            | 63                            | -                             |
| 2        | Intangible plant - Other                                 | 6,356                 |                       | 122                    | 6,356                 |                            | 122                           |                               |
| 3        |  | 7,677                 |                       | 185                    | 7,677                 |                            | 185                           | _                             |
|          | Local Storage Plant                                      |                       |                       |                        |                       |                            |                               |                               |
| 4        | Structures and improvements                              | 3,299                 | 2.85%                 | 94                     | 3,299                 | 3.30%                      | 109                           | (15)                          |
| 5        | Gas holders - storage                                    | 4,574                 | 2.54%                 | 116                    | 4,574                 | 2.68%                      | 123                           | (7)                           |
| 6        | Gas holders - equipment                                  | 13,250                | 3.54%                 | 469                    | 13,250                | 3.68%                      | 488                           | (19)                          |
| 7        | Regulatory Overheads                                     | 1,656                 | 30                    | 55                     | 1,656                 | 30                         | 55                            |                               |
| 8        |  | 22,779                |                       | 734                    | 22,779                |                            | 775                           | (41)                          |
| _        | Storage:   |                       |                       |                        |                       |                            |                               |                               |
| 9        | Land rights  | 32,062                | 2.10%                 | 673                    | 32,062                | 2.23%                      | 715                           | (42)                          |
| 10       | Structures and improvements                              | 47,792                | 2.50%                 | 1,195                  | 47,792                | 2.34%                      | 1,119                         | 76                            |
| 11       | Wells and lines  | 90,073                | 2.48%                 | 2,234                  | 90,073                | 2.66%                      | 2,396                         | (162)                         |
| 12       | Compressor equipment                                     | 235,882               | 2.68%                 | 6,322                  | 235,882               | 3.19%                      | 7,525                         | (1,203)                       |
| 13       | Measuring & regulating equipment Other Storage Equipment | 46,275                | 3.11%                 | 1,439                  | 46,275                | 4.30%                      | 1,990                         | (551)                         |
| 14       | 0 1 1  | 2,302                 | 20.00%                | 460                    | 2,302                 | 20.00%                     | 460                           | -                             |
| 15       | Regulatory Overheads                                     | 14,664                | 35                    | 419                    | 14,664                | 35                         | 419                           |                               |
| 16       |  | 469,050               |                       | 12,742                 | 469,050               |                            | 14,624                        | (1,882)                       |
|          | Transmission:  |                       |                       |                        |                       |                            |                               |                               |
| 17       | Land rights  | 37,846                | 1.76%                 | 666                    | 37,846                | 2.00%                      | 757                           | (91)                          |
| 18       | Structures and improvements                              | 54,602                | 2.03%                 | 1,108                  | 54,602                | 2.66%                      | 1,452                         | (344)                         |
| 19       | Mains  | 1,078,915             | 1.98%                 | 21,362                 | 1,078,915             | 2.37%                      | 25,570                        | (4,208)                       |
| 20       | Compressor equipment                                     | 337,120               | 3.23%                 | 10,889                 | 337,120               | 3.52%                      | 11,867                        | (978)                         |
| 21       | Measuring & regulating equipment                         | 166,532               | 2.60%                 | 4,330                  | 166,532               | 3.61%                      | 6,012                         | (1,682)                       |
| 22       | Regulatory Overheads                                     | 44,785                | 40                    | 1,120                  | 44,785                | 40                         | 1,120                         |                               |
| 23       |  | 1,719,800             |                       | 39,475                 | 1,719,800             |                            | 46,778                        | (7,303)                       |
|          | Distribution - Southern Operations:                      |                       |                       |                        |                       |                            |                               |                               |
| 24       | Land rights  | 7,571                 | 1.65%                 | 125                    | 7,571                 | 1.67%                      | 126                           | (1)                           |
| 25       | Structures and improvements                              | 129,114               | 2.22%                 | 2,866                  | 129,114               | 2.94%                      | 3,757                         | (891)                         |
| 26       | Services - metallic                                      | 113,773               | 2.81%                 | 3,197                  | 113,773               | 3.69%                      | 4,199                         | (1,002)                       |
| 27       | Services - plastic                                       | 783,833               | 2.51%                 | 19,674                 | 783,833               | 3.18%                      | 24,926                        | (5,252)                       |
| 28       | Regulators   | 68,701                | 5.00%                 | 3,439                  | 68,701                | 3.30%                      | 2,270                         | 1,169                         |
| 29       | Regulator and meter installations                        | 70,003                | 2.80%                 | 1,956                  | 70,003                | 3.51%                      | 2,454                         | (498)                         |
| 30       | Mains - metallic   | 414,764               | 2.83%                 | 11,738                 | 414,764               | 2.54%                      | 10,535                        | 1,203                         |
| 31       | Mains - plastic  | 531,747               | 2.31%                 | 12,284                 | 531,747               | 2.34%                      | 12,443                        | (159)                         |
| 32       | Measuring & regulating equipment                         | 38,524                | 3.66%                 | 1,410                  | 38,524                | 4.54%                      | 1,788                         | (378)                         |
| 33       | Meters   | 226,902               | 3.82%                 | 8,668                  | 226,902               | 3.70%                      | 8,395                         | 273                           |
| 34       | Regulatory Overheads                                     | 72,124                | 35                    | 2,061                  | 72,124                | 35                         | 2,061                         |                               |
| 35       |  | 2,457,056             |                       | 67,418                 | 2,457,056             |                            | 72,954                        | (5,536)                       |

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# UNION GAS LIMITED

## Provision for Depreciation, Amortization and Depletion

## Calendar Year Ending December 31,2013

|      |   |           | Proposed | D 1       |           | 2004   | Provision | Variance  |
|------|---|-----------|----------|-----------|-----------|--------|-----------|-----------|
| Line | D   | Average   | Rate     | Proposed  | Average   | Rate   | Using     | From      |
| No.  | Particulars (\$000's)                               | Plant (1) | (%)      | Provision | Plant (1) | (%)    | 2004 Rate | 2004 Rate |
|      |   | (a)       | (b)      | (c)       | (d)       | (e)    | (f)       | (g)       |
|      | Distribution plant - Northern & Eastern Operations: |           |          |           |           |        |           |           |
| 1    | Land rights   | 9,443     | 1.71%    | 161       | 9,443     | 1.68%  | 159       | 2         |
| 2    | Structures & improvements                           | 62,145    | 2.41%    | 1,498     | 62,145    | 3.13%  | 1,945     | (447)     |
| 3    | Services - metallic                                 | 96,441    | 3.22%    | 3,106     | 96,441    | 3.58%  | 3,452     | (346)     |
| 4    | Services - plastic                                  | 374,732   | 2.60%    | 9,743     | 374,732   | 3.19%  | 11,954    | (2,211)   |
| 5    | Regulators  | 27,294    | 5.00%    | 1,365     | 27,294    | 3.34%  | 912       | 453       |
| 6    | Regulator and meter installations                   | 29,845    | 2.92%    | 871       | 29,845    | 3.50%  | 1,045     | (174)     |
| 7    | Mains - metallic                                    | 379,283   | 3.02%    | 11,454    | 379,283   | 2.52%  | 9,558     | 1,896     |
| 8    | Mains - plastic                                     | 208,318   | 2.38%    | 4,958     | 208,318   | 2.35%  | 4,895     | 63        |
| 9    | Compressor equipment                                | -         |          | -         | -         | 3.34%  | -         | -         |
| 10   | Measuring & regulating equipment                    | 110,387   | 3.77%    | 4,162     | 110,387   | 4.63%  | 5,111     | (949)     |
| 11   | Meters  | 65,744    | 4.03%    | 2,649     | 65,744    | 3.67%  | 2,413     | 236       |
| 12   | Regulatory Overheads                                | 32,523    | 35       | 929       | 32,523    | 35     | 929       |           |
| 13   |   | 1,396,155 |          | 40,896    | 1,396,155 |        | 42,373    | (1,477)   |
| 10   | General:  | 1,000,100 |          | .0,000    | 1,550,155 |        | .2,575    | (1,177)   |
| 14   | Structures and improvements                         | 44,184    | 1.92%    | 848       | 44,184    | 2.13%  | 941       | (93)      |
| 15   | Office furniture and equipment                      | 6,405     | 6.67%    | 427       | 6,405     | 6.67%  | 427       | -         |
| 16   | Office equipment - computers                        | 101,827   | 25.00%   | 25,457    | 101,827   | 25.00% | 25,457    | -         |
| 17   | Transportation equipment                            | 41,741    | 13.27%   | 5,539     | 41,741    | 10.07% | 4,203     | 1,336     |
| 18   | Heavy work equipment                                | 18,649    | 6.92%    | 1,291     | 18,649    | 4.55%  | 849       | 442       |
| 19   | Tools and other equipment                           | 29,694    | 6.67%    | 1,981     | 29,694    | 6.67%  | 1,981     | _         |
| 20   | Communications equipment                            | 15,145    | 6.67%    | 1,010     | 15,145    | 6.67%  | 1,010     | _         |
| 21   | Communications structures                           | 225       | 6.67%    | 15        | 225       | 4.88%  | 11        | 4         |
| 22   | Regulatory Overheads                                | 7,143     | 10       | 714       | 7,143     | 10     | 714       |           |
| 23   |   | 265,013   |          | 37,282    | 265,013   |        | 35,593    | 1,689     |
| 24   | Sub-total   | 6,337,530 |          | 198,732   | 6,337,530 |        | 213,282   | (14,550)  |
| 25   | Total provision for depreciation and                |           |          |           |           |        |           |           |
|      | amortization  |           |          | 198,732   |           |        | 213,282   | (14,550)  |
| 26   | Depreciation through clearing                       |           |          | 2,265     |           |        | 2,265     | -         |
| 27   |   | 6,337,530 |          | 196,467   | 6,337,530 |        | 211,017   | (14,550)  |

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1 PREFILED EVIDENCE OF 2 **DAVE HOCKIN** 3 MANAGER AFFILIATE REPORTING AND ACCOUNTING 4 5 The purpose of this evidence is to provide an overview of Union Gas Limited's ("Union") forecast of affiliate charges 1 (for services provided to and received from affiliates) and to 6 7 demonstrate how these charges meet the Board's "three-prong test" for recovery from ratepayers 8 as described by the Board in the E.B.R.O. 493/494 Decision with Reasons. 9 10 The evidence is structured as follows: 11 1/ Affiliate Services Forecast 12 2/ Purpose of Shared Services 13 3/ Cost Allocation Methodology 14 4/ Benchmarking 15 5/ Union's Shared Services in Relation to the Three Prong Test 16 17 1/ AFFILIATE SERVICES FORECAST Union forecasts it will have net revenue (services provided by Union to an affiliate minus 18 19 charges received by Union from an affiliate) for years 2011, 2012, and 2013. Table 1 provides a summary of Union's affiliate services forecast. The attached Schedules 1-3 detail revenue, 20

<sup>&</sup>lt;sup>1</sup> The contracts Union has with its affiliates for gas supply and S&T services are described at Exhibit A1, Tab 9.

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- expense, and net revenue/expense by function. The 2012 and 2013 forecasts are based on 2011
- 2 Service Level Agreements ("SLA") plus inflation, plus/minus known changes for specific SLAs.

Table 1

<u>Affiliate Services Forecast</u>
(\$ Millions)

| Line<br>No. | Functional Service      | 2010<br>Actual | 2011<br>Outlook | 2012<br>Forecast | 2013<br>Forecast |                |
|-------------|-------------------------|----------------|-----------------|------------------|------------------|----------------|
|             |                         | (a)            | (b)             | (c)              | (d)              |                |
|             | SLA Services (Gross)    |                |                 |                  |                  |                |
| 1           | Revenue                 | 10.2           | 11.4            | 13.7             | 13.7             |                |
| 2           | Expense                 | 9.1            | 9.3             | 9.2              | 9.4              |                |
| 3           | Depreciation Expense    | 0.4            | 0.4             | 2.3              | 2.4              |                |
| 4           | Gross Revenue (Expense) | 0.7            | 1.7             | 2.2              | 1.9              | (Line 1 -2 -3) |
|             |                         |                |                 |                  |                  |                |
| 5           | OH Capitalization       | (1.7)          | (1.4)           | (1.6)            | (1.6)            |                |
| 6           | Net Revenue (Expense)   | 2.4            | 3.1             | 3.8              | 3.5              | (Line 4 -5)    |
| 7           | Unregulated Allocation  | 0.0            | 0.2             | 0.2              | 0.2              |                |
| 9           | Net Regulated Revenue   | 2.4            | 2.9             | 3.6              | 3.3              | (Line 6 -7)    |

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- 4 The affiliate services Union receives are for Union Gas ("the Company"). Affiliate service
- 5 revenue and expense are allocated to the unregulated portion of Union's operation using the
- 6 same allocation factors applied to Union's internal operating and maintenance ("O&M") cost.

- 8 As shown in line 9 of Table 1, there is a forecasted \$0.9 million increase in net revenue in 2013
- 9 as compared to the 2010 actual results. This is comprised of a revenue increase of \$3.5 million
- offset by an increase in expense of \$2.0 million for depreciation and \$0.3 for changes in other
- 11 expenses over the four-year period.

# 1 <u>Depreciation</u>

- 2 As shown on Table 1, the only significant variance in expenses from 2010 through 2013 is the
- 3 fee for depreciation expense. Depreciation is the cost paid to Spectra Energy ("Spectra") for
- 4 Union's share of amortizing common Information Technology ("IT") systems owned by Spectra
- 5 and used by all companies. Although referred to as depreciation, this is recorded as an affiliate
- 6 expense because it is a SLA fee paid to Spectra. Table 2 details the depreciation charge by
- 7 component.

Table2
Affiliate Depreciation Expense
(\$000's)

| Line |                       |        |         |          |          |
|------|-----------------------|--------|---------|----------|----------|
| No.  | IT System             | 2010   | 2011    | 2012     | 2013     |
|      | _                     | Actual | Outlook | Forecast | Forecast |
|      |                       | (a)    | (b)     | (c)      | (d)      |
| 1    | HR                    | 151    | 146     | 149      | -        |
| 2    | IT Security           | 97     | 94      | 96       | -        |
| 3    | IT Help Desk          | 27     | 26      | 27       | -        |
| 4    | Portal                | 100    | 97      | 99       | -        |
| 5    | Supply Chain          |        | -       | 897      | 897      |
| 6    | HR                    |        | -       | 511      | 1,024    |
| 7    | Internal Controls     |        | -       | 101      | 100      |
| 8    | Treasury, AP, Finance |        | -       | 396      | 423      |
|      |                       |        |         |          |          |
| 9    | Total                 | 375    | 363     | 2,276    | 2,444    |

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As shown on Table 2, the depreciation cost increase from 2010 to 2012 is a result of new

systems coming into service. The decrease in 2013 is the elimination of the charge from systems

that came into service in 2008.

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1 The new systems in 2011 relate to Supply Chain (Procurement); and 2012 includes Human 2 Resources ("HR"), Accounts Payable ("AP"), Treasury, Finance, and Internal Controls. The HR 3 information system is the foundation that enables the in-sourcing of Payroll, Internal Controls, 4 and work flow automation for AP. Please refer to the evidence of Mr. Bohdan Bodnar, Ms. Pat 5 Elliott and Mr. Chuck Conlon filed at Exhibit D1, Tab 3 for more information regarding the 6 decision to source the Payroll function through a SLA with Spectra. 7 8 The Supply Chain (Procurement) systems were modified to obtain efficiencies through the use of 9 common corporate policies and procedures, common supplier data bases, managing supplier 10 relationships, electronic interfaces with suppliers and, improved linkage to the payment 11 processes. 12 13 The AP system is being redesigned to enable automated workflow while also increasing internal 14 controls. The forecast includes additional revenue from Spectra beginning in 2012 as a result of 15 Union starting to process AP for Spectra. Union has been processing AP for all of its Canadian 16 affiliates for more than 10 years. 17 18 Union does not have a Treasury function. Union purchases Treasury services from Spectra. 19 Spectra's Treasury system is being modified and Union will bear a portion of the depreciation 20 expense beginning in 2012. 21

The Internal Controls application comes into service in 2012 replacing an unsupported data base.

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- 1 The forecasted depreciation expense includes the Supply Chain system which is being modified
- during 2010 and 2011. The depreciation expense for this system began in 2011 as the system was

3 phased in.

- 5 <u>2007 Board-approved and 2013 Forecast Comparison</u>
- 6 Subsequent to Union's 2007 rate case (EB-2005-0520) Duke Energy Corporation spun off its
- 7 natural gas businesses forming Spectra Energy. At that time, Spectra/Union went through
- 8 significant restructuring. The services and organizational structures of the former Duke and the
- 9 current Spectra and Union Gas companies changed substantially. Some services provided by
- Duke were terminated, some re-contracted with third parties, some were transferred to Union,
- and some were restructured for cost reductions. These changes make it complex and difficult to
- provide a meaningful comparison of individual services between Board-approved 2007 and 2013
- forecast. An aggregate summary of the Board-approved forecast compared to the 2013 forecast is
- shown in Table 3.

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Table 3

<u>Affiliate Services – 2007 Board-approved vs. 2013 forecast</u>
(\$ millions)

|            |                        |                 |               | Variance                  |                 | Variance<br>2013                               |                |
|------------|------------------------|-----------------|---------------|---------------------------|-----------------|--|----------------|
|            |                        | 2007            |               | 2007                      |                 | Forecast vs                                    |                |
| Line       |                        | Board           | 2007          | Actual vs                 | 2013            | 2007   |                |
| <u>No.</u> |                        | <u>Approved</u> | <u>Actual</u> | <u>Approved</u>           | <u>Forecast</u> | <u>Actual</u>                                  |                |
|            | SLA Services (Gross)   | <u>(a)</u>      | <u>(b)</u>    | $\underline{(c)}=(c)-(b)$ | <u>(d)</u>      | $\underline{\text{(e)}}=\text{(d)}-\text{(b)}$ |                |
| 1          | Revenue                | 5.7             | 6.5           | 0.8                       | 13.7            | 7.2  |                |
| 2          | Expense                | 11.9            | 6.3           | (5.3)                     | 9.4             | 3.1  |                |
| 3          | Depreciation Expense   | -               | -             |                           | 2.4             | 2.4  | _              |
| 4          | Gross Revenue (Cost)   | (6.2)           | (0.2)         | 6.1                       | 1.9             | 1.7  | (Line 1 -2 -3) |
| 5          | OH Capitalization      | (4.1)           | 0.1           | 4.2                       | (1.6)           | (1.7)  |                |
| 6          | Net Revenue (Expense)  | (2.1)           | (0.1)         | 1.9                       | 3.5             | 3.4  | (Line 4 -5)    |
| 7          | Unregulated Allocation | -               | -             | -                         | 0.2             | 0.2  |                |
| 8          |                        |                 |               |                           |                 |  | _              |
|            | Net Regulated Revenue  |                 |               |                           |                 |  |                |
| 9          | (Expense)              | (2.1)           | (0.1)         | 1.9                       | 3.3             | 3.2  | (Line 6 -7)    |

# 2/ PURPOSE OF SHARED SERVICES

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- 3 Union participates in shared services as a cost effective means to provide utility services to
- 4 ratepayers. Sharing services enables the Enterprise (defined as all Spectra companies) to pursue
- 5 economies of scale and scope to have common platforms and processes. Business units benefit
- 6 through cost reductions passed on to them as well as being able to access business expertise
- 7 developed elsewhere in the organization. Shared service structures are a practical means of
- 8 achieving productivity improvements.

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- 1 There are four types of services:
- 2 i) Enterprise Wide Services
- 3 Union is both a provider and receiver of similar services. The Enterprise-has staff at Union,
- 4 Houston and the West to provide the function to the Enterprise. Cross-billing occurs and Union
- 5 has both revenue and expense for the function. Services in this group include: Environmental
- 6 Health & Safety ("EHS"); HR which includes Compensation, Management Oversight, Employee
- 7 Relations, HR Information Systems, Training & Development, Workforce Planning, and
- 8 Performance Management; Insurance Management; Information Technology ("IT") which
- 9 includes Senior Management, IT Systems Support, IT Security, Software procurement, IT
- 10 Architecture and Policy and, Help Desk support; Legal; Supply Chain; and, Tax.

ii) Union is Provider Only

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- Union provides services to the Enterprise affiliates for this group of services but does not receive
- similar services for these functions. These provide revenue to Union. Services in this group
- include: Engineering & Construction ("ECS"); Finance (Pension Accounting, Affiliate
- Accounting, and Accounts Payable); Government Relations; HR (Payroll); and, Business
- 17 Development Storage & Transportation ("BDST") which includes Underground Storage,
- 18 Capacity Planning, Gas Control, and Affiliate Entity Management.
- 20 iii) Union is Receiver Only
- 21 These services are provided to Union because it does not have the expertise internally. Since
- 22 Union only pays for a portion of common staffing, these services cost Union less than having full
- 23 time employees if Union were to staff itself. These services are an expense to Union. Services in

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- this group include: Corporate Services (Travel, Library, Security, Real Estate Support and
- 2 Emergency Preparedness Planning); ECS (Project Systems & Controls, Risk Management,
- 3 Materials Procurement/Supply Chain Support); Ethics; Finance (Controller & Treasury); and,
- 4 S&T Marketing which is within the BDST category.

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#### 6 iv) <u>Depreciation Expense</u>

Depreciation is the cost paid to Spectra for Union's share of amortizing common IT systems owned by Spectra and used by all companies. These are new IT systems as a result of the spin-off of Spectra from the former Duke Energy. These systems are fundamental for Union's utility operations. A single instance of each system was (is being) paid for by Spectra. The amortized cost is shared among the users of the system. The amortization period is five and 10 years. The initial systems were built in 2007 and came into service January, 2008. They are amortized over the five-year period of 2008-2012. In 2010, 2011 and 2012 other projects have and will come into service and will be amortized over five and 10-year periods. These amortization periods reduce the 2013 cost to Union's ratepayers by \$ 2.0 million as compared the four-year period Union uses for its software projects. The Board's Affiliate Relationship Code ("ARC") permits an affiliate to include a return on assets ("ROA") equal to the Union allowed return. Spectra's fee does not include a return component.

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1 Table 4 provides a summary of these four services by group.

Table 4

<u>Affiliate Revenue (Expense) By Type</u>
(\$ Millions)

| Line | F .: 10 :                      | 2010   | 2011     | 2012     | 2013     |
|------|--------------------------------|--------|----------|----------|----------|
| No.  | Functional Service             | Actual | Forecast | Forecast | Forecast |
|      |                                | (a)    | (b)      | (c)      | (d)      |
| 1    | Union is Provider and Receiver | 0.8    | 1.4      | 2.7      | 2.6      |
| 2    | Union Provider Only            | 2.6    | 2.8      | 3.9      | 3.9      |
| 3    | Union Receiver Only            | (2.3)  | (2.1)    | (2.1)    | (2.2)    |
| 4    | Depreciation Expense           | (0.4)  | (0.4)    | (2.3)    | (2.4)    |
| 5    | Sub Total                      | 0.7    | 1.7      | 2.2      | 1.9      |
| 6    |                                |        |          |          |          |
| 7    | OH Capitalization              | (1.7)  | (1.4)    | (1.6)    | (1.6)    |
| 8    | Unregulated Allocation         | 0.0    | 0.2      | 0.2      | 0.2      |
| 9    |                                |        |          |          |          |
| 10   | Net Regulated Revenue          | 2.4    | 2.9      | 3.6      | 3.3      |

#### 2

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#### 3/ Cost Allocation Methodology

- 4 As part of EB-2005-0520, an independent consultant PricewaterhouseCoopers ("PwC") reviewed
- 5 Union's cost allocation methodology and determined that it was reasonable and consistent with
- 6 the ARC. Union has not changed its cost allocation approach.

7

- 8 Services to and from Union are based on the Receivers' needs. Union takes a central role in the
- 9 costing of all services provided to and received by Union. Union examines the budgeted cost,
- applies cost drivers and adds an indirect cost to calculate the fully allocated cost ("FAC"). Union
- takes this central role to ensure a consistent application of costing principles and to facilitate the
- 12 creation of uniform processes and documents.

#### 4/ BENCHMARKING

1

- 2 Appendix A is a Union Gas Benchmarking Analysis Report (dated August 18, 2011) prepared by
- 3 KPMG. KPMG was engaged to compare Union's net cost of four corporate support functions:
- 4 HR, IT, Finance, and EHS to a peer group of companies. These functions were selected because
- 5 they are the largest payments for services purchased from affiliates in 2011. Each purchase
- 6 exceeds \$0.5 million annually. These four functions represent 68% of the services purchased by
- 7 Union in 2011. As shown on Table 5 (column c), Union provides similar services to other
- 8 affiliates for these four functions and forecasts a net revenue of \$2.0 million in 2011.

Table 5

2011 Benchmarked Services
(\$ Millions)

| Line |         |         |                | Revenue      |
|------|---------|---------|----------------|--------------|
| No.  |         | Revenue | <b>Expense</b> | Less Expense |
|      |         | (a)     | (b)            | (c)=(a)-(b)  |
| 1    | Hr      | 2.4     | 2.1            | 0.3          |
| 2    | IT      | 3.8     | 1.7            | 2.1          |
| 3    | Finance | 1.1     | 1.2            | (0.1)        |
| 4    | EHS     | 0.8     | 1.1            | (0.3)        |
| 5    | Total   | 8.1     | 6.1            | 2.0          |

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Net cost is Union's loaded internal cost plus the cost for services purchased from affiliates minus

revenue for services provided to affiliates.

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The benchmarking report includes metrics for three types of peer companies: Utilities

15 (Worldwide); Similar Revenue (all Industries World Wide); and Regional (all Industries North

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- 1 American). The report for EHS was based on a survey by KPMG of North American gas utilities
- 2 because a comparative data base for EHS was not available.

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#### **Benchmarking Results**

- 5 Union's net cost for the four functions is at or better (lower total cost) than the median compared
- 6 to benchmarked companies. The executive summary (p.4) of the report states:

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#### Benchmarking Performance summary

- Finance Benchmark comparisons indicate that Union has a lower total cost of the
- finance function as per \$1,000 revenue than the majority of the Utility respondents.
- 11 IT Benchmark comparisons indicate that Union's IT spend as a percentage of total
- 12 operating expenses is line with the Utility industry. Note: Total cost of IT function as per
- \$1,000 revenue was not available within industry benchmarks therefore the most suitable
- 14 alternative cost benchmark was used from Gartner.
- 15 *HR Benchmark comparisons indicate that Union has a lower total cost of the HR*
- function as per \$1,000 revenue than the majority of the utilities in the industry. When
- 17 compared against respondents within a similar revenue range and region, Union is line
- 18 *with the median.*
- 19 EHS –Benchmark comparisons indicate Union's cost of the EHS function per \$1,000
- 20 revenue is \$.97 which is ranked lower than the mean of respondents surveyed.

#### 1 5/ Union's shared services in relation to the three- prong test

- 2 The "three-prong test" for recovery from ratepayers as described by the Board in its E.B.R.O.
- 3 493/494 Decision with Reasons, includes:

4

- 5 1. Cost Incurrence: Are the costs prudently incurred by, or on behalf of the utility for the
- 6 provision of a service required by Ontario ratepayers? (i.e. are the services needed?)
- 7 2. Cost Allocation: If properly incurred, are the proposed charges allocated appropriately based
- 8 on the application of cost drivers/allocation factors supported by principles of cost causality?
- 9 3. Cost/Benefit: Do the benefits to Ontario ratepayers equal or exceed the costs?

10

- 11 <u>Cost Incurrence Test</u>
- 12 In assessing the cost incurrence test during E.B.R.O. 493/494, the Board considered if it was a
- 13 new service, an additional level or, if it was adequately provided at current levels.

14

- Union has been receiving these shared services for many years. These are services that Union
- requires. They also replace staffing that Union would otherwise need to provide for or receive in
- some other manner. If Union did not receive services from an affiliate, Union anticipates its
- 18 O&M costs would be higher than what has been forecasted for 2013.

19

20 Union's affiliate service charges satisfy the Board's cost incurrence test.

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#### 1 Cost Allocation Test

- 2 As noted in EB-2005-0520, PwC found Union's affiliate service costing approach to be sound.
- 3 Unions' methodology for costing and verifying SLA fees has not changed since it was last
- 4 reviewed by PwC for Union's 2007 rate case.

5

6 Union's affiliate service charges satisfy the Board's cost allocation test.

7

- 8 Cost/Benefit Test
- 9 In the E.B.R.O 493/494 Decision with Reasons, the Board accepted four categories as the basis
- 10 for assessing quantifiable benefits:
- 1. Replacement costs the services provided replace an equivalent service at equal or lower
- 12 cost.
- 2. Synergistic or linkage benefits the services allow the utility to reduce costs by being
- part of a larger organization and operating in concert for the procurement of products and
- services.
- 3. Revenue enhancement or cost recovery benefits activities provide value to other
- affiliates for which payment in cash or in kind is received.
- 4. Stand alone benefits strategic actions and activities instituted by the affiliate that
- 19 produce direct benefits to the utility.

20

- Each of the services Union provides to, or receives from, an affiliate fall into one or more of the
- categories identified above. In addition, the shared services approach benefits ratepayers by
- 23 approximately \$2.5 million annually as a result of Union billing affiliates for fixed indirect costs.

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- 1 The services received by Union provide Union with the business knowledge, expertise and
- 2 capacity to provide and charge for outbound services. For example, common processes, policies
- 3 and business platforms which are supported with centralized business leadership/governance
- 4 allow Union to provide services to affiliates.

5

6 Union submits the affiliate service charges satisfy the Board's cost/benefit test.

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# <u>Union Gas Limited</u> Net Affiliate Revenue (Expense) (\$000's)

| Line<br>No. | Functional Service        | 2010<br>Actual | 2011<br>Outlook | 2012<br>Forecast | 2013<br>Forecast |
|-------------|---------------------------|----------------|-----------------|------------------|------------------|
|             |                           | (a)            | (b)             | (c)              | (d)              |
| 1           | Audit                     | (501)          | 0               | 0                | 0                |
| 2           | Bus Devel, S&T            | 69             | 498             | 499              | 522              |
| 3           | Corp Services             | (42)           | (42)            | (43)             | (44)             |
| 4           | Engineering & Contruction | 664            | 176             | 191              | 49               |
| 5           | EHS                       | 167            | (285)           | (264)            | (276)            |
| 6           | Ethics                    | (188)          | (220)           | (220)            | (230)            |
| 7           | Finance                   | (156)          | (136)           | 695              | 665              |
| 8           | Gov Relations             | 0              | 450             | 671              | 701              |
| 9           | HR                        | (107)          | 339             | 467              | 173              |
| 10          | Insurance                 | 23             | 54              | 50               | 45               |
| 11          | IT                        | 921            | 2,113           | 2,530            | 2,610            |
| 12          | Legal                     | (120)          | (122)           | (137)            | (143)            |
| 13          | Other                     | 38             | (9)             | (9)              | (10)             |
| 14          | Pub Affairs               | (25)           | (4)             | (5)              | (5)              |
| 15          | Supply Chain              | (232)          | (1,216)         | (721)            | (566)            |
| 16          | Tax                       | 583            | 487             | 744              | 774              |
| 17<br>18    | Sub Total                 | 1,095          | 2,083           | 4,448            | 4,263            |
| 19          | Depreciation              | (375)          | (363)           | (2,276)          | (2,444)          |
| 20          | Grand Total               | 720            | 1,720           | 2,172            | 1,819            |
| 21          |                           |                |                 |                  |                  |
| 22          | OH Capitalization         | (1,671)        | (1,446)         | (1,578)          | (1,576)          |
| 23<br>24    | Unregulated Allocation    | 38             | 184             | 196              | 195              |
| 25          | Net Regulated Revenue     | 2,353          | 2,982           | 3,554            | 3,200            |

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# Union Gas Limited Affiliate Revenue (\$000's)

| Line |                           | 2010   | 2011    | 2012     | 2013     |
|------|---------------------------|--------|---------|----------|----------|
| No.  | Functional Service        | Actual | Outlook | Forecast | Forecast |
|      |                           | (a)    | (b)     | (c)      | (d)      |
| 1    | Audit                     | 206    | -       | -        | -        |
| 2    | Bus Devel, S&T            | 377    | 695     | 696      | 728      |
| 3    | Corp Services             | 36     | -       | -        | -        |
| 4    | Engineering & Contruction | 1,177  | 594     | 608      | 485      |
| 5    | EHS                       | 705    | 766     | 786      | 821      |
| 6    | Ethics                    | -      | -       | -        | -        |
| 7    | Finance                   | 1,046  | 1,095   | 1,926    | 1,951    |
| 8    | Gov Relations             |        | 450     | 671      | 701      |
| 9    | HR                        | 2,174  | 2,404   | 2,679    | 2,480    |
| 10   | Insurance                 | 116    | 150     | 150      | 150      |
| 11   | IT                        | 2,906  | 3,773   | 4,185    | 4,339    |
| 12   | Legal                     | 9      | 12      | 12       | 13       |
| 13   | Other                     | 38     | 13      | 13       | 14       |
| 14   | Public Affairs            | -      | -       | -        | -        |
| 15   | Supply Chain              | 471    | 540     | 766      | 801      |
| 16   | Tax                       | 921    | 923     | 1,174    | 1,224    |
| 17   | Total                     | 10,182 | 11,414  | 13,667   | 13,706   |
| 18   |                           |        |         |          |          |
| 19   | OH Capitalization         | 3      | -       |          |          |
| 20   | Unregulated Allocation    | 256    | 409     | 492      | 503      |
| 21   |                           |        |         |          |          |
| 22   | Net Regulated Revenue     | 9,924  | 11,005  | 13,176   | 13,204   |

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#### <u>Union Gas Limited</u> Affiliate Expenses (\$000's)

| Line |                           |             | 2011    | 2012     | 2013     |
|------|---------------------------|-------------|---------|----------|----------|
| No.  | Functional Service        | 2010 Actual | Outlook | Forecast | Forecast |
|      |                           | (a)         | (b)     | (c)      | (d)      |
| 1    | Audit                     | 708         | -       | -        | -        |
| 2    | Bus Devel, S&T            | 308         | 197     | 197      | 206      |
| 3    | Corp Services             | 77          | 42      | 43       | 44       |
| 4    | Engineering & Contruction | 513         | 417     | 418      | 437      |
| 5    | EHS                       | 538         | 1,051   | 1,050    | 1,097    |
| 6    | Ethics                    | 188         | 220     | 220      | 230      |
| 7    | Finance                   | 1,202       | 1,231   | 1,231    | 1,286    |
| 8    | Gov Relations             |             | -       | -        | -        |
| 9    | HR                        | 2,281       | 2,065   | 2,212    | 2,307    |
| 10   | Insurance                 | 92          | 96      | 100      | 105      |
| 11   | IT                        | 1,985       | 1,660   | 1,655    | 1,729    |
| 12   | Legal                     | 129         | 134     | 150      | 157      |
| 13   | Other                     | -           | 22      | 22       | 23       |
| 14   | Pub Affairs               | 25          | 4       | 5        | 5        |
| 15   | Supply Chain              | 703         | 1,756   | 1,487    | 1,367    |
| 16   | Tax                       | 338         | 436     | 431      | 450      |
| 17   | Sub Total                 | 9,087       | 9,330   | 9,219    | 9,443    |
| 18   |                           |             |         |          | _        |
| 19   | Depreciation              | 375         | 363     | 2,276    | 2,444    |
| 20   | Total                     | 9,462       | 9,693   | 11,495   | 11,887   |
| 21   |                           |             |         |          |          |
| 22   | OH Capitalization         | 1,674       | 1,446   | 1,578    | 1,576    |
| 23   | Unregulated Allocation    | 218         | 225     | 296      | 307      |
| 24   |                           |             |         |          |          |
| 25   | Net Regulated Expense     | 7,570       | 8,023   | 9,622    | 10,004   |



# **Union Gas** *Benchmark Analysis Report*

August 18, 2011

**ADVISORY** 

Filed: 2011-11-10 EB-2011-0210 Exhibit D1 Tab 7 Appendix A

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## **Executive Summary (1/2)**

#### Introduction

Union Gas ("Union") has engaged KPMG to benchmark the net cost of the following 4 corporate support functions:

- Finance
- Information Technology (IT)
- Human Resources (HR)
- Environmental Health & Safety (EHS)

#### **Approach**

The approach involved mapping Company metrics to standard benchmarking database nomenclature and available benchmarks. The potential metrics were selected based on developing an understanding of Union's activities within the 4 functions. We utilized or collected metrics from respondents within the Utility industry, with similar revenue range (> \$1 billion), and similar region (North America) using three sources: APQC benchmarks to compare the Finance and HR support functions, APQC and Gartner to compare the IT support function and primary benchmarking interviews for Environmental Health & Safety (EHS). Where benchmarks were available, we primarily compared cost metrics rather than process efficiency metrics as it was considered more relevant to the scope of this engagement. We compared Union to the 25th percentile, the median, and the 75th percentile of respondents (where applicable).

A Primary Benchmarking approach was used for EHS, as suitable benchmarks were not available in standard databases. This involved engaging a short list of 12 comparable Utilities in North America. Six respondents (including Union Gas) participated in this initiative.

## **Executive Summary (2/2)**

#### **Benchmarking Performance summary**

**Finance** – Benchmark comparisons indicate that Union has a lower total cost of the finance function as per \$1,000 revenue than the majority of the Utility respondents.

IT – Benchmark comparisons indicate that Union's IT spend as a percentage of total operating expenses is line with the Utility industry. Note: Total cost of IT function as per \$1,000 revenue was not available within industry benchmarks, therefore the most suitable alternative cost benchmark was used from Gartner.

**HR** – Benchmark comparisons indicate that Union has a lower total cost of the HR function as per \$1,000 revenue than the majority of the utilities in the industry. When compared against respondents within a similar revenue range and region, Union is line with the median.

**EHS** –Benchmark comparisons indicate Union's cost of the EHS function per \$1,000 revenue is \$.97 which is ranked lower than the mean of respondents surveyed.

KPMG has included in this report a graphical summary of results for the selected metrics along with commentary and contributing factors (where applicable) under the heading "observations". Contributing factors were gathered through follow-up interviews with representatives (named in the corresponding sections) from the respective functional areas.

The report includes six sections including: an executive summary, an overview of objectives and approach, benchmarking by function highlighting one overall cost metric for each of the four functions plus a supplemental section that includes additional metrics by function. The report also includes an appendix and glossary of terms.

## **Overview - Objectives and Approach**

#### **Objectives**

Union Gas engaged KPMG to evaluate the performance of 4 support functions – IT, Finance, HR, and EHS which will be used to support its rate case that will be presented to the Ontario Energy Board ("OEB") at the end of the 3<sup>rd</sup> quarter of 2011.

#### **Description of approach**

**Benchmark Selection** – The potential metrics were selected based on developing an understanding of Union's functional activities. This included discussions with the project lead and representatives of each support function, the respective mapping to standard benchmarking database nomenclature, and availability of relevant benchmarks.

**Data Collection** – Working with the representatives of each support function, we met to review the potential metrics and discuss the accurate alignment of FTEs based on functional processes as outlined in the benchmarking databases. We then provided a metric survey (excel worksheet) to collect data on 2010 costs, FTEs, and other quantitative data elements. Additionally, we also interviewed select staff from each support function to understand current state operating model and processes (where applicable).

**Data Validation** – Using data workbooks and documentation provided by Union Gas, we reviewed the content given for the purposes of substantiating data inputs to ensure the integrity of benchmarks selected for this engagement.

**Data Analysis** – We compiled industry benchmarks to compare Union against the Utility industry, comparable revenue range (> 1 billion) and regional respondents (North America) across several measures. The benchmark data was analyzed to identify comparative performance.

**Report-** The report is organized with a benchmarking by function main summary showing one key overall cost metric for each of the areas examined plus a supplemental section containing additional benchmarking results and commentary.

# Benchmarking by function

## **Finance**

## **Finance Organization Benchmarking Analysis**

#### **Summary**

Benchmark comparisons indicate that Union is positioned ahead of the majority of utilities in the industry as the Company has a lower total cost of their finance function per \$1,000 revenue. Within the similar revenue range and region, Union is ranked between the 75<sup>th</sup> percentile and the median in comparison with these respondents. Further operational effectiveness metrics are contained in the supplemental section of this report.

#### **Data Sources**

We used APQC to provide the benchmark comparisons for Union's Finance function. The following Union Gas personnel assisted in providing data for the benchmarking survey in relation to Finance:

| Name        | BU/ Department |
|-------------|----------------|
| Dave Hockin | Finance        |

## **Finance Organization Benchmarking Analysis**

#### **Finance Function Processes Reviewed**

The foundation of the APQC's research is the Process Classification Framework (PCF). The PCF organizes operating and management processes into 12 enterprise-level categories, including process groups and more than 1,500 processes and associated activities. Organizations can then discuss an activity and know its exact parameters.

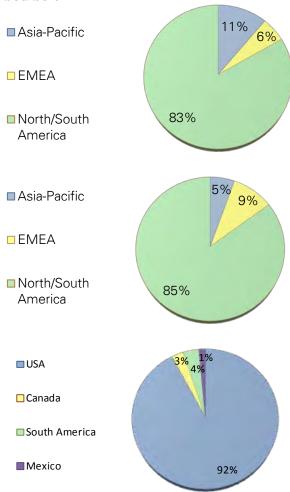
APQC has categorized finance function activities into the following processes:

- Perform planning and management accounting
- Order to invoice
- Manage and process accounts receivables/collections
- Perform general accounting and reporting
- Manage fixed-assets
- Process accounts payable and expense reimbursements
- Manage treasury operations
- Manage internal controls
- Manage taxes

Union has a total of 92.7 finance function FTEs, however not all of the above APQC processes have been included in this analysis or appropriately align with Union's finance function processes. Please refer to the appendix for a breakdown of Union's finance function processes included in this analysis and the number of FTEs allocated to each process.

## **Finance Organization Benchmarking Analysis**

Union's performance was evaluated in relation to APQC metrics for the Utility industry, comparable revenue range and regional respondents as described below:



## **Peer: Industry - Demographics**

Within the peer group, "Industry", 83% of respondents are located in a similar region as Union - however the size of the firms within this region is not known.

## Peer: Revenue Range - Demographics

Within the peer group, "Revenue Range", 85% of respondents are located in the North or South America that fall in the same revenue category as Union - the industry in which these firms operate is not known.

#### Peer: Region - Demographics

Within the peer group, "Region", 95% of respondents are located in the US and Canada - the size and industry of these firms is not known.

## **Finance Organization Benchmarking Analysis**

**Benchmark:** Total cost of the finance function per \$1,000 revenue

**Use:** To evaluate the cost effectiveness of an organization's finance function

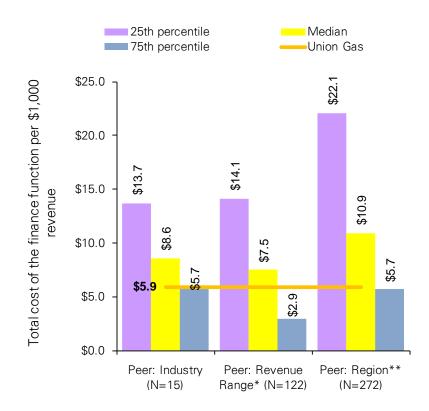
#### **Observations:**

#### For this benchmark:

- Union is ranked between the median and the 75th percentile in comparison to utility industry respondents. Union has a lower total cost of the finance function as per \$1,000 revenue than the majority of the Utility respondents.
- Within the same revenue range and region, Union is ranked between the median and 75<sup>th</sup> percentile in comparison to these respondents.

#### **Cost Effectiveness**

Total cost of the finance function per \$1,000 revenue



Source: APQC and Union Gas

<sup>\*</sup> Revenue Range of >\$1B

<sup>\*\*</sup> North American Region

# Information Technology (IT)

## **IT Benchmarking Analysis**

#### **Summary**

Using Gartner, Union was compared against other utilities in the industry with respect to the metric, measuring a company's IT spend as a percentage of total operating expenses. Due to benchmarking survey limitations, this was the most suitable cost benchmark available for this study. The results demonstrate that Union is reasonable and line with respondents within this space. Additional operational effectiveness metrics are contained in the supplemental section of this report.

#### **Data Sources**

We used Gartner and APQC to provide the benchmark comparisons for Union's IT function. The following Union Gas staff assisted in providing data for the benchmarking survey in relation to IT:

| Name         | BU/ Department |
|--------------|----------------|
| Nancy Penney | IT             |
| Joan Hackett | IT             |

## **IT Benchmarking Analysis**

#### **IT Function Processes Reviewed**

The foundation of the APQC's research is the Process Classification Framework (PCF). The PCF organizes operating and management processes into 12 enterprise-level categories, including process groups and more than 1,500 processes and associated activities. Organizations can then discuss an activity and know its exact parameters.

APQC has categorized IT function activities into the following processes:

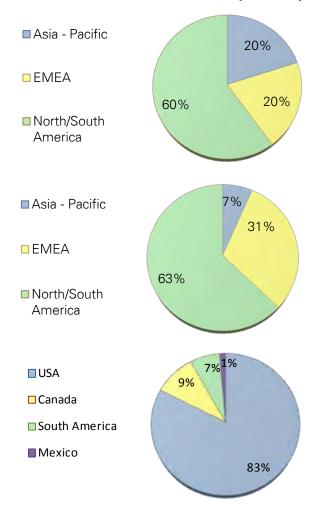
- Manage the business of information technology
- Develop and manage IT customer relationships
- Manage business resiliency and risk
- Manage enterprise information
- Develop and maintain information technology solutions
- Deploy information technology solutions
- Deliver and support information technology services
- Manage IT knowledge

Union has a total of 119.2 IT function FTEs (excluding contractors), however not all of the above APQC processes have been included in this analysis or appropriately align with Union's IT function processes. Please refer to the appendix for a breakdown of Union's IT function processes included in this analysis and the number of FTEs allocated to each process.

## IT Benchmarking Analysis

Where possible, Union's performance was evaluated in relation to the Utility industry, comparable revenue range and regional respondents.

Gartner metrics are related to the Utility industry only while APQC metrics are across each of these groups as described below:



## **Peer: Industry - Demographics**

Within the peer group, "Industry", 60% of the respondents are located in a similar region as Union – however the size of the firms within this region is not known.

## **Peer: Revenue Range - Demographics**

Within the peer group, "Revenue Range", 63% of respondents are located in the North or South America that fall in the same revenue category as Union - the industry in which these firms operate is not known.

## Peer: Region - Demographics

Within the peer group, "Region", 91% of respondents are located in the US and Canada – however the size and industry of these firms is not known.

## **IT Benchmarking Analysis - Gartner Benchmarks**

Benchmark: IT Spend<sup>1</sup> as a % of Operational Expense

Use: To evaluate the cost effectiveness of IT

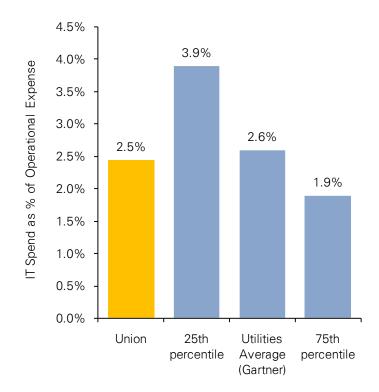
#### **Observations:**

For this benchmark:

- Union ranks slightly above the average of utility industry respondents.
- Using Gartner's 'cash-out' definition for IT spend, Union spent a similar amount on IT as a % of revenue in 2010 compared to other utilities.
- Union's IT department is cost centre focused and typically uses outsourced resources for any projects undertaken in place of adding staff internally.

#### **Cost Effectiveness**

IT Spend<sup>1</sup> as % of Operational Expense



Source: Gartner, Union Gas Gartner surveyed approximately 90 Utilities from across the world. The number of utilities that responded to this specific metric was not provided.

<sup>1</sup>Please refer to Appendix for definition of IT Spend.

# **Human Resources (HR)**

## **HR Benchmarking Analysis**

#### **Summary**

Using APQC, Union was compared against other utilities in the industry with respect to the total cost of their HR function per \$1,000 revenue. Results show, Union is positioned ahead of the majority of Utility respondents as the Company. Within the similar revenue range and region, Union is reasonable and in line with the median when compared with respondents surveyed. Additional operational effectiveness metrics are contained in the supplemental section of this report.

#### **Data Sources**

We used APQC to provide the benchmark comparisons for Union's HR function. The following Union Gas staff assisted in providing data for the benchmarking survey in relation to HR:

| Name            | BU/ Department |
|-----------------|----------------|
| Chuck Conlon    | HR             |
| Bonnie VanBavel | HR             |

## **HR Benchmarking Analysis**

#### **HR Function Processes Reviewed**

The foundation of the APQC's research is the Process Classification Framework (PCF). The PCF organizes operating and management processes into 12 enterprise-level categories, including process groups and more than 1,500 processes and associated activities. Organizations can then discuss an activity and know its exact parameters.

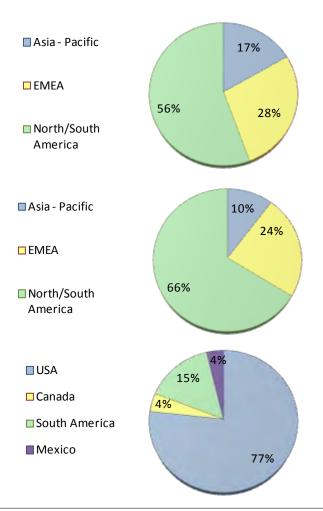
APQC has categorized HR function activities into the following processes:

- Develop and manage human resources (HR) planning, policies, and strategies
- Recruit, source, and select employees
- Reward and retain employees
- Develop and counsel employees
- Redeploy and retire employees
- Manage employee information

Union has a total of 41.4 HR function FTEs, however not all of the above APQC processes appropriately align with Union's HR function processes. Please refer to the appendix for a breakdown of Union's HR function processes included in this analysis and the number of FTEs allocated to each process.

## **HR Benchmarking Analysis**

Union's performance was evaluated in relation to APQC metrics for the Utility industry, comparable revenue range and regional respondents as described below:



## **Peer: Industry - Demographics**

Within the peer group, "Industry", more than half of the respondents are located in a similar region as Union – however the size of the firms within this region is not known.

## Peer: Revenue Range - Demographics

Within the peer group, "Revenue Range", 66% of respondents are located in the North or South America that fall in the same revenue category as Union - the industry in which these firms operate in is not known.

## Peer: Region - Demographics

Within the peer group, "Region", 81% of respondents are located in the US and Canada – however the size and industry of these firms is not known.

## **HR Benchmarking Analysis**

**Benchmark:** Total cost of the HR function per \$1,000 revenue

Use: To evaluate the cost effectiveness of HR

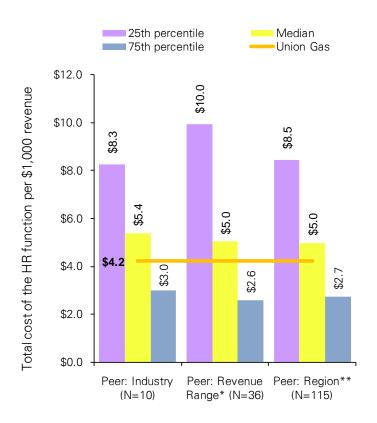
#### **Observations:**

For this benchmark:

 Union Gas is positioned between the median and the 75<sup>th</sup> percentile in the three groups; comparing to utilities in the industry, within same revenue range and region with respect to the cost of HR per \$1,000 revenue.

#### **Cost effectiveness**

Total cost of the HR function per \$1,000 revenue



Source: APQC and Union Gas

\* Revenue Range of >\$1B

\*\* North American Region

# **Environmental Health & Safety** (EHS)

## **EHS Benchmarking Analysis**

#### **Summary**

Using primary benchmarking interviews and questionnaire, Union was compared against 5 other utilities in the industry with respect to the total cost of the EHS function as per \$1,000 revenue, total cost of the EHS function per employee and other qualitative factors (please refer to the Appendix for EHS primary benchmark survey results matrix).

#### **Data Sources**

We used a primary benchmarking assessment to provide both qualitative and quantitative comparisons for Union's EHS function. The following Union Gas staff assisted in providing data for the benchmarking survey in relation to EHS:

| Name       | BU/ Department |
|------------|----------------|
| Paul Greco | EHS            |

#### **EHS Benchmark Assessment Results**

| EHS Benchmark Assessment Results <sup>1</sup>           |           |            |           |            |           |           |  |
|---|-----------|------------|-----------|------------|-----------|-----------|--|
|   | Union Gas | Company 1  | Company 2 | Company 3  | Company 4 | Company 5 |  |
| Benchmark:  1) Cost of EHS Function per \$1,000 Revenue | 1) \$.79  | 1) \$1.25  | 1) \$.36  | 1) \$2.61  | 1) \$2.95 | 1) \$.74  |  |
| 2) Cost of EHS Function per Employee                    | 2) \$595  | 2) \$1,143 | 2) \$509  | 2) \$2,005 | 2) \$944  | 2) \$433  |  |

Benchmark: Total cost of the EHS function per \$1,000 revenue

#### **Observations:**

- Union's cost of the EHS function per \$1,000 revenue is \$.79 which is ranked lower than the mean of respondents surveyed \$1.45.
- Company 5 and Union are in a similar revenue range (\$1-\$2 billion). Union's cost of EHS function relative to revenue is in line with Company 5 above.

Benchmark: Total cost of the EHS function per employee

#### **Observations:**

- Union's cost per EHS employee is \$595. Union's cost is below the mean of \$938 when compared to respondents.
- Company 5 and Union have a similar employee base. Union's cost per EHS employee is slightly higher when compared to Company 5. (note: this excludes environmental component in company 5 which may increase their total EHS cost)

#### **Qualitative Factors:**

#### Observations:

- With respect to a Company's customer strategy, participants surveyed were consistent with a focus on customer, in contrast to Union who is cost focused.
- All respondents including Union have a specific software or system utilized for the EHS function. Of the respondents, 5 out of 6 (including Union) include the cost associated with this software or system as part of their EHS budgets.

# **Supplemental Benchmarks**

IT Finance HR

## **Finance Organization Benchmarking Analysis**

**Benchmark:** Number of finance function FTEs per \$1 billion revenue

**Use:** To evaluate the process efficiency of the finance function

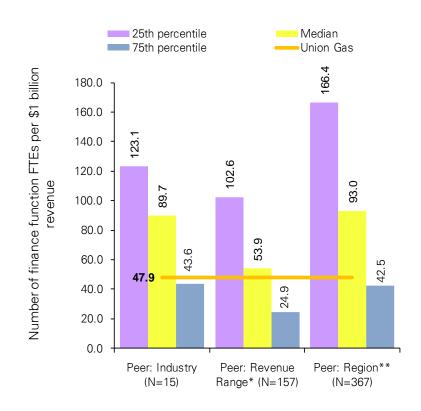
#### **Observations:**

#### For this benchmark:

 Union is ranked between the median and the 75th percentile in comparison to utility industry respondents and to similar respondents in the Company's region and revenue range.

#### **Process Efficiency**

#### Number of finance function FTEs per \$1 billion revenue



Source: APQC and Union Gas
\* Revenue Range of >\$1B

\*\* North American Region

### **Finance Organization Benchmarking Analysis**

**Benchmark:** Total cost of the finance function per finance function FTE

**Use:** To evaluate the cost effectiveness of an organization's finance function

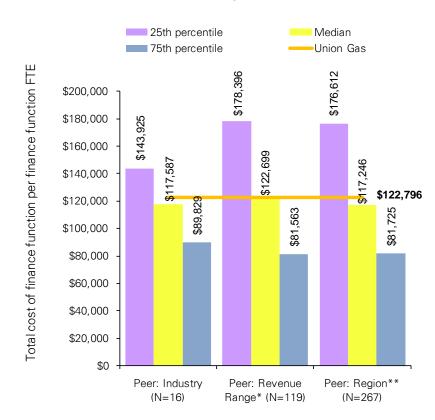
#### **Observations:**

#### For this benchmark:

- Union is ranked between the 25th percentile and the median in comparison to utilities in the industry.
   Union's has a cost of the finance function of \$123K per finance function FTE compared to other utility respondents, median value of \$118K.
- Union is in line, and between the 25th percentile and median in comparison to other respondents in the same revenue range and region, respectively.
- Union offers two service lines, Distribution and Wholesale. As a result, given the structure of the Company it does require a degree of specialization within the finance function. This enables the finance function to accommodate the different requirements of each service line.

#### Cost effectiveness

#### Total cost of the finance function per finance function FTE



Source: APQC and Union Gas

<sup>\*</sup> Revenue Range of >\$1B

<sup>\*\*</sup> North American Region

### **Finance Organization Benchmarking Analysis**

**Benchmark:** Number of FTEs for the process group "manage treasury operations" per \$1 billion revenue

**Use:** To evaluate the process efficiency of the treasury function

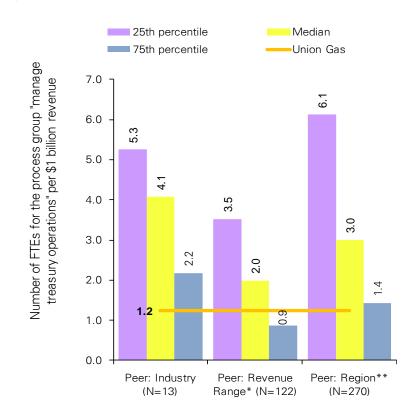
#### **Observations:**

For this benchmark:

- Union is ranked above the 75th percentile in comparison to other utilities in the industry and to similar respondents in the Company's region.
- Within the same revenue range, Union Gas is .2 lower the 75th percentile and notably higher than the median.
- Union's Treasury operations performs two main activities, cash management (i.e. oversight of funds) and efforts associated with lenders.

#### **Process Efficiency**

Number of FTEs for the process group "manage treasury operations" per \$1 billion revenue



### **Finance Organization Benchmarking Analysis**

**Benchmark:** Percentage of finance function FTEs allocated to the process group "manage treasury operations"

**Use:** To evaluate the size of the treasury function relative to the finance function

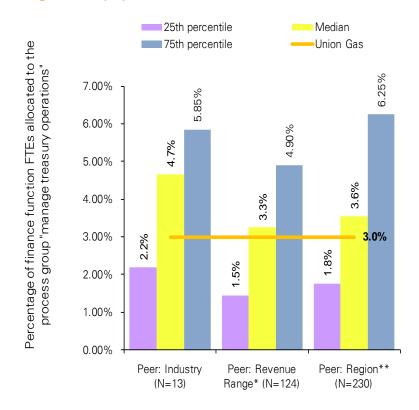
#### **Observations:**

For this benchmark:

- Union is ranked between the 25th percentile and the median in contrast to utilities in the industry and to respondents within a similar revenue range and region.
- Union appears to have a low percentage of FTEs allocated to the process group "manage treasury operations" relative to the total number of finance function FTEs in comparison to utility respondents.

#### **Supplemental Information**

Percentage of finance function FTEs allocated to the process group "manage treasury operations"



## **IT Benchmarking Analysis**

**Benchmark:** Percentage of total IT FTEs that are external service providers

Use: To evaluate the organizational effectiveness of IT

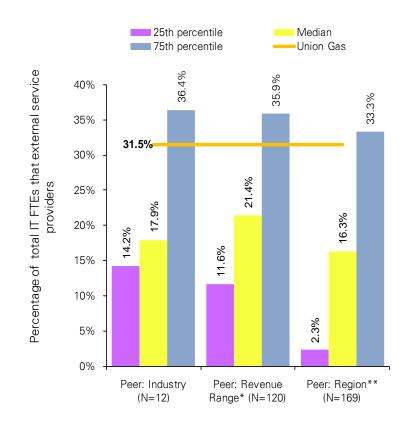
#### **Observations:**

For this benchmark:

- Union is ranked between the median and the 75<sup>th</sup> percentile in comparison to utilities in the industry, regional and similar revenue range respondents.
- Contractors are used to compliment Union's internal staff depending on varying workloads throughout the year and the relative size of IT projects initiated. Union engages in 3-4 major projects (i.e. change initiatives) and generally 30-40 smaller projects (i.e. system application projects) per year.

#### **Organizational Effectiveness**

**Percentage of total IT FTEs that are external service providers** 



## **IT Benchmarking Analysis**

**Benchmark:** Number of IT customers serviced per IT FTE

Use: To evaluate the staff productivity of IT

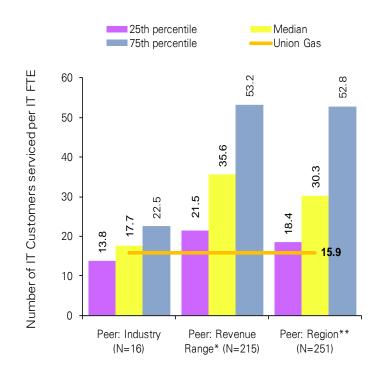
#### **Observations:**

For this benchmark:

- Union's IT resources serve approximately 1.8 fewer IT customers per FTE than the utility industry median.
- Within the same revenue range and region,
   Union is ranked lower than the 25th percentile in contrast to these respondents.
- Union's IT department staff service Union's two business lines; Distribution and Wholesale.
   Therefore, IT personnel may handle a variety of queries and IT development requiring a depth and breadth of knowledge and effort.

#### **Staff Productivity**

Number of IT customers serviced per IT FTE



Source: APQC and Union Gas

<sup>\*</sup> Revenue Range of >\$1B

<sup>\*\*</sup> North American Region

## **IT Benchmarking Analysis**

Benchmark: Total IT cost per FTE

Use: To evaluate the cost effectiveness of IT

#### **Observations:**

For this benchmark, Union is ranked:

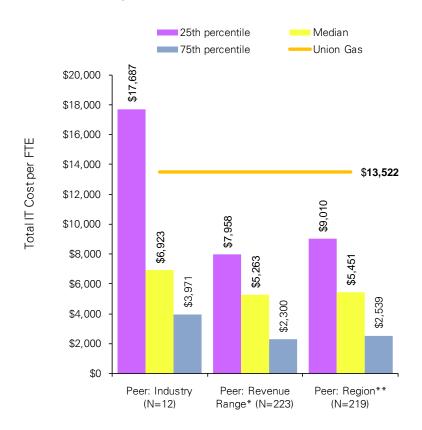
- Between the 25th percentile and the median in comparison to utility industry respondents.
- Within the same revenue range and region, Union is ranked lower than the 25th percentile in comparison to these respondents.

Contributing factors to the higher IT cost per FTE:

- Union offers two different business lines (Distribution and Wholesale services). This structure leads to duplication of IT systems (CIS and billing systems). These systems are managed by IT personnel, hence, it requires additional resources necessary to manage these systems.
- Historically, Union has not purchased standardized applications as a means to update. It has maintained a practice of customizing applications on their legacy systems which often requires a high degree of development and coding effort.

#### **Cost Effectiveness**

#### **Total IT cost per FTE**



Source: APQC and Union Gas

<sup>\*</sup> Revenue Range of >\$1B

<sup>\*\*</sup> North American Region

## **HR Benchmarking Analysis**

**Benchmark:** Total personnel cost<sup>1</sup> of the HR function per employee

**Use:** Compare personnel cost efficiency of the HR function

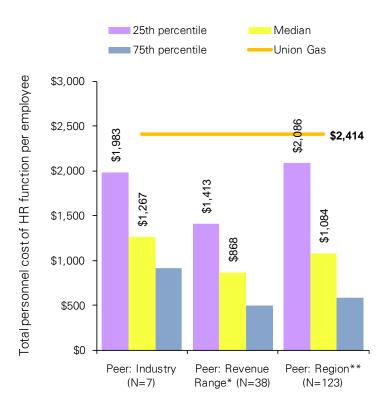
#### **Observations:**

For this benchmark:

- Union Gas is ranked below the 25<sup>th</sup> percentile in comparison to utilities in the industry.
- Within the same revenue range and region, Union's personnel cost of the HR function per employee is higher than the median by \$1,761 and \$1,545, respectively.
- Union's HR department services two business lines; Distribution and Wholesale with geographic dispersion across Ontario. Therefore, additional staff is be required to service diverse needs and customize programs.
- Union's HR group is comprised of an experienced and long standing service team that is remunerated accordingly, which may lead to higher personnel costs. The benefit from this experience has been deemed by Union as valuable to the business and HR function.

#### **Cost effectiveness**

#### Total personnel cost<sup>1</sup> of the HR function per employee



## **HR Benchmarking Analysis**

**Benchmark:** Total HR cost per business entity FTE (excludes benefit program costs)

Use: Compare the cost efficiency of the HR function

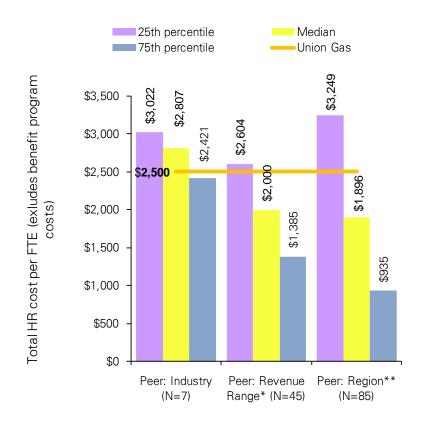
#### **Observations:**

For this benchmark:

- Union Gas is ranked between the 75th percentile and the median in comparison to utilities in the industry.
   Union is lower than median respondents by a cost of \$307 per FTE.
- Within the same revenue range and region, Union is positioned between the 25th percentile and median in comparison to these respondents.

#### **Cost effectiveness**

#### **Total HR cost per business entity FTE**



## **HR Benchmarking Analysis**

**Benchmark:** Total personnel cost<sup>1</sup> of the HR function per \$1,000 revenue

Use: To evaluate the cost effectiveness of HR

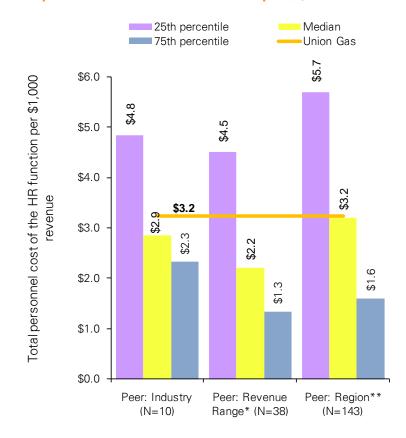
#### **Observations:**

For this benchmark:

- Union Gas is ranked between the 25<sup>th</sup> percentile and the median in comparison to utilities in the industry. Union's HR personnel cost per \$1,000 revenue is greater than the median by a nominal amount of \$.3.
- Within the same revenue range and region, Union is below the median and is in line with the median, respectively, in comparison to these respondents.

#### Cost effectiveness

#### Total personnel cost<sup>1</sup> of the HR function per \$1,000 revenue



# Appendix

## Appendix-Union Gas Benchmark Analysis

## **Benchmarking – Key Inputs**

### **Support Function Data**

#### **FTEs**

• Total Union Gas FTEs: 2,587

(includes overtime hours)

• Total Union Gas Employees: 2,375

• IT Users: 2,767

(each staff member is considered an IT User)

#### **APQC Data Inputs: HR FTEs**

| Human Resource Process Group  | FTE  |
|---|------|
| Create and manage human resources (HR) planning, policies, and strategies | 6.6  |
| Recruit, source, and select employees                                     | 5.5  |
| Develop and counsel employees   | 5.5  |
| Reward and retain employees   | 18.6 |
| Re-deploy and retire employees  | 0.7  |
| Manage employee information   | 4.5  |
| Total HR function FTEs  | 41.4 |

#### **APQC Data Inputs: Finance FTEs**

| Finance Process Group  | FTE  |
|--|------|
| Manage policies and procedures   | 52   |
| Perform general accounting   | 35   |
| Manage treasury operations (Process Group)   | 2.4  |
| Operate controls and monitor compliance with internal controls policies and procedures | 3.3  |
| Total Finance function FTEs  | 92.7 |

## Appendix-Union Gas Benchmark Analysis

## Benchmarking – Key Inputs (2)

#### **APQC Data Inputs: IT FTEs**

|  |           | Contractor | External         |
|--|-----------|------------|------------------|
| Component Description                            | FTE Count | Count      | Contractor Count |
| IS   | 85.20     | 14.9       |                  |
| ITI  | 42.33     | 4.33       | 34.83            |
| Tech Services                                    | 9.00      |            |                  |
| SAP Services                                     | 8.50      | 0.5        | 0.06             |
| SAP Services - Affiliate                         | -2.00     |            |                  |
| Vertex Technical Services                        |           |            | 0.25             |
| IS Management Group-Houston                      | 1.30      |            |                  |
| A139-Support Email, Filenet, EPASS, Supply Chain | 0.40      |            |                  |
| GT51-Support of HR Systems                       | 0.80      |            |                  |
| A140-IT Security                                 | 2.30      |            |                  |
| GT50-Support Treasury, Finance, Tax              | 0.40      |            |                  |
| ITI West - Security - with Direct Loads          | 0.30      |            |                  |
| ITI West - Bus Mgmt - with Direct Loads          | 1.40      |            |                  |
| ITI Mgmt   | -1.63     |            |                  |
| Web Wintel                                       | -3.40     |            |                  |
| Unix, Data Mgmt, Sys Mgmt, P&C                   | -9.31     |            |                  |
| Security - Control Systems                       | -0.98     |            |                  |
| Security - Admin                                 | -1.85     |            |                  |
| CTS, Desktop Delievery, AD/Exchange              | -1.92     |            |                  |
| Telecom - Data, Voice, Radio, Firewall           | -6.89     |            |                  |
| Business Management                              | -3.19     |            |                  |
| IT Governance                                    | -0.38     |            |                  |
| HR Sustainment                                   | -1.00     |            |                  |
| HR Database Support                              | -0.11     |            |                  |
| FACSYS Support                                   | -0.02     |            |                  |
| Total IT Net Costs                               | 119.24    | 19.73      | 35.14            |

| EHS Benchmark As                            | EHS Benchmark Assessment Results |  |  |   |  |  |
|---|----------------------------------|--|--|---|--|--|
|   | Union Gas                        | Company 1                              | Company 2                                    | Company 3   | Company 4  | Company 5  |
| Coverage                                    | North America                    | United States                          | <ul><li>North America</li><li>EMEA</li></ul> | <ul><li>North America</li><li>South America</li></ul> | North America  | North America                                      |
| Net Sales (\$B)                             | • \$1.9B                         | • \$3.2B                               | • \$9.2B (NA)                                | • \$14.2B   | • \$576M   | • \$1.2B   |
| Customer Strategy                           | Cost Leadership                  | Customer Focus                         | Customer Focus                               | Customer Focus  | Combination -     Customer focus     &     Product/Service     Differentiation | Customer     Focus                                 |
| Employee Base<br>(Dependant<br>Contractors) | • 2,587                          | • 3,500 (500)                          | • 6,482 (323)                                | • 18,656 (9,067)                                      | 2,000 (seasonal - not significant)   | • 2,000  |
| EHS Department<br>Structure                 | Corporate department             | Corporate department/ Field department | Corporate<br>department/<br>Field department | Corporate<br>department/<br>Field department          | Corporate<br>department/<br>Field department                                   | Corporate     department/     Field     department |

|                | Union Gas   | Company 1  | Company 2  | Company 3   | Company 4  | Company 5   |
|----------------|---|--|--|---|--|---|
| EHS Activities | <ul> <li>Developing<br/>Standards &amp;<br/>Guidelines</li> <li>Providing<br/>Oversight<br/>(adherence to<br/>standards and<br/>reporting)</li> <li>Initiatives and<br/>Projects</li> </ul> | <ul> <li>Developing<br/>Standards,<br/>Guidelines &amp;<br/>Methodologies</li> <li>Providing<br/>Oversight</li> <li>Issuance of<br/>Statistics &amp;<br/>Tracking Trends</li> <li>Facilitating &amp;<br/>Monitoring<br/>Company<br/>Initiatives</li> </ul> | <ul> <li>Provide Strategic Direction &amp; Manage Local Practitioners</li> <li>Developing Standards &amp; Guidelines</li> <li>Manage Company- wide Initiatives &amp; Applications</li> <li>Monitor &amp; Report KPIs</li> <li>Conduct Investigations &amp; Audits</li> </ul> | <ul> <li>Corporate EHS Services</li> <li>DEI</li> <li>Scientific Services</li> <li>Nuclear Development &amp; Support</li> <li>Business Planning/Project Management</li> <li>Systems &amp; Reporting</li> <li>Corporate Support/ EHS Audits</li> <li>EHS Field Support</li> <li>Environmental Subject Matter Expert (SME)</li> <li>Meteorology</li> <li>H&amp;S SME</li> </ul> | <ul> <li>Developing<br/>Standards &amp;<br/>Guidelines</li> <li>Providing<br/>Oversight</li> <li>Hazard<br/>Assessments</li> <li>EHS Audits</li> <li>Health and<br/>Safety Advisors         <ul> <li>(internal<br/>consulting role)</li> </ul> </li> <li>Operating Staff -<br/>- Accountable for<br/>Performance<br/>(both positive<br/>and negative<br/>performance)</li> </ul> | <ul> <li>Developing<br/>Standards &amp;<br/>Guidelines</li> <li>Providing<br/>Oversight</li> <li>EHS Audits</li> <li>Provide Safety<br/>Management<br/>Training</li> <li>Liaison with<br/>Regulators</li> <li>Health &amp;<br/>Wellness<br/>Program</li> <li>Public<br/>Interaction (i.e.<br/>with unions)</li> </ul> |

| EHS Bench                      | EHS Benchmark Assessment Results  |   |   |  |  |  |
|--------------------------------|---|---|---|--|--|--|
|                                | Union Gas   | Company 1   | Company 2   | Company 3  | Company 4  | Company 5  |
| EHS Cost<br>Allocation         | <ul> <li>Total cost<br/>\$1.54M allocated:</li> <li>Staff &amp; Expenses<br/>- \$539K</li> <li>EHS Services<br/>Labour Allocation<br/>- \$356K</li> <li>EHS Audits &amp;<br/>Consulting -<br/>\$156K</li> <li>EPASSLabour,<br/>Software, Temp<br/>Staff - \$489K</li> </ul> | <ul> <li>Total cost         <ul> <li>\$4M</li> </ul> </li> <li>Costs         <ul> <li>allocated</li> <li>evenly</li> <li>across 4</li> <li>regions</li> <li>not by</li> <li>activity</li> </ul> </li> </ul> | <ul> <li>Total cost – \$3.3M</li> <li>Including Salary &amp; Benefits – \$2.5M</li> </ul>   | <ul> <li>Total cost \$37.4M</li> <li>Scientific Services \$7.5M</li> <li>Nuclear Support \$500K</li> <li>Business Planning/Project Management\$700K</li> <li>Systems, Reporting &amp; DEI \$13M</li> <li>EHS Support/Data Analysis/ Audits \$3.6M</li> <li>Environmental Subject Matter Expert \$8M</li> <li>H&amp;S SME \$3.2M</li> <li>Miscellaneous \$2M</li> </ul> | <ul> <li>Total cost<br/>\$1.7M allocated<br/>below:</li> <li>Staff Regulatory<br/>\$700K</li> <li>Support/Hygienis<br/>t \$300K</li> <li>Audits/Consulting<br/>Costs &amp; Special<br/>Projects \$675K</li> </ul>    | <ul> <li>Total cost \$870</li> <li>Program     Development &amp;     Training - \$261K</li> <li>Audits - \$174K</li> <li>Developing     Guidelines &amp;     Standard s-     \$174K</li> <li>Investigate &amp;     Reporting -     \$174K</li> <li>Public Education     &amp; Contractor     Database - \$87K</li> </ul> |
| EHS<br>Resource<br>Allocation: | <ul> <li>Total 6 EHS staff who are evenly allocated to activities below:</li> <li>Developing Standards &amp; Guidelines</li> <li>Providing Oversight</li> <li>Initiatives and Projects</li> </ul>   | <ul> <li>Total – 14<br/>EHS staff<br/>allocated<br/>as follows:</li> <li>Environme<br/>ntal – 5</li> <li>Safety – 7</li> </ul>  | <ul> <li>Total – 12 EHS staff:</li> <li>Strategic Direction &amp; Manage local field staff– 3</li> <li>Developing Standards &amp; Guidelines – 1</li> <li>Manage Initiatives &amp; Applications –7</li> <li>EHS Audits – 1</li> <li>Monitor/Report KPIs (embedded)</li> </ul> | <ul> <li>Total EHS Staff- 202</li> <li>Scientific Services - 60</li> <li>Nuclear Support - 3</li> <li>Business Planning/Project Management - 3</li> <li>Systems, Reporting &amp; DEI -59</li> <li>Support/ EHS Audits - 10</li> <li>Environmental Subject Matter Expert (SME) - 47</li> <li>H&amp;S SME- 20</li> </ul>   | <ul> <li>Total – 7 EHS staff:</li> <li>Regulatory (permits/approval s) – 3</li> <li>Industrial Hygienist –1</li> <li>Support Field Group/Develop Standards &amp; Oversight) – 2</li> <li>EHS Director – 1</li> </ul> | <ul> <li>6 EHS staff:</li> <li>Program Development &amp; Training – 30%</li> <li>Audits – 20%</li> <li>Developing Guidelines – 20%</li> <li>Investigate &amp; Reporting – 20%</li> <li>Public Education &amp; Contractor Database – 10%</li> </ul>   |

| EHS Benchmark  | Assessment Resu  | lts  |  |  |   |  |
|--|--|--|--|--|---|--|
|  | Union Gas  | Company 1  | Company 2  | Company 3  | Company 4   | Company 5                                    |
| EHS Support<br>Software                              | <ul> <li>EHS         system/software         utilized is         charged to EHS         function</li> <li>Total cost \$1.5M         in capital/year         and \$455K         O&amp;M/year</li> </ul> | <ul> <li>SAP and<br/>SharePoint</li> <li>Costs<br/>allocated to<br/>overall firm<br/>budget</li> </ul> | <ul> <li>Analytix HSE (tracks incidents &amp; injury)</li> <li>CyberRegs (Search &amp; Monitor Regulations)</li> <li>Enablon (Carbon footprint tracking)</li> <li>CMO Compliance (record keeping &amp; auditing protocols)</li> <li>\$130K/yr included in EHS budget (\$100K included in IS capital budget)</li> </ul> | <ul> <li>eTrac</li> <li>Total EHS Cost<br/>of Annual<br/>license = \$460K</li> </ul> | <ul> <li>Subscription to<br/>software<br/>contractor<br/>management<br/>and incident<br/>management</li> <li>Total EHS Cost<br/>= \$40K/year</li> </ul> | Spot (provides online tracking of incidents) |
| Key Metrics:   |  |  |  |  |   |  |
| 1) Cost of EHS<br>Function per<br>\$1,000<br>Revenue | 1) \$.79   | 1) \$1.25  | 1) \$.36   | 1) \$2.61  | 1) \$2.95   | 1) \$.74                                     |
| 2) Cost of EHS<br>Function per<br>Employee           | 2) \$595   | 2) \$1,143   | 2) \$509   | 2) \$2,005   | 2) \$944  | 2) \$433                                     |

## **Benchmarking – Glossary of Terms**

**Full-time Equivalent (FTE)** - To calculate the number of full-time equivalents employed during the year for each respective process or activity, you must prorate the number of employees and the hours spent performing each process/activity. Assume that a full-time worker represents 40 hours per week. Provide the average number of full-time equivalents employed during the year for each respective process. Include full-time employees, part-time employees, and temporary workers hired during peak demand periods. Allocate only the portion of the employee's time that relates to or supports the activities identified for an applicable process. Prorate management and secretarial time by estimating the level of effort in support of each activity, by process.

**Full-time Employee -** For the purpose of this survey, a regular full-time employee is hired for an indefinite period of time and is normally scheduled to work forty hours per week.

Appointment is continuous, subject to satisfactory performance and availability of funding.

**Personnel Costs -** Personnel cost is the cost associated with personnel compensation and fringe benefits of employees (i.e., those classified as FTEs which includes both full-time and salaried/hourly employees e.g. part-time, contractors) contributing to each respective process. Personnel cost should include all of the following costs.

Employee Compensation: Includes salaries and wages, bonuses, overtime and benefits.

Fringe: Includes contributions made towards the employees' government retirement fund, workers compensation, insurance plans, savings plans, pension funds/retirement plans, and stock purchase plans. This should also include special allowances, such as relocation expenses and car allowances.

**IT Spend** - Gartner defines IT Spend as the 'cash out of the business' amount related to IT. Therefore, capital costs are included and depreciation is not. APQC defines IT Spend as the 'operating expense' of IT. In this case, capital costs are not included and depreciation is included.

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1 PREFILED EVIDENCE OF 2 TANYA BELL, PUBLIC AFFAIRS COMMUNITY INVESTMENT SPECIALIST 3 TOM ARNOLD, DIRECTOR COMMUNICATIONS AND COMMUNITY 4 **INVESTMENT** 5 6 The purpose of this evidence is to provide an overview of Union's community investments and 7 its proposal to recover the costs associated with these investments. 8 9 Union has a longstanding commitment of investing in the communities in which it serves. 10 Currently, Union delivers natural gas services to over 1.3 million homes and businesses in over 11 400 communities in Ontario. These types of investments are an effective tool to help position 12 Union as a "Partner of Choice" (defined in following section) within these communities, build 13 awareness about Union with its customers and, foster relationships with key stakeholders such as 14 municipal, provincial and Aboriginal leaders across its franchise. 15 16 Union is seeking approval to recover \$0.374 million in investment costs in 2013. Union 17 maintains that its community investments are highly valued and represent a legitimate, necessary 18 cost of doing business. With respect to rate recovery, since the primary intent of these 19 investments is to benefit the community and ultimately the ratepayer, Union believes it's 20 appropriate that these costs be passed on to the ratepayer. The forecast expense is consistent with 21 historical investment levels

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#### **Partner of Choice**

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2 A strong presence in the community helps Union promote its reputation and increase its overall 3 brand awareness. Community investments not only raise Union's profile, they also serve to 4 enhance its reputation as a respected and valued corporate citizen, such as its varied 5 environmental and education investments. Union's community presence is especially important 6 at a time when its significant infrastructure program is underway. For example, an effective 7 community investment strategy can help mitigate the risk of opposition to specific projects (i.e. 8 pipeline expansions). This can lead to the completion of a project in a timely and most cost 9 effective manner which is a win/win for the Company and the ratepayer. This ongoing 10 commitment to the community helps position Union as a "Partner of Choice". 11 12 Investments in the community provide tangible and verifiable benefits to Union's ratepayers and 13 the communities in which they live and work. Not only do they help enhance a community's 14 overall economic health, but a strong presence in the community can also help Union's ability to 15 influence customer behavior. This is especially relevant in areas of safety and smart energy-use. 16 In addition, any benefits Union realizes through these types of investments will contribute to its 17 ability to manage the risks and costs associated with its distribution, transmission and storage 18 business. This is aligned with Union's corporate mission of providing services in a safe, reliable 19 and, ultimately, cost effective manner. 20

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#### **Investment Strategy**

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- 2 In a typical year, Union receives numerous community investment requests. However, Union's
- 3 investment strategy targets only those agencies that provide sustainable benefits to communities
- 4 across its franchise territory. Union's investments typically focus on areas pertaining to safety,
- 5 workforce development and education, environmental education, conservation and research as
- 6 well as targeted arts/culture giving. When assessing the various community investment requests,
- 7 Union considers the following criteria:
- 8 Relevance
- Principles and Strategic Objectives
- Reputation and Brand Recognition
- Accountability and Measurement
- Volunteerism and Employee Development

In 2011, examples of Union's community investments include funding a partnership with the

- 15 Chatham-Kent Children's Safety Village. The village plays an important role in helping to
- reduce injuries by teaching children personal responsibility and awareness regarding safety.
- 17 Through their programs, children learn to identify risks and are given the opportunity to practice
- behaviours in a safe environment that can reduce or eliminate those risks and prevent injury.
- 19 Union also provided \$10,000 to a research project, led by the University's Waterloo Institute for
- 20 Sustainable Energy (WISE). This research project focuses on the idea of using advanced
- 21 information technology to create a fully integrated "smart energy network", one that includes

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- 1 natural gas, renewables and, in the future, would incorporate new fuels such as hydrogen.
- 2 All decisions at Union related to community investments are, and will continue to be, consistent
- 3 with its corporate values, code of business ethics and the guiding principles listed below:

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- Align with the Company's focus areas of Community Vitality (Safety, Environment,
   Arts & Culture, Health & Human Services), Education & Workforce Development, as
   well as business objectives, employee interests and community needs;
  - Provide long-term benefits to the communities where Union does business;
  - Build capacity, not dependency, for both Union and its beneficiaries;
  - Encourage participative partnerships in which Union donates its talents and capabilities as well as monetary assistance;
  - Be based on real community needs, and reflect the cultural, social and economic profile of communities where Union does business; and,
  - Ensure that both the beneficiaries and Union understand the benefits that will arise both prior to the investment and during an accountability process after a specified period of time.

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| 1  | PREFILED EVIDENCE OF  |
|----|---|
| 2  | BILL FAY, MANAGER, UNDERGROUND STORAGE  |
| 3  | CAROL CAMERON, MANAGER, CAPACTIY MANAGEMENT & UTILIZATION   |
| 4  |   |
| 5  | The purpose of this evidence is to update the integrity space requirement included in Union's     |
| 6  | delivery rates. This evidence will discuss:   |
| 7  | 1/ Rationale for System Integrity   |
| 8  | 2/ Historical System Integrity in Rates   |
| 9  | 3/ Proposed System Integrity Space for 2013   |
| 10 |   |
| 11 | 1/ RATIONALE FOR SYSTEM INTEGRITY   |
| 12 | As an integrated storage and transmission system operator Union requires system integrity space   |
| 13 | to support the integrity of the system as a whole and provide the provision of service to all     |
| 14 | customers. It provides reserve capacity and allows for the operational balancing necessary to     |
| 15 | manage all of the services Union offers and ensures the integrity of Union's storage,             |
| 16 | transmission and distribution systems.  |
| 17 |   |
| 18 | 2/ HISTORICAL SYSTEM INTEGRITY IN RATES   |
| 19 | To manage Union's integrated system operations it was determined in E.B.R.O. 499 that             |
| 20 | 257,780 10 <sup>3</sup> m <sup>3</sup> (9.7 PJ) of storage space was required. This consisted of: |

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| 1  |                        | $10^3 \text{m}^3$ | <u>PJ</u>   |
|----|------------------------|-------------------|---|
| 2  | Southern storage       | 240,780           | 9.1   |
| 3  | Northern LNG           | <u>17,000</u>     | <u>0.6</u>  |
| 4  |                        | 257,780           | 9.7   |
| 5  |                        |                   |   |
| 6  | As part of the unbun   | dling of Union    | 's infranchise services (RP-1999-0017) it was necessary to      |
| 7  | define the various op  | perational comp   | conents and the associated drivers to allocate system integrity |
| 8  | costs to rate classes. | As a result, the  | e operational risks associated with being a provider of last    |
| 9  | resort were identified | d and the "syste  | em integrity space" necessary to support the potential          |
| 10 | deliverability shortfa | alls was estimat  | ted based on operational experience. The total system           |
| 11 | integrity space was e  | estimated at 9.7  | PJ. Since RP-1999-0017, the total system integrity space has    |
| 12 | remained the same.     |                   |   |
|    |                        |                   |   |

### 3/ PROPOSED SYSTEM INTEGRITY SPACE AND ALLOCATION FOR 2013

- 15 Union's proposed allocation of the system integrity space among the operational components
- relative to the allocation in EB-2005-0520 is shown below in Table 1.

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1 2 3

# Table 1 Comparison of Allocation of System Integrity Space

| Line No. | System Integrity Operational Components | Current<br>(EB-2005-0520)<br>(PJ) | Proposed<br>(EB-2011-0210)<br>(PJ) |
|----------|---|-----------------------------------|------------------------------------|
| 1        | Forecasted Weather Variances            | 3.5                               | 2.6                                |
| 2        | UFG Forecast Variances                  | 1.8                               | 2.2                                |
| 3        | System Line Pack                        | 1.7                               | 1.1                                |
| 4        | Storage Pool Hysteresis                 | 0.5                               | 2.0                                |
| 5        | OBA/LBA Imbalances                      | 0.3                               | 0.9                                |
| 6        | Supply Backstopping                     | <u>1.8</u>                        | <u>0.7</u>                         |
| 7        | Total                                   | 9.7                               | 9.5                                |

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- 5 The increase in the hysteresis component has resulted in a reallocation of the system integrity
- 6 space to the other components (ie. weather, UFG, line pack, OBA/LBA and supply
- 7 backstopping) based on the diversity of the expected outcomes. The increase in pool hysteresis
- 8 has been driven by higher than expected well interference in Union's storage pools. Well
- 9 interference results in lower effective pool pressures which in turn lowers the overall well flow
- performance. The magnitude of well interference effects depends largely on the individual pool
- characteristics, system demands and the length of sustained withdrawals or injections.

- 13 The individual components making up the operational requirements for system integrity space
- 14 are discussed below:

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#### 1. Forecasted Weather Variations

2 Daily gas nominations are based upon a weather forecast prepared prior to the beginning of

the gas day. Weather that is colder than forecasted could therefore require higher system

4 deliverability than planned.

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#### 2. UFG Forecasted Variances

Variances between actual and forecasted unaccounted-for-gas ("UFG") volumes can result in

a lower than expected storage inventory balance. The lower than expected inventory as a

result of higher than forecasted UFG could result in a shortfall in storage deliverability.

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#### 3. System Line Pack

Swings in system line pack due to unexpected upsets and unplanned system demands may

result in the necessity to withdraw from storage to replenish line pack on Union's Dawn -

14 Parkway, Panhandle, and Sarnia systems.

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#### 4. Storage Pool Hysteresis

Storage pool deliverability performance can be influenced by localized pressure drawdown

across the reservoir as a result of withdrawal and injection operations. The reduction in the

effective reservoir pressure resulting from this drawdown is referred to as hysteresis. The

20 lower effective reservoir pressure results in lower deliverability performance from storage.

#### 5. OBA/LBA Imbalances

Operational balancing agreement ("OBA") and load balancing agreement ("LBA")

3 imbalances occur daily at various delivery and receipt points on Union's system. To the

extent that the OBA/LBA imbalances draft Union's system on any given day an equivalent

5 volume from Union storage is required to balance supplies and demands on Union's system.

#### 6. Supply Backstopping

Supply backstopping is required to cover supply failure in the event of an unscheduled upstream compressor upset or pipeline interruption. Although these events are rare, the

10 consequences can be significant.

12 Union's system integrity space, as described above, is composed of both 3.5 PJ of empty and 6.0

13 PJ of filled storage. Union requires both empty and filled space for the following reasons:

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1) 3.5 PJ of empty space on November 1<sup>st</sup> to manage late season injection requirements. As storage pools are filled, pools are shut-in for stabilization. This stabilization period is critical to the ongoing inventory monitoring, operation and integrity of the storage reservoirs. As pools are shut-in during the later part of the injection season the number of pools available for injections is reduced. Managing October and November gas receipts becomes increasingly difficult as temperatures can vary considerably at this time of year. Some

i. forecasted weather variances

components that are managed with the empty space include:

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| 1  | ii. unaccounted-for-gas forecast variances   |
|----|--|
| 2  | iii. storage pool hysteresis   |
| 3  | iv. OBA/LBA imbalances   |
| 4  |  |
| 5  | 2) 6.0 PJ (including 0.6 PJ Hagar LNG) of filled space to meet winter operational requirements |
| 6  | resulting from system upsets, imbalances and forecast variances. These include:                |
| 7  | i. forecasted weather variances  |
| 8  | ii. unaccounted-for-gas forecast variances   |
| 9  | iii. line pack variances   |
| 10 | iv. storage pool hysteresis  |
| 11 | v. OBA/LBA imbalances  |
| 12 | vi. supply backstopping  |

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| 1  | PREFILED EVIDENCE OF   |
|----|--|
| 2  | BRYAN GOULDEN, MANAGER, MARKET DEVELOPMENT   |
| 3  |  |
| 4  | The purpose of this evidence is to outline Union's proposed level of funding for the Energy      |
| 5  | Technology and Innovation Canada ("ETIC") program. This evidence is organized under the          |
| 6  | following headings:  |
| 7  | 1/ ETIC Program  |
| 8  | 2/ Utility Spending on Innovation and Technology   |
| 9  | 3/ Union's ETIC Commitment   |
| 10 |  |
| 11 | 1/ETIC PROGRAM   |
| 12 | Average investment in technology and innovation across North American gas utilities lags         |
| 13 | investment made by other major worldwide natural gas and electric utilities. To help address the |
| 14 | lack of investment in technology and innovation, the CGA Board of Directors approved the         |
| 15 | establishment of an energy technology innovation fund in September 2010, commencing in           |
| 16 | 2011, consistent with the CGA's vision that by 2015:   |
| 17 | "The natural gas delivery industry is recognized as the leader in delivering smart               |
| 18 | energy solutions to consumers in support of sustainable communities:                             |
| 19 | i. Seen by governments as the best industry to deliver low carbon energy to the                  |
| 20 | consumer.  |
| 21 | ii. Seen by the consumer as best positioned to help them optimize their                          |
| 22 | consumption.   |

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1 With gas as a foundation fuel, the industry provides Canada's communities, 2 business and industry with clean, safe and reliable, energy while operating in a policy, regulatory, technical and partnership landscape that supports superior 3 4 returns on investment." 5 To help Canada achieve a low carbon energy future and ensure the continued relevance of 6 7 natural gas as a foundational fuel, Canadian natural gas utilities need to invest appropriately in technology commercialization and innovation in end use oriented markets. 8 9 Initially the overall focus of ETIC is to facilitate and drive natural gas technology innovation that 10 ensures natural gas remains a preferred foundational fuel. This will be achieved through 11 identifying technology gaps, accessing and sharing information among the member companies 12 and others, strategic investment in technology commercialization and innovation, showcasing of 13 innovative gas and gas-enabled solutions, partnering with technology suppliers, and influencing 14 15 the research and development community. ETIC is intended to be a research provider for its members, either directly through management of specific research projects or indirectly through 16 17 investments in project funding on a collaborative basis with other interested stakeholders. 18 Natural gas market share has been stable or declining in all market sectors since 1990 with the 19 exception of power generation that has shown growth prospects. This trend is expected to 20 21 continue, as a result of tighter building and equipment regulation, a significant focus on energy

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2 of market transition, the industry needs to continue to ensure that natural gas technology options meet the needs of customers and other energy industry stakeholders. Strategic investment in 3 4 technology is a critical tool in achieving this objective. 5 6 Union believes it is critical to increase its participation in industry wide evaluation and 7 implementation of new technologies. Although key fundamental gas technologies exist today, 8 the most significant challenges continue to be in the adaptation and deployment of natural gas based innovative technology solutions. For example, natural gas residential space heating 9 technology has been developed to the point that the high efficiency furnace is the current de facto 10 11 appliance of choice in most high end residential detached housing developments (where gas is available). High efficiency natural gas furnaces have a combustion efficiency in excess of 90% 12 and have a significant operating cost and current life cycle cost advantage relative to other 13 energy forms. However, the next generation of natural gas residential space heating appliances 14 needs to be developed to compete with other technology choices. This development is unlikely to 15 occur without the innovation investment and active investment of the gas industry. 16 17 As a gas distribution company, Union understands the customer's expectations with respect to 18 19 safety, reliability and affordability and is well positioned to identify the optimum technology solutions that will meet future expectations of high energy efficiency while addressing the need 20

conservation/ DSM and greenhouse gas mitigation initiatives involving natural gas. In this time

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1 to reduce carbon emissions. Success depends on gaining regulatory support for investment in 2 technology and innovation areas that support the transition to a low carbon energy system. Projects funded under ETIC will be those that provide an opportunity to help Union better 3 4 understand the realities of emerging technologies or that have potential impact on Union's business model. All project investments will be scope and time bound and leveraged to ensure 5 6 the participation of other stakeholders including manufacturers, suppliers, international gas 7 utilities, government and Non -Governmental Organizations. Union will work to ensure that the 8 investments made will provide value to natural gas rate payers through prudent, leveraged 9 expenditures on technology innovation. 10 2/ UTILITY SPENDING ON INNOVATION AND TECHNOLOGY 11 As indicated above, North American gas utilities lag other major worldwide natural gas utilities 12 in investments in technology and innovation. The 2011 "EU Industrial R&D Investment 13 Scoreboard" (the "Scoreboard") collects information on the top 1,000 EU companies and 1,000 14 non-EU companies investing the largest sums in R&D in the last reporting year. The Scoreboard 15 includes data on R&D investment along with other economic and financial data from the last 16 four financial years. 17 18 19 As indicated in Table 1, the level of R&D investment for the six "primarily natural gas" utilities included in this survey is 0.29% of total sales revenue. 20

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Table 1

<u>World Natural Gas Utility Research & Development Investment</u>

(per 2011 EU RD Scorecard)

2010 R&D/Net Operating Profit R&D Market No Company (% of Net Sales) Capitalization (€n) Rank Country Investment (€n) Net Sales (€n) Employees Sales Ratio 1 RWE 82 Germany 261.00 50,722.00 71,001 0.51% 13.36% 20,795.7 84,478.00 2 GDF SUEZ 90 France 222.00 236,116 0.26% 10.56% 51,928.8 3 E.ON 213 Germany 88.00 94,426.00 87,770 0.09% 7.72% 39,013.7 4 National Grid 519 UK 18.67 16,739.72 27,672 0.11% 26.72% 25,693.0 98.07 10,079.18 6,052.0 5 Osaka Gas 454 Japan 19,268 0.97% -7.09% 6 Tokyo Gas 15,539 6.04% 9,247.6 507 Japan 84.85 13,011.96 0.65% Average 772.60 269,456.85 0.29%

Source: http://iri.jrc.es/research/scoreboard\_2011.htm

- 2 As indicated in Table 2 the level of R&D investment for the 17 electric power utilities included
- 3 in this survey is 0.67% of total sales revenue. Union notes that no North American gas utilities
- 4 were identified as being in the top 1000 R&D funders worldwide outside the EU. The only North
- 5 American electric utility to be identified on this listing is Hydro Quebec with 2010 R&D
- 6 expenditures equal to 0.81% of its total sales revenue.

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Table 2
World Natural Gas Utility Research & Development Investment
(per 2011 EU RD Scorecard)

|    |                                  |      |             | 2010                    |            |           |                        |                                      |                            |
|----|----------------------------------|------|-------------|-------------------------|------------|-----------|------------------------|--------------------------------------|----------------------------|
| No | Company                          | Rank | Country     | R&D Investment (€n) Net | Sales (€m) | Employees | R&D/Net<br>Sales Ratio | Operating Profit<br>(% of Net Sales) | Market Capitalization (€n) |
| 1  | Korea Electric Power             | 141  | South Korea | 440.5                   | 25,896.3   | 37,332    | 1.70%                  | 4.55%                                | 11,674.7                   |
| 2  | Tokyo Electric Power             | 176  | Japan       | 345.0                   | 46,104.8   | 52,452    | 0.75%                  | 6.57%                                | 6,978.6                    |
| 3  | Kansai Electric Power            | 291  | Japan       | 180.3                   | 23,957.4   | 32,083    | 0.75%                  | 9.01%                                | 11,496.6                   |
| 4  | Chubu Electric Power             | 374  | Japan       | 127.8                   | 20,574.7   | 29,116    | 0.62%                  | 9.55%                                | 9,502.6                    |
| 5  | Kyushu Electric Power            | 463  | Japan       | 96.0                    | 13,280.5   |           | 0.72%                  | 7.12%                                | 5,482.5                    |
| 6  | Tohoku Electric Power            | 516  | Japan       | 82.3                    | 15,288.3   | 22,479    | 0.54%                  | 5.59%                                | 4,809.4                    |
| 7  | Hydro-Quebec                     | 558  | Canada      | 75.0                    | 9,256.1    | 19,521    | 0.81%                  | 48.22%                               |                            |
| 8  | Chugoku Electric Power           | 657  | Japan       | 59.3                    | 9,544.4    | 14,146    | 0.62%                  | 7.26%                                | 4,400.9                    |
| 9  | Taiwan Power                     | 695  | Taiwan      | 55.7                    | 13,069.0   |           | 0.43%                  | (1.43%)                              |                            |
| 10 | Electric Power Development       | 703  | Japan       | 54.7                    | 5,372.0    | 6,701     | 1.02%                  | 11.15%                               | 3,280.6                    |
| 11 | Shikoku Electric Power           | 783  | Japan       | 47.2                    | 5,012.7    |           | 0.94%                  | 8.43%                                | 3,669.7                    |
| 1  | AREVA                            | 52   | France      | 520.0                   | 11,112.0   | 47,851    | 4.68%                  | (2.87%)                              | 10,132.5                   |
| 2  | Electricite de France            | 55   | France      | 486.0                   | 72,481.0   | 158,764   | 0.67%                  | 5.96%                                | 49,509.1                   |
| 3  | Vattenfall                       | 99   | Sweden      | 207.6                   | 23,681.3   | 38,459    | 0.88%                  | 13.91%                               |                            |
| 4  | Iberdrola                        | 158  | Spain       | 130.2                   | 30,431.0   | 31,344    | 0.43%                  | 15.80%                               | 33,451.4                   |
| 5  | Enel                             | 210  | Italy       | 89.0                    | 71,943.0   | 79,913    | 0.12%                  | 15.45%                               | 38,637.2                   |
| 6  | Scottish and Southern Energy     | 321  | UK          | 45.1                    | 33,068.8   | 20,266    | 0.14%                  | 8.23%                                | 14,675.8                   |
| 7  | Terna                            | 338  | Italy       | 42.4                    | 2,036.4    | 3,486     | 2.08%                  | 46.77%                               | 6,447.1                    |
| 8  | Energias de Portugal             | 363  | Portugal    | 36.5                    | 14,170.7   | 12,096    | 0.26%                  | 14.75%                               | 8,433.7                    |
| 9  | EnBW Energie Baden-Wurtter       | 379  | Germany     | 34.3                    | 17,509.0   | 20,450    | 0.20%                  | 9.45%                                | 10,129.5                   |
| 10 | Fortum                           | 405  | Finland     | 30.0                    | 6,296.0    | 11,156    | 0.48%                  | 28.02%                               | 16,878.5                   |
| 11 | Cez                              | 419  | Czech Repub | 28.3                    | 7,925.8    | 32,937    | 0.36%                  | 32.89%                               | 20,079.3                   |
| 12 | Teollisuuden Voima               | 486  | Finland     | 21.6                    | 362.6      | 842       | 5.96%                  | 43.48%                               |                            |
| 13 | International Power              | 511  | UK          | 19.8                    | 3,902.8    | 3,520     | 0.51%                  | 19.62%                               | 18,739.8                   |
| 14 | Urenco                           | 548  | UK          | 16.7                    | 1,267.2    | 3,264     | 1.32%                  | 46.62%                               |                            |
| 15 | Elia System Operator             | 705  | Belgium     | 10.9                    | 939.5      | 1,163     | 1.16%                  | 29.12%                               | 1,803.9                    |
| 16 | Red Electrica De Espana          | 952  | Spain       | 5.0                     | 1,397.3    | 1,695     | 0.36%                  | 46.47%                               | 5,239.5                    |
| 17 | Osterreichische Elektrizitatswir | 978  | Austria     | <u>4.8</u>              | 3,307.9    | 3,015     | 0.15%                  | 25.67%                               | 4,904.1                    |
|    | Average                          |      |             | 3,292.0                 | 489,188.4  |           | 0.67%                  |                                      |                            |

Source: http://iri.jrc.es/research/scoreboard\_2011.htm

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#### 3/ Union's ETIC COMMITMENT

- 4 Union's proposed 2013 O&M budget includes \$5.0 million related to the ETIC program. This
- 5 amount is consistent with the average level of R&D investment for the six "primarily natural
- 6 gas" utilities included in the 2011 EU scorecard. 1

 $<sup>^{1}</sup>$  \$1,830 million x 0.29% = \$5.307 million.

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- 1 In 2011 and 2012, Union is projecting expenditures of \$0.6 million and \$3.0 million,
- 2 respectively, related to the ETIC program.

- 4 ETIC spending will not exceed the amount included in approved rates. In any year when ETIC
- 5 expenditures are less than the amount included in approved rates, ratepayers will credited the
- 6 difference. For example, in the event that Union spends \$4.25 million of its budgeted \$5.0
- 7 million ETIC commitment, the remaining \$0.75 million would be returned to the credit of the
- 8 ratepayer in the following year. Union's request for approval of the ETIC Deferral Account
- 9 appears at Exhibit H1, Tab 5.

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### **UNION GAS LIMITED**

### Cost of Service

### Year Ending December 31

| Line<br>No. | Particulars (\$000's)            | Board-<br>Approved<br>2007<br>(a) | Actual 2010 (b) | Outlook<br>2011<br>(c) | Forecast 2012 (d) | Forecast 2013 (e) |
|-------------|----------------------------------|-----------------------------------|-----------------|------------------------|-------------------|-------------------|
| 1           | Cost of gas                      | 1,135,825                         | 795,549         | 759,739                | 730,925           | 706,756           |
| 2           | Operating and maintenance        | 326,222                           | 351,634         | 364,337                | 375,869           | 377,189           |
| 3           | Depreciation                     | 173,780                           | 190,176         | 196,962                | 204,145           | 196,467           |
| 4           | Other financing                  | 315                               | 621             | 351                    | 362               | 1,179             |
| 5           | Property and capital taxes       | 67,709                            | 65,131          | 61,681                 | 62,916            | 64,022            |
| 6           | Other expense                    | -                                 | 500             | -                      | -                 | -                 |
| 7           | Income taxes                     | 14,589                            | 30,214          | 26,685                 | 18,090            | 8,390             |
| 8           | Cost of service excluding return | 1,718,440                         | 1,433,825       | 1,409,755              | 1,392,306         | 1,354,003         |

## <u>UNION GAS LIMITED</u> Operating and Maintenance Expense by Cost Type <u>Year Ended December 31</u>

| Line |   | Board Approved | Actual     | Actual     | Actual     | Actual     | Outlook    | Forecast   | Forecast     |
|------|---|----------------|------------|------------|------------|------------|------------|------------|--------------|
| No.  | Particulars (\$000s)                                | 2007           | 2007       | 2008       | 2009 (2)   | 2010       | 2011 (3)   | 2012       | 2013         |
|      |   | (a)            | (b)        | (c)        | (d)        | (e)        | (f)        | (g)        | (h)          |
| 1    | Salaries/Wages                                      | 159,896.0      | 164,371.2  | 172,274.5  | 175,065.7  | 183,249.1  | 180,753.1  | 187,950.4  | 193,786.4    |
| 2    | Benefits  | 55,621.0       | 56,364.5   | 51,366.1   | 52,919.0   | 70,861.2   | 78,657.4   | 72,269.4   | 61,683.7 (4) |
| 3    | Materials   | 9,132.0        | 9,973.0    | 10,696.2   | 10,692.9   | 9,631.1    | 9,243.5    | 9,241.6    | 9,957.8      |
| 4    | Employee Expenses/Training                          | 12,798.0       | 12,033.7   | 13,714.4   | 10,887.9   | 11,783.4   | 13,072.5   | 14,109.8   | 14,330.2     |
| 5    | Contract Services                                   | 50,061.0       | 51,194.0   | 55,317.4   | 56,107.4   | 57,335.1   | 60,809.3   | 63,669.5   | 66,376.2     |
| 6    | Consulting  | 6,447.0        | 7,277.0    | 8,269.5    | 6,689.0    | 7,505.6    | 8,790.6    | 11,082.3   | 13,171.6     |
| 7    | General   | 20,645.0       | 18,031.9   | 21,837.4   | 19,939.7   | 21,210.7   | 21,582.5   | 21,592.3   | 22,189.8     |
| 8    | Transportation and Maintenance                      | 7,523.0        | 7,317.5    | 8,159.3    | 7,645.4    | 7,891.8    | 6,445.6    | 7,413.6    | 7,477.9      |
| 9    | Company Used Gas                                    | 4,911.0        | 3,167.4    | 3,547.5    | 3,373.3    | 2,451.1    | 2,956.7    | 2,473.4    | 2,501.6      |
| 10   | Utility Costs                                       | 3,269.0        | 3,315.6    | 3,533.9    | 3,236.0    | 3,704.2    | 4,546.4    | 4,561.9    | 4,681.9      |
| 11   | Communications                                      | 7,969.0        | 7,980.8    | 8,224.6    | 7,599.9    | 6,780.3    | 7,246.5    | 6,243.2    | 6,380.1      |
| 12   | Demand Side Management Programs                     | 11,874.0       | 11,569.1   | 12,471.3   | 14,391.3   | 16,437.6   | 17,874.1   | 23,605.1   | 24,231.9     |
| 13   | Advertising   | 2,255.0        | 2,117.7    | 1,543.9    | 1,568.9    | 1,860.4    | 2,227.5    | 2,287.7    | 2,385.9      |
| 14   | Insurance   | 7,004.0        | 8,029.9    | 7,240.1    | 7,763.3    | 8,506.8    | 8,815.4    | 8,605.1    | 9,056.0      |
| 15   | Donations   | 404.0          | 377.2      | 451.0      | 500.8      | 749.1      | 747.2      | 774.6      | 787.6        |
| 16   | Financial   | 2,884.0        | 1,661.3    | 2,117.0    | 2,917.6    | 2,077.1    | 2,191.4    | 1,860.4    | 1,871.0      |
| 17   | Lease   | 3,202.0        | 3,381.5    | 3,198.1    | 3,479.5    | 3,632.3    | 3,728.1    | 4,151.1    | 4,191.0      |
| 18   | Cost Recovery from Third Parties                    | (2,106.0)      | (3,288.8)  | (3,770.3)  | (5,362.7)  | (4,641.2)  | (2,420.9)  | (2,882.9)  | (2,549.1)    |
| 19   | Computers   | 4,226.0        | 4,101.6    | 4,263.1    | 4,678.2    | 4,922.1    | 5,650.5    | 6,158.1    | 6,464.7      |
| 20   | Regulatory Hearing & OEB Cost Assessment            | 6,000.0        | 5,751.8    | 4,487.9    | 3,652.6    | 3,126.1    | 3,616.0    | 5,200.0    | 4,300.0      |
| 21   | Outbound Affiliate Services                         | (5,741.0)      | (6,475.9)  | (7,768.4)  | (9,312.3)  | (10,182.2) | (11,401.1) | (13,667.2) | (13,706.2)   |
| 22   | Inbound Affiliate Services                          | 11,933.0       | 6,302.5    | 5,869.9    | 7,306.2    | 9,462.2    | 9,674.7    | 11,494.4   | 11,888.2     |
| 23   | Bad Debt  | 11,600.0       | 7,300.0    | 9,100.0    | 8,600.0    | 5,075.3    | 7,200.0    | 6,600.0    | 6,600.0      |
| 24   | Other   | 100.0          | 100.8      | 236.5      | 738.6      | 248.2      | 572.5      | 140.4      | 141.0        |
| 25   | Total   | 391,907.0      | 381,955.3  | 396,380.9  | 395,078.2  | 423,677.4  | 442,579.5  | 454,934.2  | 458,199.2    |
| 26   | Indirect Capitalization (OH)                        | (51,528.0)     | (47,275.2) | (52,675.2) | (51,246.2) | (46,289.6) | (48,300.6) | (49,153.4) | (48,660.6)   |
| 27   | Direct Capitalization (DCC)                         | (7,350.0)      | (7,250.7)  | (8,590.4)  | (8,348.0)  | (13,978.3) | (18,158.9) | (17,058.3) | (19,368.6)   |
| 28   | Total Capitalization                                | (58,878.0)     | (54,525.9) | (61,265.6) | (59,594.2) | (60,267.9) | (66,459.5) | (66,211.7) | (68,029.2)   |
| 20   | Total Capitalization                                | (38,878.0)     | (34,323.9) | (01,203.0) | (39,394.2) | (00,207.9) | (00,439.3) | (00,211.7) | (00,029.2)   |
| 29   | Total   | 333,029.0      | 327,429.4  | 335,115.3  | 335,484.0  | 363,409.5  | 376,120.0  | 388,722.5  | 390,170.0    |
| 30   | Non Utility Allocations (1)                         | (6,807.0)      | (7,127.0)  | (10,122.8) | (12,282.2) | (11,775.9) | (11,782.8) | (12,853.2) | (12,980.9)   |
| 31   | IFRS Costs  | -              | -          | -          | (2,877.0)  | -          | -          | -          | -            |
|      | The Costs   |                |            |            | (2,077.0)  |            |            |            |              |
| 32   | Total Net Utility Operating and Maintenance Expense | 326,222.0      | 320,302.4  | 324,992.5  | 320,324.8  | 351,633.6  | 364,337.2  | 375,869.3  | 377,189.1    |
| 33   | Excess Utility Cross-Charge (5)                     | (599.0)        | (2,261.0)  | (2,261.0)  | (2,261.0)  | (2,261.0)  | (2,261.0)  | (2,261.0)  | (2,261.0)    |
| 34   | Total Net Utility O&M Less Cross-Charge             | 325,623.0      | 318,041.4  | 322,731.5  | 318,063.8  | 349,372.6  | 362,076.2  | 373,608.3  | 374,928.1    |

### Note:

- (1) Includes charitable donations and prior period PST assessment.
- (2) 2009 Actuals do not include \$9M related to Lobo C and St. Clair.
- (3) 2011 3+9 Outlook plus \$800K for Cross Bore costs.
- (4) 2013 defined benefit pension costs are US GAAP CDN Reporting (see Exhibit D1 Tab 3 for further details).
- (5) 2013 Utility Cross-Charge is an estimate and will be updated as part of the cost study.

Filed: 2011-11-10 EB-2011-0210 Exhibit D2

# 2011 Depreciation Rate Study





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47800S - METERS

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## **EXECUTIVE SUMMARY**

## INTRODUCTION

This report presents a review and update of depreciation rates and parameters for utility plant owned and operated by Union Gas Limited (Union). The report contains recommended 2011 depreciation rates and parameters for: a) intangible assets; b) local and underground storage facilities; and c) gas transmission, distribution and general plant categories. Work on the study commenced in March 2011 and progressed through early July, at which time the project was completed.

Foster Associates, Inc. is a public utility economic consulting firm headquartered in Bethesda, Maryland offering economic research and consulting services on issues and problems arising from governmental regulation of business. Areas of specialization supported by the firm's Fort Myers office include property life forecasting, technological forecasting, depreciation estimation, and valuation of industrial property.

Foster Associates has undertaken numerous depreciation engagements for both public and privately owned business entities including detailed statistical life studies, analyses of required net salvage rates, and the selection of depreciation systems that will most nearly achieve the goals of depreciation accounting under the constraints of either government regulation or competitive market pricing. Foster Associates is widely recognized for industry leadership in the development of depreciation systems, life analysis techniques and computer software for conducting depreciation and valuation studies.

This is the eighth major depreciation study undertaken by Union in the last 40 years. Current depreciation rates were developed by Foster Associates in a 2003 comprehensive study in which revised parameters were estimated for all plant accounts. Rates currently used by Union were adopted September 19, 2003 pursuant to an Alternative Dispute Resolution Agreement approved by the Ontario Energy Board (OEB) under Docket No. RP–2003–0063. The settlement agreement accepted all depreciation rates developed in the 2003 study.

On January 1, 1998, Union Gas formalized a legal merger with Centra Gas Ontario. The depreciation rates adopted by Union in RP–2003–0063 retained the pre–merger corporate identity for plant classified in the Distribution function. This treatment was adopted to preserve a jurisdictional separation of distribution plant for ratemaking purposes. While it is the intention of Union to eventually eliminate the pre–merger corporate identity of former Centra assets, the current study retains the distinction between Northern and Eastern Operations (previously Centra) and the Southern Operations of Union for plant classified in the Distribution function.

The current study also preserves the elimination of Accounts 49601 and 49602 (Contributions in Aid of Construction) proposed in the 2003 study and approved in RP–2003–0063. Depreciation rates developed prior to the 2003 study

included rates for the CIAC accounts derived from a composite weighted average of the accrual rates for the major plant accounts in which investments were funded by contributions. The current treatment of CIAC is to credit the associated plant accounts as previously permitted by the OEB Uniform System of Accounts for Gas Utilities. Depreciation reserves for the CIAC accounts were distributed and combined with the associated plant reserves in the 2003 study.

The principal findings and recommendations of the 2011 study are summarized in the Statements section of this report. Statement A provides a comparative summary of current and proposed annual depreciation rates for each rate category. Statement B provides a comparison of current and proposed annual depreciation accruals. Statement C provides a comparison of computed, recorded and redistributed depreciation reserves for each rate category. Statement D provides a summary of the investment and net salvage components of rebalanced reserves. Statement E provides a summary of the components used to obtain a weighted-average net salvage rate for each plant account. Statement F provides the computation of future net salvage rates for the Local Storage function. Statement G provides a comparative summary of current and proposed parameters including projection life, projection curve, average service life, average remaining life, and average and future net salvage rates.

## SCOPE OF STUDY

The principal activities undertaken in the course of the current study included:

- Collection of plant and net salvage data;
- Reconciliation of data to the official records of the Company;
- Communication with Union plant accounting and operations personnel;
- Estimation of projection lives and retirement dispersion patterns;
- Analysis of gross salvage and cost of removal;
- Analysis and redistribution of recorded depreciation reserves; and
- Development of recommended accrual rates for each rate category.

<sup>&</sup>lt;sup>1</sup> Contributions or grants in cash, services or property from governments or government agencies, corporations, individuals, and others for contributions in aid of construction shall be applied as a reduction of the detail plant accounts to which they refer, if not recorded separately in Account No. 499, "Contributions and Grants". (USOA, Appendix A, Section 1, Part B)

## DEPRECIATION SYSTEM

A depreciation rate is formed by combining the elements of a depreciation system. A depreciation system is composed of a method, a procedure and a technique. A depreciation method (e.g., straight—line) describes the component of the system that determines the acceleration or deceleration of depreciation accruals in relation to either time or use. A depreciation procedure (e.g., vintage group) identifies the level of grouping or sub—grouping of assets within a plant category. The level of grouping specifies the weighting used to obtain composite life statistics for an account. A depreciation technique (e.g., remaining—life) describes the life statistic used in the system.

With the exception of selected general support asset categories for which amortization accounting has been approved, Union is currently using a depreciation system composed of the straight—line method, vintage group procedure, remaining—life technique. Amortization accounting is used for general plant categories in which the unit cost of plant items is small in relation to the number of units classified in the account. Plant is retired (*i.e.*, credited to plant and charged to the reserve) as each vintage achieves an age equal to the amortization period. Any realized net salvage for amortizable accounts is netted against current—year vintage additions.

Amortization accounting is also recommended in the current study for Account 47400 (Regulators). The numerous property units classified in this account are relatively low—cost items with no record—keeping system in place to track the physical disposition of the assets. Moreover, house regulators for new installations are now typically pre—assembled as a component of a meter manifold and classified as minor items of property in Account 47401 (Regulator and Meter Installations). Reserve imbalances resulting from the proposed 20—year amortization period for Account 47400 were distributed to the remaining depreciable accounts within the Distribution plant function for the Northern and Eastern Operations and the Southern Operations, respectively.

The matching and expense recognition principles of accounting provide that the cost of an asset (or group of assets) should be allocated to operations over an estimate of the economic life of the asset in proportion to the consumption of service potential. It is the opinion of Foster Associates that the objectives of depreciation accounting are being achieved using the currently approved vintage group procedure, which distinguishes average service lives among vintages, and the remaining–life technique which provides cost apportionment over the estimated weighted average remaining life of a rate category. It is also the opinion of Foster Associates that amortization accounting remains appropriate for the approved amortization categories. Accordingly, the depreciation system currently prescribed for Union was used in the current study to develop accrual rates pro-

posed for calendar year 2011.

## PROPOSED DEPRECIATION RATES

Table 1 below provides a summary of the changes in annual rates and accruals resulting from an application of the service life and net salvage parameters recommended in the current study.

|               |         | Accrual Rate | )      | 201               | ΙA | nnualized Acc | crua | il           |
|---------------|---------|--------------|--------|-------------------|----|---------------|------|--------------|
| Function      | Current | Proposed     | Diff.  | <br>Current       |    | Proposed      |      | Difference   |
| А             | В       | С            | D=C-B  | E                 |    | F             |      | G=F-E        |
| Intangible    | 5.05%   | 5.45%        | 0.40%  | \$<br>61,555      | \$ | 66,431        | \$   | 4,876        |
| Local Storage | 3.35%   | 3.16%        | -0.19% | 570,449           |    | 538,330       |      | (32,119)     |
| U/G Stirage   | 3.04%   | 2.63%        | -0.41% | 13,397,696        |    | 11,563,828    |      | (1,833,868)  |
| Transmission  | 2.70%   | 2.27%        | -0.43% | 42,624,294        |    | 35,809,174    |      | (6,815,120)  |
| Distribution  | 2.99%   | 2.78%        | -0.21% | 104,669,492       |    | 97,199,048    |      | (7,470,444)  |
| General Plant | 10.99%  | 11.70%       | 0.71%  | 27,332,018        |    | 29,068,934    |      | 1,736,916    |
| Total         | 3.26%   | 3.01%        | -0.25% | \$<br>188,655,504 | \$ | 174,245,745   | \$(  | (14,409,759) |

Table 1. Current and Proposed Rates and Accruals

Foster Associates is recommending primary account depreciation rates equivalent to a composite rate of 3.01 percent. Depreciation expense is currently accrued at an equivalent composite rate of 3.26 percent. The recommended change in the composite depreciation rate is, therefore, a reduction of 0.25 percentage points.

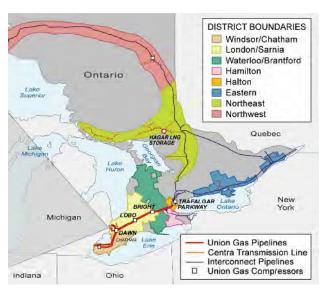
A continued application of current rates would provide annualized depreciation expense of \$188,655,504 compared with an annualized expense of \$174,245,745 using the rates developed in this study. The proposed expense reduction is \$14,409,759. The change in annualized accruals includes a reduction of \$2,837,776 attributable to an amortization of a \$74,728,569 reserve imbalance. A proportionate amount of the estimated reserve imbalance will be amortized over the weighted average remaining life of each rate category. The remaining portion of the change in accruals is attributable to recommended adjustments to various service life and net salvage parameters.

Of the 41 property accounts included in the 2011 study, Foster Associates is recommending rate reductions for 29 accounts and rate increases for 12 accounts.

## **COMPANY PROFILE**

### GENERAL

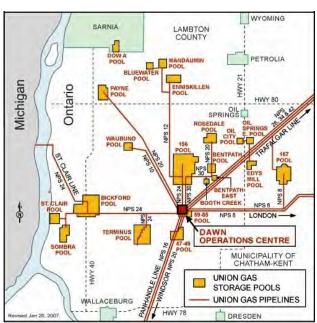
Union Gas Limited, a Spectra Energy Company, is a major Canadian natural gas utility that provides energy delivery and related services to 1.3 million residential, commercial and industrial customers over 400 communities northern, southwestern and eastern Ontario. Its distribution service area extends throughout northern Ontario from the Manitoba border to the North Bay/Muskoka area, through southwestern Ontario



from Windsor to just west of Toronto, and across eastern Ontario from Port Hope to Cornwall.

The Company also provides natural gas storage and transportation services for other utilities and energy market participants in Ontario, Quebec and the United States. Union Gas has assets of approximately \$5.6 billion including 25,574 miles of distribution mains, 15,024 miles of distribution services, and 2,946 miles of transmission pipelines. The Company employs about 2,200 people.

The Dawn Hub is the largest natural gas storage facility in Canada. With six interconnects—three pipeline of which are TransCanada's-Union Gas has easy access to 15 pipeline and distribution companies. The Dawn Hub is important link in movement of natural gas from Western Canadian and U.S. supply basins to markets in central Canada, the Great Lakes region and the northeast U.S. Dawn has a working capacity of 155 Bcf and can deliver 2 Bcf a day to customers.



## STUDY PROCEDURE

### INTRODUCTION

The purpose of a depreciation study is to analyze the mortality characteristics, net salvage rates and adequacy of the depreciation accrual and recorded depreciation reserve for each rate category. This study provides the foundation and documentation for recommended changes in the depreciation accrual rates used by Union. The proposed rates are subject to approval by the Ontario Energy Board.

## SCOPE

The steps involved in conducting a depreciation study can be grouped into five major tasks:

- Data Collection:
- Life Analysis and Estimation;
- Net Salvage Analysis;
- Depreciation Reserve Analysis; and
- Development of Accrual Rates.

The scope of the 2011 study included a consideration of each of these tasks as described below.

## **DATA COLLECTION**

The minimum database required to conduct a statistical life study consists of a history of vintage year additions and unaged activity year retirements, transfers and adjustments. These data must be appropriately adjusted for transfers, sales and other plant activity that would otherwise bias the measured service life of normal retirements. The age distribution of surviving plant for unaged data can be estimated by distributing plant in service at the beginning of the study year to prior vintages in proportion to the theoretical amount surviving from a projection or survivor curve identified in the life study. The statistical methods of life analysis used to examine unaged plant data are known as *semi-actuarial techniques*.

A far more extensive database is required to apply statistical methods of life analysis known as *actuarial techniques*. Plant data used in an actuarial life study most often include age distributions of surviving plant at the beginning of a study year and the vintage year, activity year, and dollar amounts associated with normal retirements, reimbursed retirements, sales, abnormal retirements, transfers, corrections, and extraordinary adjustments over a series of prior activity years. An actuarial database may include age distributions of surviving plant at the beginning of the earliest activity year, rather than at the beginning of the study year. Plant additions, however, must be included in a database containing an opening age distribution to derive aged survivors at the beginning of the study year. All activity year transactions with vintage year identification are coded and stored in a

database. These data are processed by a computer program and transaction summary reports are created in a format reconcilable to official plant records. The availability of such detailed information is dependent upon an accounting system that supports aged property records.

Prior to 1994, Union did not have a plant accounting system within which aged plant records could be maintained. In October, 1994 the Company implemented an in-house, designed and developed Continuing Property Record (CPR) system with vintage year identification of plant in service at March 31, 1994. Property tax records were used to construct the age distribution of pre–1982 vintages and the aging of post–1982 vintages was obtained from a detailed analysis of subsidiary plant records. The Company adopted calendar year accounting for financial reporting purposes commencing with calendar year 1995, which was reported as a nine–month accounting period.

On April 1, 1997 the in-house system was converted to a commercial product developed by SAP. The new system was populated with vintage year identification of plant in service at December 31, 1996. Plant accounting records for the Northern and Eastern Operations (formerly Centra) were also uploaded to the new Union system on April 1, 1997.

With the exception of Accounts 45200 (Structures and Improvements), 46200 (Structures and Improvements), 47200 (Structures and Improvements) and 48200 (Structures and Improvements), Union can now provide plant accounting transactions with vintage year identification for post–1997 activity for all remaining plant categories,. The vintage year assigned to plant activity associated with structures and improvements is the year the plant was originally constructed. While this practice will not misstate the aggregate investment in a plant category, the reported age distribution of surviving plant is not representative of the actual age of the investments. An aged data base was assembled by Foster Associates for all plant categories over the period 1997 through 2002 in conducting the 2003 study.

Service life statistics estimated in the current study were derived from plant accounting transactions recorded over the period 1997 through 2010. Detailed accounting transactions were extracted from the CPR system and assigned transaction codes which describe the nature of the accounting activity. Transaction codes for plant additions, for example, were used to distinguish normal additions from acquisitions, purchases, reimbursements and adjustments. Similar transaction codes were used to distinguish normal retirements from sales, reimbursements, abnormal retirements and adjustments. Transaction codes were also assigned to transfers, capital leases, gross salvage, cost of removal and other accounting activity that should be considered in a depreciation study.

The database used in conducting the 2003 study was updated for the current

study by appending plant and net salvage transactions for activity years 2003–2010 and age distributions of surviving plant at December 31, 2010. The accuracy and completeness of the assembled database was verified for activity years 2003 through 2010 by comparing the beginning plant balance, additions, retirements, transfers and adjustments, and the ending plant balance derived for each activity year to the official plant records of the Company. Activity years prior to 2003 were verified in the 2003 study. Age distributions of surviving plant at December 31, 2010 were reconciled to the CPR system.

Reserve transactions recorded over the period 1997–2010 were used in the 2011 study to derive appropriate net salvage rates. Realized net salvage was blended with future net salvage estimates to derive average net salvage rates used in the computation of theoretical reserves.

## LIFE ANALYSIS AND ESTIMATION

Life analysis and life estimation are terms used to describe a two-step procedure for estimating the mortality characteristics of a plant category. The first step (i.e., life analysis) is largely mechanical and primarily concerned with history. Statistical techniques are used in this step to obtain a mathematical description of the forces of retirement acting upon a plant category and an estimate of the projection life of the account. The mathematical expressions used to describe these life characteristics are known as survival functions or survivor curves.

The second step (*i.e.*, life estimation) is concerned with predicting the expected remaining life of property units still exposed to forces of retirement. It is a process of blending the results of a life analysis with informed judgment (including expectations about the future) to obtain an appropriate projection life and probability distribution descriptive of the parent population from which a plant account is viewed as a random sample. The amount of weight given to a life analysis will depend upon the extent to which past retirement experience is considered descriptive of the future.

The analytical methods used in a life analysis are broadly classified as actuarial and semi-actuarial techniques. Actuarial techniques can be applied to plant accounting records that reveal the age of a plant asset at the time of its retirement from service. Stated differently, each property unit must be identifiable by date of installation and age at retirement. Semi-actuarial techniques can be used to derive service life and dispersion estimates when age identification of retirements is not maintained or readily available. Age identification of retirements was available for all plant accounts included in the 2011 depreciation study.

An actuarial life analysis program designed and developed by Foster Associates was used in this study to analyze post–1997 plant accounting activity. The first step in an actuarial analysis involves a systematic treatment of the available

data for the purpose of constructing an observed life table. A complete life table contains the life history of a group of property units installed during the same accounting period and various probability relationships derived from the data. A life table is arranged by age—intervals (usually defined as one year) and shows the number of units (or dollars) entering and leaving each age—interval and probability relationships associated with this activity. A life table minimally shows the age of each survivor and the age of each retirement from a group of units installed in a given accounting year.

A life table can be constructed in any one of at least five methods. The annual—rate or retirement—rate method was used in this study. The mechanics of the annual—rate method require the calculation of a series of ratios obtained by dividing the number of units (or dollars) surviving at the beginning of an age interval into the number of units (or dollars) retired during the same interval. This ratio (or set of ratios) is referred to as a retirement ratio. The cumulative proportion surviving is obtained by multiplying the retirement ratio for each age interval by the proportion of the original group surviving at the beginning of that age interval and subtracting this product from the proportion surviving at the beginning of the same interval. The annual—rate method is applied to multiple groups or vintages by combining the retirements and/or survivors of like ages for each vintage included in the analysis.

The second step in an actuarial analysis involves graduating or smoothing the observed life table and fitting the smoothed series to a family of survival functions. The functions used in this study are the Iowa-type curves which are mathematically described in terms of the Pearson frequency curve family. The observed life table was smoothed by a weighted least-squares procedure in which first, second and third degree orthogonal polynomials were fitted to the observed retirement ratios. The resulting function can be expressed as a survivorship function which is numerically integrated to obtain an estimate of the projection life. The smoothed survivorship function is then fitted by a weighted least-squares procedure to the Iowa-curve family to obtain a mathematical description or classification of the dispersion characteristics of the data.

The set of computer programs used in this analysis provides multiple rolling—band, shrinking—band and progressive—band analyses of an account. Observation bands are defined in terms of a "retirement era" that restricts the analysis to the retirement activity of all vintages represented by survivors at the beginning of a selected era. In a rolling—band analysis, a year of retirement experience is added to each successive retirement band and the earliest year from the preceding band is dropped. A shrinking—band analysis begins with the total retirement experience available and the earliest year from the preceding band is dropped for each successive band. A progressive—band analysis adds a year of retirement activity to a

previous band without dropping earlier years from the analysis. Rolling, shrinking and progressive band analyses are used to detect the emergence of trends in the behavior of the dispersion and projection life.

Options available in the actuarial life analysis program include the width and location of both placement and observation bands; the interval of years included in a selected band analysis; the estimator of the hazard rate (actuarial, conditional proportion retired, or maximum likelihood); the elements to include on the diagonal of a weight matrix (exposures, inverse of age, inverse of variance, or unweighted); and the age at which an observed life table is truncated. In addition to performing the life analysis as discussed above, the programs offer tabular and graphics output as an aid in the analysis.

While actuarial and semi-actuarial statistical methods are well suited to an analysis of plant categories containing a large number of homogeneous units (e.g., mains and services), the concept of retirement dispersion is interpreted differently for plant categories composed of major items of plant that will most likely be retired as a single unit. Plant retirements from an integrated system prior to the retirement of the entire facility are more properly viewed as interim retirements that will be replaced in order to maintain the integrity of the system. Additionally, plant facilities may be added to the existing system (i.e., interim additions) in order to expand or enhance its productive capacity without extending the service life of the present system. A proper depreciation rate can be developed for an integrated system using a life—span method.

The life—span method requires the selection of a coterminous retirement date for all plant additions to a specific facility. A composite depreciation rate is calculated for the facility using the technique of harmonic weighting of the expected life span of each vintage addition. The resulting accrual rate must be adjusted for interim retirements to the extent that such retirements can be reasonably expected. Absent this adjustment, the depreciation accumulated over the life span of the facility will be deficient by an amount equal to a portion of the interim retirements. Properly implemented, the life—span method does not include plant additions or replacements of interim retirements until such activity is reported. All accounts in the Local Storage function, Account 45200 (Structures and Improvements) in the Underground Storage function and Account 48200 (Structures and Improvements) in the General plant function were treated as life—span categories in this study.

### **NET SALVAGE ANALYSIS**

Depreciation rates designed to achieve the goals and objectives of depreciation accounting will include a parameter for future net salvage and a variable for average net salvage reflecting both realized and future net salvage rates.

Estimates of net salvage rates applicable to future retirements are most often

derived from an analysis of gross salvage and cost of removal realized in the past. An analysis of past experience (including an examination of trends over time) provides a reasonable basis for estimating future salvage and cost of removal. However, consideration should also be given to events that may cause deviations from net salvage realized in the past. Among the factors that should be considered are: the age of plant retirements; the portion of retirements likely to be reused; changes in the method of removing plant; the type of plant to be retired in the future; inflation expectations; the shape of the projection life curve; and economic conditions that may warrant greater or lesser weight to be given to net salvage rates observed in the past.

Special consideration should also be given to the treatment of insurance proceeds and other forms of third—party reimbursements credited to the depreciation reserve. A properly conducted net salvage study will exclude such activity from the estimate of future parameters and include the activity in the computation of realized and average net salvage rates.

A five—year moving average analysis of the ratio of realized salvage and cost of removal to the associated retirements was used in the 2011 study to a) estimate a realized net salvage rate; b) detect the emergence of historical trends; and c) establish a basis for estimating a future net salvage rate. Cost of removal and salvage opinions obtained from Company personnel were blended with judgment and historical net salvage indications in developing estimates of the future.

Average net salvage rates for all depreciable accounts were estimated using direct dollar weighting of historical retirements with the historical net salvage rate, and future retirements (*i.e.*, surviving plant) with the estimated future net salvage rate. The computation of the estimated average net salvage rate for each rate category is shown in Statement E.

A 1994 dismantlement study conducted by Stone & Webster Canada Limited for the Hagar LNG plant (previously owned by Centra) was used in the 2003 depreciation study to derive a reasoned estimate of a net salvage rate for the Local Storage function. Noting that the estimated year of final retirement has been extended from 2017 to 2025 and a dismantlement study more recent than 1994 has not been conducted, terminal net salvage was removed from the estimate of future net salvage rates in the current study. It remains the opinion of Foster Associates, however, that terminal net salvage should be included in the formulation of deprecation rates when an updated dismantlement study becomes available. The computations supporting the recommended weighted—average interim and final net salvage rates for the Local Storage function are shown in Statement F.

## DEPRECIATION RESERVE ANALYSIS

The purpose of a depreciation reserve analysis is to compare the current level of

recorded reserves with the level required to achieve the goals or objectives of depreciation accounting if the amount and timing of future retirements and net salvage are realized as predicted. The difference between a required (or theoretical) depreciation reserve and a recorded reserve provides a measurement of the expected excess or shortfall that will remain in the depreciation reserve if corrective action is not taken to eliminate the reserve imbalance.

Unlike a recorded reserve which represents the net amount of depreciation expense charged to previous periods of operations, a theoretical reserve is a measure of the implied reserve requirement at the beginning of a study year if the timing of future retirements and net salvage is in exact conformance with a survivor curve chosen to predict the probable life of plant units still exposed to the forces of retirement. Stated differently, a theoretical depreciation reserve is the difference between the recorded cost of plant presently in service and the sum of the depreciation expense and net salvage that will be charged in the future if retirements are distributed over time according to a specified retirement frequency distribution.

The survivor curve used in the calculation of a theoretical depreciation reserve is intended to describe forces of retirement that will be operative in the future. However, retirements caused by forces such as accidents, physical deterioration and changing technology seldom, if ever, remain stable over time. It is unlikely, therefore, that a probability or retirement frequency distribution can be identified that will accurately describe the age of plant retirements over the complete life cycle of a vintage. It is for this reason that depreciation rates should be reviewed periodically and adjusted for observed or expected changes in the parameters chosen to describe the underlying forces of mortality.

Although reserve records are commonly maintained by various account classifications, the sum of all reserves is the most important measure of the status of a company's depreciation practices. If statistical life studies have not been conducted or retirement dispersion has been ignored in setting depreciation rates, it is likely that some accounts will be over—depreciated and other accounts will be under—depreciated relative to a calculated theoretical reserve. Differences between a theoretical reserve and a recorded reserve also will arise as a normal occurrence when service lives, dispersion patterns and net salvage estimates are adjusted in the course of depreciation reviews. It is appropriate, therefore, and consistent with group depreciation theory to periodically redistribute or rebalance recorded reserves among the various primary accounts based upon the most recent estimates of retirement dispersion and net salvage rates.

It is the opinion of Foster Associates that a redistribution of recorded reserves is again appropriate for Union. Offsetting reserve imbalances (attributable to both the passage of time and parameter adjustments recommended in the current study)

should be realigned among primary accounts to reduce offsetting imbalances and increase depreciation rate stability.

A redistribution of the recorded reserve for depreciable plant was achieved by multiplying the calculated reserve for each primary account within a function by the ratio of the function total recorded reserves (net of amortizable accounts) to the function total calculated reserve. The sum of the redistributed reserves within a function is, therefore, equal to the function (or operating division) total recorded depreciation reserve before the redistribution. Depreciation reserves for amortizable categories were redistributed by setting the recorded reserves for the proposed amortization accounts equal to the theoretical reserves derived from the proposed amortization periods and distributing the residual imbalances to the remaining depreciable accounts within the appropriate function.

Statement C provides a comparison of the computed, recorded and redistributed reserves for Union at December 31, 2010. The total recorded reserve was \$2,406,759,893 or 41.6 percent of the total utility plant investment. The corresponding computed reserve is \$2,332,031,324 or 40.3 percent of the total utility plant investment. A proportionate amount of the measured reserve imbalance of \$74,728,569 will be amortized over the composite weighted-average remaining life of each rate category.

## DEVELOPMENT OF ACCRUAL RATES

The goal or objective of depreciation accounting is cost allocation over the economic life of an asset in proportion to the consumption of service potential. Ideally, the cost of an asset—which represents the cost of obtaining a bundle of service units—should be allocated to future periods of operation in proportion to the amount of service potential expended during an accounting interval. The service potential of an asset is the present value of future net revenue (*i.e.*, revenue less expenses exclusive of depreciation and other non—cash expenses) or cash inflows attributable to the use of that asset alone.

Cost allocation in proportion to the consumption of service potential is most often approximated by the use of depreciation methods employing time rather than net revenue as the apportionment base. Examples of time-based methods include sinking—fund, straight—line, declining balance, and sum—of—the—years' digits. The advantage of using a time—based method is that it does not require an estimate of the remaining amount of service capacity an asset will provide or the amount of capacity actually consumed during an accounting interval. Using a

<sup>&</sup>lt;sup>2</sup> The distinction between North and South operations was retained in rebalancing depreciation reserves. Accordingly, recorded reserves were redistributed within each operating division.

time-based allocation method, however, does not change the goal of depreciation accounting. If it is predictable that the net revenue pattern of an asset will either decrease or increase over time, then an accelerated or decelerated time-based method should be used to approximate the rate at which service potential is actually consumed.

The time period over which the cost of an asset will be allocated to operations is determined by the combination of a procedure and a technique. A depreciation procedure describes the level of grouping or sub—grouping of assets within a plant category. The broad group, vintage group, equal—life group, and item (or unit) are a few of the more widely used procedures. A depreciation technique describes the life statistic used in a depreciation system. Whole life and remaining life (or expectancy) are the most common techniques.

Depreciation rates recommended in the 2011 study were developed using the currently approved system composed of the straight–line method, vintage group procedure, remaining–life technique. This formulation of the accrual rate is equivalent to a straight–line method, vintage group procedure, whole–life technique with amortization of reserve imbalances over the estimated remaining life of each rate category. It is the opinion of Foster Associates that this system will remain appropriate for Union, provided depreciation studies are conducted periodically and parameters are routinely adjusted to reflect changing operating conditions. Although the emergence of economic factors such as restructuring and performance based regulation may ultimately encourage abandonment of the straight–line method, no attempt was made in the current study to address this concern.

It is also the opinion of Foster Associates that amortization accounting currently approved for selected general support asset accounts is consistent with the goals and objectives of depreciation accounting and remains appropriate these plant categories.

The treatment of amortization accounts in the current study was designed to produce annualized accruals equivalent to applying a rate equal to the reciprocal of an amortization period to average plant balances after retirements have been recorded. Applying a rate equal to the reciprocal of the amortization period to plant balances prior to posting retirements would overstate the annualized amortization expense by a half—period accrual on vintages that will be retired during the study year. Accrual rates contained in Statement A should be applied to current plant balances. Accrual rates equal to the reciprocal of the amortization period should be applied to average plant balances after retiring vintages that have achieved an age equal to the amortization period.

## **STATEMENTS**

## INTRODUCTION

This section provides a comparative summary of depreciation rates, annual depreciation accruals, recorded and computed depreciation reserves, and current and proposed service life and net salvage parameters recommended for Union. The content of these statements is briefly described below.

- Statement A provides a comparative summary of current and proposed annual depreciation rates using the straight—line method, vintage group procedure, remaining-life technique.
- Statement B provides a comparison of the current and proposed annualized 2011 depreciation accruals derived from the depreciation rates developed in Statement A.
- Statement C provides a comparison of recorded, computed and redistributed reserves for each rate category at December 31, 2010.
- Statement D provides a summary of the investment and net salvage components of rebalanced reserves.
- Statement E provides a summary of the components used to obtain weighted average net salvage rates.
- Statement F provides a computation of the estimated future net salvage rate for Local Storage plant.
- Statement G provides a comparative summary of current and proposed parameters and statistics.

Current depreciation accruals shown on Statement B are the product of plant investments at December 31, 2010 (Column B) and current depreciation rates shown on Statement A. Similarly, proposed depreciation accruals shown on Statement B are the product of the year—end 2010 plant investments and proposed depreciation rates shown on Statement A. The proposed remaining life accrual rates (Statement A) are given by:

$$Accrual\ Rate = \frac{1.0 - Reserve\ Ratio - Future\ Net\ Salvage\ Rate}{Remaining\ Life}$$

This formulation of a remaining-life accrual rate is equivalent to

$$Accrual\ Rate = \frac{1.0 - Average\ Net\ Salvage}{Average\ Life} + \frac{Computed\ Reserve - Recorded\ Reserve}{Remaining\ Life}$$

where Average Net Salvage, Computed Reserve and Recorded Reserve are expressed in percent.

## **UNION GAS LIMITED**

Component Accrual Rates
Current: VG Procedure / RL Technique Proposed: VG Procedure / RL Technique

|  | Curre          | nt (at 12/31/201 | 10)            | Propos              | sed (at 12/31/20           | 10)            |
|--|----------------|------------------|----------------|---------------------|----------------------------|----------------|
| Account Description                                      |                | Net Salvage      | Total          |                     | Net Salvage                | Total          |
| A  | В              | С                | D=B+C          | E                   | F                          | G=E+F          |
| INTANGIBLE PLANT   |                |                  |                |                     |                            |                |
| 40100 Franchises and Consents                            | 5.05%          |                  | 5.05%          | 5.45%               |                            | 5.45%          |
| Total Intangible Plant                                   | 5.05%          |                  | 5.05%          | 5.05%               | 0.40%                      | 5.45%          |
| LOCAL STORAGE PLANT                                      |                |                  |                |                     |                            |                |
| 44200 Structures and Improvements                        | 2.35%          | 0.95%            | 3.30%          | 2.85%               |                            | 2.85%          |
| 44301 Gas Holders - Storage Tank                         | 2.31%          | 0.37%            | 2.68%          | 2.53%               | 0.01%                      | 2.54%          |
| 44302 Gas Holders - Equipment                            | 2.49%          | 1.19%            | 3.68%          | 3.52%               | 0.02%                      | 3.54%          |
| Total Local Storage Plant                                | 2.42%          | 0.93%            | 3.35%          | 3.34%               | -0.18%                     | 3.16%          |
| UNDERGROUND STORAGE PLANT                                |                |                  |                |                     |                            |                |
| 45100 Land Rights  | 2.23%          |                  | 2.23%          | 2.10%               |                            | 2.10%          |
| 45200 Structures and Improvements                        | 2.23%          | 0.12%            | 2.35%          | 2.16%               | 0.24%                      | 2.50%          |
| 45300 Wells and Lines                                    | 2.21%          | 0.44%            | 2.65%          | 2.05%               | 0.43%                      | 2.48%          |
| 45600 Compressor Equipment                               | 2.91%          | 0.29%            | 3.20%          | 2.56%               | 0.12%                      | 2.68%          |
| 45700 Measuring and Regulating Equipment                 | 3.95%          | 0.35%            | 4.30%          | 2.86%               | 0.25%                      | 3.11%          |
| Total Underground Storage Plant                          | 2.76%          | 0.28%            | 3.04%          | 2.81%               | -0.18%                     | 2.63%          |
| TRANSMISSION PLANT                                       |                |                  |                |                     |                            |                |
| 46100 Land Rights  | 2.01%          | -0.02%           | 1.99%          | 1.76%               |                            | 1.76%          |
| 46200 Structures and Improvements                        | 2.54%          | 0.12%            | 2.66%          | 1.84%               | 0.19%                      | 2.03%          |
| 46501 Mains - Metallic                                   | 2.02%          | 0.35%            | 2.37%          | 1.72%               | 0.26%                      | 1.98%          |
| 46600 Compressor Equipment                               | 3.36%          | 0.16%            | 3.52%          | 3.12%               | 0.11%                      | 3.23%          |
| 46700 Measuring and Regulating Equipment                 | 3.36%          | 0.26%            | 3.62%          | 2.36%               | 0.24%                      | 2.60%          |
| Total Transmission Plant                                 | 2.41%          | 0.29%            | 2.70%          | 2.44%               | -0.17%                     | 2.27%          |
| DISTRIBUTION PLANT                                       |                |                  |                |                     |                            |                |
| Northern and Eastern Operations                          |                |                  |                |                     |                            |                |
| 47100 Land Rights  | 1.68%          |                  | 1.68%          | 1.71%               |                            | 1.71%          |
| 47200 Structures and Improvements                        | 2.86%          | 0.27%            | 3.13%          | 2.46%               | -0.05%                     | 2.41%          |
| 47301 Services - Metallic                                | 2.25%          | 1.33%            | 3.58%          | 1.99%               | 1.23%                      | 3.22%          |
| 47302 Services - Plastic                                 | 1.83%          | 1.36%            | 3.19%          | 1.85%               | 0.75%                      | 2.60%          |
| 47400 Regulators   | 3.35%          | -0.01%           | 3.34%          | ← 20 Year A         | Amortization $\rightarrow$ | 3.72%          |
| 47401 Regulator and Meter Installations                  | 3.34%          | 0.16%            | 3.50%          | 2.92% .             |                            | 2.92%          |
| 47501 Mains - Metallic                                   | 2.02%          | 0.50%            | 2.52%          | 1.89%               | 1.13%                      | 3.02%          |
| 47502 Mains - Plastic                                    | 1.68%          | 0.67%            | 2.35%          | 1.70%               | 0.68%                      | 2.38%          |
| 47700 Measuring and Regulating Equipment                 | 3.59%          | 1.03%            | 4.62%          | 2.51%               | 1.26%                      | 3.77%          |
| 47800 Meters   | 3.74%          | -0.07%           | 3.67%          | 4.05%               | -0.02%                     | 4.03%          |
| Total Northern and Eastern Operations                    | 2.22%          | 0.81%            | 3.03%          | 2.20%               | 0.69%                      | 2.89%          |
| Southern Operations                                      |                |                  |                |                     |                            |                |
| 47100 Land Rights  | 1.67%          |                  | 1.67%          | 1.65%               |                            | 1.65%          |
| 47200 Structures and Improvements                        | 2.85%          | 0.06%            | 2.91%          | 2.31%               | -0.09%                     | 2.22%          |
| 47301 Services - Metallic                                | 2.28%          | 1.42%            | 3.70%          | 1.79%               | 1.02%                      | 2.81%          |
| 47302 Services - Plastic                                 | 1.83%          | 1.35%            | 3.18%          | 1.80%               | 0.71%                      | 2.51%          |
| 47400 Regulators 47401 Regulator and Meter Installations | 3.33%<br>3.35% | -0.04%<br>0.16%  | 3.29%          |                     | Amortization →             | 4.08%          |
| 47501 Mains - Metallic                                   | 2.03%          | 0.15%<br>0.51%   | 3.50%<br>2.54% | 2.80%<br>1.76%      | 1 070/                     | 2.80%          |
| 47502 Mains - Plastic                                    | 1.68%          | 0.51%            | 2.35%          | 1.65%               | 1.07%<br>0.66%             | 2.83%<br>2.31% |
| 47700 Measuring and Regulating Equipment                 | 3.58%          | 1.06%            | 4.64%          | 2.42%               | 1.24%                      | 3.66%          |
| 47800 Meters   | 3.71%          | -0.01%           | 3.70%          | 3.85%               | -0.03%                     | 3.82%          |
| Total Southern Operations                                | 2.18%          | 0.78%            | 2.96%          | 2.26%               | 0.45%                      | 2.71%          |
| Total Distribution Plant                                 | 2.20%          | 0.79%            | 2.99%          | 2.24%               | 0.54%                      | 2.78%          |
| - Jan Brown addon't turit                                | 2.2070         | 0.7970           | 2.33 /0        | ۵.2 <del>4</del> /0 | 0.54 /0                    | 2.7070         |

## **UNION GAS LIMITED**

Component Accrual Rates

Current: VG Procedure / RL Technique Proposed: VG Procedure / RL Technique

|                                      | Curre       | nt (at 12/31/20           | 10)    | Propos      | ed (at 12/31/20 | 010)   |
|--------------------------------------|-------------|---------------------------|--------|-------------|-----------------|--------|
| Account Description                  | Investment  | Net Salvage               | Total  | Investment  | Net Salvage     | Total  |
| A                                    | В           | С                         | D=B+C  | E           | F               | G≃E+F  |
| GENERAL PLANT                        |             |                           |        |             |                 |        |
| Depreciable                          |             |                           |        |             |                 |        |
| 48200 Structures and Improvements    | 2.62%       | -0.50%                    | 2.12%  | 2.38%       | -0.46%          | 1.92%  |
| 48400 Transportation Equipment       | 14.21%      | -4.14%                    | 10.07% | 15.76%      | -2.49%          | 13.27% |
| 48500 Heavy Work Equipment           | 6.64%       | -2.09%                    | 4.55%  | 7.17%       | -0.25%          | 6.92%  |
| Total Depreciable                    | 8.28%       | -2.33%                    | 5.95%  | 7.00%       | 0.64%           | 7.64%  |
| Amortizable                          |             |                           |        |             |                 |        |
| 48310 Office Furniture and Equipment | ← 15 Year A | mortization $\rightarrow$ | 6.22%  | ← 15 Year A | mortization →   | 6.22%  |
| 48320 Office Equipment - Computers   | ← 4 Year A  | mortization →             | 20.37% | ← 4 Year A  | mortization →   | 20.37% |
| 48601 Tools and Other Equipment      | ← 15 Year A | mortization $\rightarrow$ | 6.41%  | ← 15 Year A | mortization →   | 6.41%  |
| 48801 Communication Equipment        | ← 15 Year A | mortization →             | 5.67%  | ← 15 Year A | mortization →   | 5.67%  |
| Total Amortizable                    | 14.57%      |                           | 14.57% | 14.58%      | -0.01%          | 14.57% |
| Total General Plant                  | 11.96%      | -0.97%                    | 10.99% | 11.43%      | 0.27%           | 11.70% |
| TOTALGAS UTILITY                     | 2.72%       | 0.54%                     | 3.26%  | 2.74%       | 0.27%           | 3.01%  |

UNION GAS LIMITED
Component Accruals
Current: VG Procedure / RL Technique
Proposed: VG Procedure / RL Technique

|  | 12/31/10         | Current       | Current 2011 Annualized Accrua | d Accrual     | Propose       | Proposed 2011 Annualized Accrual | ed Accrual    | *************************************** |             |
|--|------------------|---------------|--------------------------------|---------------|---------------|----------------------------------|---------------|---|-------------|
| Account Description                      | Investment       | Investment    | Net Salvage                    | Total         | Investment    | Net Salvage                      | Total         | ä                                       | Difference  |
| ₹  | ш                | O             | ۵                              | E=C+D         | Ľ.            | 9                                | H=F+G         |   | H-F-E       |
| INTANGIBLE PLANT                         |                  |               |                                |               |               | •                                |               | •                                       |             |
| 40100 Franchises and Consents            | \$1,218,909      | \$61,555      |                                | \$61,555      |               | ·<br>•                           |               | 9                                       | 4,876       |
| Total Intangible Plant                   | \$1,218,909      | \$61,555      |                                | \$61,555      | \$ 66,431     | ·                                | \$ 66,431     | <del>9</del>                            | 4,8/6       |
| LOCAL STORAGE PLANT                      |                  |               |                                |               |               |                                  |               |   |             |
| 44200 Structures and Improvements        | \$ 2,674,066     | \$ 62,841     | \$ 25,404                      | \$ 88,245     | \$ 76,211     | ۰<br>ج                           | \$ 76,211     | ↔                                       | (12,034)    |
| 44301 Gas Holders - Storage Tank         | 4,574,078        | 105,661       | 16,924                         | 122,585       | 115,724       | 457                              | 116,181       |   | (6,404)     |
| 44302 Gas Holders - Equipment            | 9,772,265        | 243,329       | 116,290                        | 359,619       | 343,984       | 1,954                            | 345,938       |   | (13,681)    |
| Total Local Storage Plant                | \$ 17,020,409    | \$ 411,831    | \$ 158,618                     | \$ 570,449    | \$ 535,919    | \$ 2,411                         | \$ 538,330    | €                                       | (32,119)    |
| UNDERGROUND STORAGE PLANT                |                  |               |                                |               |               |                                  |               |   |             |
| 45100 Land Rights                        | \$ 32,062,296    | \$ 714,989    | '<br>↔                         | \$ 714,989    | \$ 673,308    | €                                | \$ 673,308    | 69                                      | (41,681)    |
| 45200 Structures and Improvements        | 55,119,051       | 1,229,155     | 66,143                         | 1,295,298     | 1,245,691     | 132,286                          | 1,377,977     |   | 82,679      |
| 45300 Wells and Lines                    | 87,601,565       | 1,935,995     | 385,447                        | 2,321,442     | 1,795,832     | 376,687                          | 2,172,519     |   | (148,923)   |
| 45600 Compressor Equipment               | 214,182,254      | 6,232,704     | 621,129                        | 6,853,833     | 5,483,066     | 257,019                          | 5,740,085     | ٺ                                       | (1,113,748) |
| 45700 Measuring and Regulating Equipment | 51,444,990       | 2,032,077     | 180,057                        | 2,212,134     | 1,471,327     | 128,612                          | 1,599,939     |   | (612, 195)  |
| Total Underground Storage Plant          | \$ 440,410,156   | \$ 12,144,920 | \$ 1,252,776                   | \$ 13,397,696 | \$ 10,669,224 | \$ 894,604                       | \$ 11,563,828 | \$                                      | (1,833,868) |
| TRANSMISSION PLANT                       |                  |               |                                |               |               |                                  |               |   |             |
| 46100 Land Rights                        | \$ 37,709,004    | \$ 757,951    | \$ (7,542)                     | \$ 750,409    | \$ 663,678    | ا<br>ج                           | \$ 663,678    | <del>s</del>                            | (86,731)    |
| 46200 Structures and Improvements        | 53,543,879       | 1,360,015     | 64,253                         | 1,424,268     | 985,207       | 101,733                          | 1,086,940     |   | (337,328)   |
| 46501 Mains - Metallic                   | 1,041,972,208    | 21,047,839    | 3,646,903                      | 24,694,742    | 17,921,922    | 2,709,128                        | 20,631,050    | ৼ                                       | (4,063,692) |
| 46600 Compressor Equipment               | 300,909,097      | 10,110,546    | 481,455                        | 10,592,001    | 9,388,364     | 331,000                          | 9,719,364     |   | (872,637)   |
| 46700 Measuring and Regulating Equipment | 142,620,842      | 4,792,060     | 370,814                        | 5,162,874     | 3,365,852     | 342,290                          | 3,708,142     | ٦                                       | 1,454,732)  |
| Total Transmission Plant                 | \$ 1,576,755,030 | \$ 38,068,411 | \$ 4,555,883                   | \$ 42,624,294 | \$ 32,325,023 | \$ 3,484,151                     | \$ 35,809,174 | 9)<br>\$                                | (6,815,120) |
| DISTRIBUTION PLANT                       |                  |               |                                |               |               |                                  |               |   |             |
| Northern and Eastern Operations          |                  |               | ,                              |               |               | ,                                |               | ,                                       |             |
| 47100 Land Rights                        | \$ 9,011,143     | \$ 151,387    | •                              | \$ 151,387    | \$ 154,091    | ·<br>•>                          | \$ 154,091    | ₩                                       | 2,704       |
| 47200 Structures and Improvements        | 61,811,428       | 1,767,807     | 166,891                        | 1,934,698     | 1,520,561     | (30,906)                         | 1,489,655     |   | (445,043)   |
| 47301 Services - Metallic                | 92,761,004       | 2,087,123     | 1,233,721                      | 3,320,844     | 1,845,944     | 1,140,960                        | 2,986,904     |   | (333,940)   |
| 47302 Services - Plastic                 | 354,120,371      | 6,480,403     | 4,816,037                      | 11,296,440    | 6,551,227     | 2,655,903                        | 9,207,130     | ٣                                       | (2,089,310) |
| 47400 Regulators                         | 27,055,553       | 906,361       | (2,706)                        | 903,655       | 1,025,405     | (18,283)                         | 1,007,122     |   | 103,467     |
| 47401 Regulator and Meter Installations  | 29,092,211       | 971,680       | 46,548                         | 1,018,228     | 849,493       |                                  | 849,493       |   | (168,735)   |
| 47501 Mains - Metallic                   | 351,222,754      | 7,094,700     | 1,756,114                      | 8,850,814     | 6,638,110     | 3,968,817                        | 10,606,927    | •                                       | 1,756,113   |
| 47502 Mains - Plastic                    | 201,072,312      | 3,378,015     | 1,347,184                      | 4,725,199     | 3,418,229     | 1,367,292                        | 4,785,521     |   | 60,322      |
| 47700 Measuring and Regulating Equipment | 103,778,777      | 3,725,658     | 1,068,921                      | 4,794,579     | 2,604,847     | 1,307,613                        | 3,912,460     |   | (882,119)   |
| 47800 Meters                             | 52,403,372       | - 1           | (30,082)                       |               | - 1           | (10,481)                         | - 1           | -                                       | 188,652     |
| Total Northern and Eastern Operations    | \$ 1,282,328,925 | \$ 28,523,020 | \$10,396,028                   | \$ 38,919,048 | \$ 26,730,244 | \$ 10,380,915                    | \$ 37,111,159 | ÷>                                      | (1,807,889) |

UNION GAS LIMITED
Component Accruals
Current: VG Procedure / RL Technique
Proposed: VG Procedure / RL Technique

|   | 12/31/10         | Curren        | Current 2011 Annualized Accrua | d Accrual      | Proposed      | Proposed 2011 Annualized Accrua    | d Accrual     |               |                 |
|---|------------------|---------------|--------------------------------|----------------|---------------|------------------------------------|---------------|---------------|-----------------|
| Account Description                           | Investment       | Investment    | Net Salvage                    | Total          | Investment    | Net Salvage                        | Total         |               | Difference      |
| A   | æ                | υ             | 0                              | E=C+D          | 4             | 5                                  | H=F+G         |               | FFE             |
| Southern Operations                           |                  |               |                                |                |               |                                    |               |               |                 |
| 47100 Land Rights                             | \$ 5,494,304     | \$ 91,755     | ı<br>₩                         | \$ 91,755      | \$ 90,656     | ·<br>\$                            | \$ 90,656     | ↔             | (1,099)         |
| 47200 Structures and Improvements             | 101,589,573      | 2,895,303     | 60,954                         | 2,956,257      | 2,346,719     | (91,431)                           | 2,255,288     |               | (200,969)       |
| 47301 Services - Metallic                     | 109,632,954      | 2,499,631     | 1,556,788                      | 4,056,419      | 1,962,430     | 1,118,256                          | 3,080,686     |               | (975,733)       |
| 47302 Services - Plastic                      | 741,618,024      | 13,571,610    | 10,011,843                     | 23,583,453     | 13,349,124    | 5,265,488                          | 18,614,612    |               | (4,968,841)     |
| 47400 Regulators                              | 70,083,173       | 2,333,770     | (28,033)                       | 2,305,737      | 2,929,477     | (66,752)                           | 2,862,725     |               | 556,988         |
| 47401 Regulator and Meter Installations       | 67,553,639       | 2,263,047     | 101,330                        | 2,364,377      | 1,891,502     |                                    | 1,891,502     |               | (472,875)       |
| 47501 Mains - Metallic                        | 399,123,055      | 8,102,198     | 2,035,528                      | 10,137,726     | 7,024,566     | 4,270,617                          | 11,295,183    |               | 1,157,457       |
| 47502 Mains - Plastic                         | 502,504,563      | 8,442,077     | 3,366,781                      | 11,808,858     | 8,291,325     | 3,316,530                          | 11,607,855    |               | (201,003)       |
| 47700 Measuring and Regulating Equipment      | 29,226,321       | 1,046,302     | 309,799                        | 1,356,101      | 707,277       | 362,406                            | 1,069,683     |               | (286,418)       |
| 47800 Meters                                  | 191,615,166      | 7,108,923     | (19,162)                       | 7,089,761      | 7,377,184     | (57,485)                           | 7,319,699     |               | 229,938         |
| Total Southern Operations                     | \$ 2,218,440,772 | \$ 48,354,616 | \$17,395,828                   | \$ 65,750,444  | \$ 45,970,260 | \$ 14,117,629                      | \$ 60,087,889 | ↔             | (5,662,555)     |
| Total Distribution Plant                      | \$ 3,500,769,697 | \$ 76,877,636 | \$27,791,856                   | \$ 104,669,492 | \$ 72,700,504 | \$ 24,498,544                      | \$ 97,199,048 | €9            | (7,470,444)     |
| GENERAL PLANT<br>Depreciable                  |                  |               |                                |                |               |                                    |               |               |                 |
| 48200 Structures and Improvements             | \$ 41,903,606    | \$ 1,097,874  | \$ (209,518)                   | \$ 888,356     | \$ 997,306    | \$ (192,757)                       | \$ 804,549    | <del>69</del> | (83,807)        |
| 48400 Transportation Equipment                | 44,635,164       | 6,342,657     | (1,847,896)                    | 4,494,761      | 7,034,502     | (1,111,416)                        | 5,923,086     |               | 1,428,325       |
| 40300 neavy work Equipment  Total Depreciable | \$ 103,095,676   | \$ 8,539,910  | \$ (2,403,453)                 | \$ 6,136,457   | \$ 9,218,938  | (41,392 <u>)</u><br>\$ (1,345,565) | \$ 7,873,373  | es            | 1,736,916       |
| Amortizable                                   |                  |               |                                |                |               |                                    |               |               |                 |
| 48310 Office Furniture and Equipment          | \$ 11,113,877    | \$ 691,104    | ٠<br>ج                         | \$ 691,104     | \$ 691,104    | ·<br>\$                            | \$ 691,104    | ↔             | •               |
| 48320 Office Equipment - Computers            | 86,088,725       | 17,536,122    |                                | 17,536,122     | 17,536,122    |                                    | 17,536,122    |               |                 |
| 48601 Tools and Other Equipment               | 31,739,914       | 2,033,215     |                                | 2,033,215      | 2,033,215     |                                    | 2,033,215     |               |                 |
| 48801 Communication Equipment                 | 16,483,099       | - 1           |                                | 935,120        | - 1           |                                    | - 1           |               | Ī               |
| Total Amortizable                             | \$ 145,425,615   | \$ 21,195,561 | ·<br>&                         | \$ 21,195,561  | \$ 21,195,561 | '<br><del>У</del>                  | \$ 21,195,561 | ↔             | 1               |
| Total General Plant                           | \$ 248,521,291   | \$ 29,735,471 | \$ (2,403,453)                 | \$ 27,332,018  | \$ 30,414,499 | \$ (1,345,565)                     | \$ 29,068,934 | €             | 1,736,916       |
| TOTALGAS UTILITY                              | \$ 5,784,695,492 | \$157,299,824 | \$31,355,680                   | \$ 188,655,504 | \$146,711,600 | \$ 27,534,145                      | \$174,245,745 | \$            | \$ (14,409,759) |

UNION GAS LIMITED
Depreciation Reserve Summary
Vintage Group Procedure
December 31, 2010

|  |     | Plant            |              | Recorded Reserve | erve    |   | Computed Reserve | serve  |     | Redistributed Reserve | serve  |
|--|-----|------------------|--------------|------------------|---------|---|------------------|--------|-----|-----------------------|--------|
| Account Description                      |     | Investment       |              | Amount           | Ratio   |   | Amount           | Ratio  |     | Amount                | Ratio  |
| ¥  |     | В                |              | ņ                | D=C/B   |   | E                | F=E/B  |     | 9                     | H=G/B  |
| INTANGIBLE PLANT                         | •   |                  | ,            |                  | ;       | , | 1                |        | ,   |                       |        |
| 40100 Franchises and Consents            | છ   | 1,218,909        | မှ           | 361,860          | 29.69%  | æ | 567,005          | 46.52% | မှ  | 361,860               | 29.69% |
| Total Intangible Plant                   | ↔   | 1,218,909        | ↔            | 361,860          | 29.69%  | ↔ | 567,005          | 46.52% | ↔   | 361,860               | 29.69% |
| LOCAL STORAGE PLANT                      |     |                  |              |                  |         |   |                  |        |     |                       |        |
| 44200 Structures and Improvements        | ↔   | 2,674,066        | ᡐ            | 2,452,635        | 91.72%  | ↔ | 1,429,723        | 53.47% | ↔   | 1,593,357             | 29.59% |
| 44301 Gas Holders - Storage Tank         |     | 4,574,078        |              | 4,574,078        | 100.00% |   | 2,632,509        | 57.55% |     | 2,933,801             | 64.14% |
| 44302 Gas Holders - Equipment            |     | 9,772,265        |              | 7,957,005        | 81.42%  |   | 4,370,761        | 44.73% |     | 4,870,999             | 49.85% |
| Total Local Storage Plant                | မှာ | 17,020,409       | <del>s</del> | 14,983,718       | 88.03%  | € | 8,432,993        | 49.55% | ↔   | 9,398,157             | 55.22% |
| UNDERGROUND STORAGE PLANT                |     |                  |              |                  |         |   |                  |        |     |                       |        |
| 45100 Land Rights                        | ↔   | 32,062,296       | <del>ω</del> | 10,285,037       | 32.08%  | υ | 10,143,602       | 31.64% | ↔   | 11,304,547            | 35.26% |
| 45200 Structures and Improvements        |     | 55,119,051       |              | 23,311,865       | 42.29%  |   | 25,146,759       | 45.62% |     | 28,024,828            | 50.84% |
| 45300 Wells and Lines                    |     | 87,601,565       |              | 35,711,229       | 40.77%  |   | 38,210,255       | 43.62% |     | 42,583,453            | 48.61% |
| 45600 Compressor Equipment               |     | 214,182,254      |              | 109,328,078      | 51.04%  |   | 95,567,655       | 44.62% |     | 106,505,457           | 49.73% |
| 45700 Measuring and Regulating Equipment |     | 51,444,990       |              | 35,294,747       | 68.61%  |   | 27,904,535       | 54.24% |     | 31,098,233            | 60.45% |
| Total Underground Storage Plant          | ક્ક | 440,410,156      | မှာ          | 213,930,956      | 48.58%  | ↔ | 196,972,806      | 44.72% | မှာ | 219,516,518           | 49.84% |
| TRANSMISSION PLANT                       |     |                  |              | ٠                |         |   |                  |        |     |                       |        |
| 46100 Land Rights                        | ↔   | 37,709,004       | မှာ          | 8,597,685        | 22.80%  | ↔ | 7,685,781        | 20.38% | ↔   | 8,678,444             | 23.01% |
| 46200 Structures and Improvements        |     | 53,543,879       |              | 26,092,822       | 48.73%  |   | 22,193,777       | 41.45% |     | 25,060,233            | 46.80% |
| 46501 Mains - Metallic                   | _   | ,041,972,208     |              | 393,578,357      | 37.77%  |   | 342,145,062      | 32.84% |     | 386,335,086           | 37.08% |
| 46600 Compressor Equipment               |     | 300,909,097      |              | 90,361,284       | 30.03%  |   | 96,380,379       | 32.03% |     | 108,828,465           | 36.17% |
| 46700 Measuring and Regulating Equipment |     | 142,620,842      |              | 62,972,797       | 44.15%  |   | 46,672,671       | 32.73% |     | 52,700,717            | 36.95% |
| Total Transmission Plant                 | \$  | \$ 1,576,755,030 | ↔            | 581,602,944      | 36.89%  | ↔ | 515,077,669      | 32.67% | ↔   | 581,602,944           | 36.89% |
| DISTRIBUTION PLANT                       |     |                  |              |                  |         |   |                  |        |     |                       |        |
| Northern and Eastern Operations          |     |                  |              |                  |         |   |                  |        |     |                       |        |
| 47100 Land Rights                        | ↔   | 9,011,143        | υ            | 3,046,141        | 33.80%  | ↔ | 2,863,242        | 31.77% | ↔   | 2,673,340             | 29.67% |
| 47200 Structures and Improvements        |     | 61,811,428       |              | 21,395,510       | 34.61%  |   | 13,896,700       | 22.48% |     | 12,975,011            | 20.99% |
| 47301 Services - Metallic                |     | 92,761,004       |              | 61,819,635       | 66.64%  |   | 26,609,660       | 61.03% |     | 52,855,062            | 26.98% |
| 47302 Services - Plastic                 |     | 354,120,371      |              | 154,003,927      | 43.49%  |   | 122,483,288      | 34.59% |     | 114,359,665           | 32.29% |
| 47400 Regulators                         |     | 27,055,553       |              | 11,323,841       | 41.85%  |   | 16,530,848       | 61.10% |     | 16,530,848            | 61.10% |
| 47401 Regulator and Meter Installations  |     | 29,092,211       |              | 10,143,131       | 34.87%  |   | 10,235,985       | 35.18% |     | 9,557,090             | 32.85% |
| 47501 Mains - Metallic                   |     | 351,222,754      |              | 146,899,969      | 41.83%  |   | 239,955,259      | 68.32% |     | 224,040,387           | 63.79% |
|  |     |                  |              |                  |         |   |                  |        |     |                       |        |

UNION GAS LIMITED
Depreciation Reserve Summary
Vintage Group Procedure
December 31, 2010

|  | Plant            | Recorded Reserve | serve  | Comp   | Computed Reserve | erve   |   | Redistributed Reserve | serve  |
|--|------------------|------------------|--------|--|------------------|--------|---|-----------------------|--------|
| Account Description                      | Investment       | Amount           | Ratio  | Amount   | ınt              | Ratio  |   | Amount                | Ratio  |
| ¥  | <b>a</b>         | υ                | D=C/B  | ш  |                  | F=E/B  |   | O                     | H=G/B  |
| 47502 Mains - Plastic                    | 201,072,312      | 71,688,284       | 35.65% | 68,17  | 68,176,081       | 33.91% |   | 63,654,348            | 31.66% |
| 47700 Measuring and Regulating Equipment | 103,778,777      | 50,944,049       | 49.09% | 36,46  | 36,469,083       | 35.14% |   | 34,050,296            | 32.81% |
| 47800 Meters                             | 52,403,372       | 16,508,017       | 31.50% | 18,28  | 18,289,495       | 34.90% |   | 17,076,457            | 32.59% |
| Total Northern and Eastern Operations    | \$ 1,282,328,925 | \$ 547,772,503   | 42.72% | \$ 585,5(  | 585,509,642      | 45.66% | ↔ | 547,772,503           | 42.72% |
| Southern Operations                      |                  |                  |        |  |                  |        |   |                       |        |
| 47100 Land Rights                        | \$ 5,494,304     | \$ 1,165,527     | 21.21% | \$ 1,10  | 1,100,507        | 20.03% | ↔ | 1,138,636             | 20.72% |
| 47200 Structures and Improvements        | 101,589,573      | 46,066,298       | 45.35% | 31,1   | 31,116,644       | 30.63% |   | 32,194,731            | 31.69% |
| 47301 Services - Metallic                | 109,632,954      | 101,160,672      | 92.27% | 89,1   | 89,124,677       | 81.29% |   | 92,212,547            | 84.11% |
| 47302 Services - Plastic                 | 741,618,024      | 291,246,443      | 39.27% | 236,52   | 236,525,055      | 31.89% |   | 244,719,851           | 33.00% |
| 47400 Regulators                         | 70,083,173       | 26,633,162       | 38.00% | 39,8.  | 39,811,017       | 56.81% |   | 39,811,017            | 56.81% |
| 47401 Regulator and Meter Installations  | 67,553,639       | 26,719,532       | 39.55% | 21,26  | 21,266,239       | 31.48% |   | 22,003,043            | 32.57% |
| 47501 Mains - Metallic                   | 399,123,055      | 212,172,022      | 53.16% | 264,2  | 264,254,569      | 66.21% |   | 273,410,100           | 68.50% |
| 47502 Mains - Plastic                    | 502,504,563      | 156,518,147      | 31.15% | 151,72   | 151,729,785      | 30.19% |   | 156,986,711           | 31.24% |
| 47700 Measuring and Regulating Equipment | 29,226,321       | 15,364,312       | 52.57% | 10,9   | 10,911,016       | 37.33% |   | 11,289,046            | 38.63% |
| 47800 Meters                             | 191,615,166      | 60,003,808       | 31.31% | 61,16  | 61,165,077       | 31.92% |   | 63,284,240            | 33.03% |
| Total Southern Operations                | \$ 2,218,440,772 | \$ 937,049,923   | 42.24% | \$ 907,00  | 907,004,587      | 40.88% | ↔ | 937,049,923           | 42.24% |
| Total Distribution Plant                 | \$ 3,500,769,697 | \$ 1,484,822,426 | 42.41% | \$ 1,492,514,229   | 14,229           | 42.63% | ↔ | 1,484,822,426         | 42.41% |
| GENERAL PLANT                            |                  |                  |        |  |                  |        |   |                       |        |
| 48200 Structures and Improvements        | \$ 41,903,606    | \$ 18.923.317    | 45.16% | \$ 13.33   | 13.328.688       | 31.81% | G | 10.743.949            | 25.64% |
| 48400 Transportation Equipment           | Ī                | •                | 25.84% | _  | 19,718,240       | 44.18% |   | 15,894,419            | 35.61% |
| 48500 Heavy Work Equipment               | 16,556,906       | 1,017,527        | 6.15%  |  | 5,157,062        | 31.15% |   | 4,156,989             | 25.11% |
| Total Depreciable                        | \$ 103,095,676   | \$ 31,473,028    | 30.53% | \$ 38,20   | 38,203,991       | 37.06% | ↔ | 30,795,357            | 29.87% |
| Amortizable                              |                  |                  |        |  |                  | 0      | • |                       | 0      |
| 48310 Office Furniture and Equipment     | \$ 11,113,877    | \$ 5,681,529     | 51.12% | *<br>5,0,0   | 6,229,896        | 55.05% | æ | 6,229,896             | 56.06% |
| 48320 Office Equipment - Computers       | 86,088,725       | 49,191,303       | 57.14% | 4α, α  | 46,900,455       | 20.61% |   | 46,900,455            | 20.01% |
| 48601 Tools and Other Equipment          | 31,739,914       | 15,805,104       | 49.80% | 15<br>25<br>26<br>26<br>26<br>26<br>26<br>26<br>26<br>26<br>26<br>26<br>26<br>26<br>26 | 15,893,892       | 50.08% |   | 15,893,892            | 50.08% |
| 48801 Communication Equipment            |                  | 8,907,025        | 54.04% |  | 9,232,388        | 56.01% |   | 9,232,388             | 56.01% |
| Total Amortizable                        | \$ 145,425,615   | \$ 79,584,960    | 54.73% | \$ 80,26   | 80,262,631       | 55.19% | ↔ | 80,262,631            | 55.19% |
| Total General Plant                      | \$ 248,521,291   | \$ 111,057,988   | 44.69% | \$ 118,46  | 118,466,622      | 47.67% | ↔ | 111,057,988           | 44.69% |
| TOTALGAS UTILITY                         | \$ 5,784,695,492 | \$ 2,406,759,893 | 41.61% | \$ 2,332,031,324   | 31,324           | 40.31% | ₩ | 2,406,759,893         | 41.61% |

UNION GAS LIMITED
Depreciation Reserve Components
Redistributed Reserve
December 31, 2010

|  |               | Plant         |               | Investment Reserve | serve  | Z             | Net Salvage Reserve | serve  |              | Total Reserve | e      |
|--|---------------|---------------|---------------|--------------------|--------|---------------|---------------------|--------|--------------|---------------|--------|
| Account Description                      |               | Investment    |               | Amount             | Ratio  |               | Amount              | Ratio  |              | Amount        | Ratio  |
| A  |               | m             |               | ပ                  | D=C/B  |               | ш                   | F=E/B  |              | G=C+E         | H=G/B  |
| INTANGIBLE PLANT                         |               |               |               |                    |        |               |                     |        |              |               |        |
| 40100 Franchises and Consents            | S             | 1,218,909     | क             | 361,860            | 29.69% | မှ            | 1                   |        | s            | 361,860       | 29.69% |
| Total Intangible Plant                   | <del>()</del> | 1,218,909     | ↔             | 361,860            | 29.69% | <del>s</del>  | ī                   |        | ↔            | 361,860       | 29.69% |
| LOCAL STORAGE PLANT                      |               |               |               |                    |        |               |                     |        |              |               |        |
| 44200 Structures and Improvements        | ↔             | 2,674,066     | ↔             | 1,590,176          | 59.47% | ↔             | 3,180               | 0.12%  | ↔            | 1,593,357     | 59.59% |
| 44301 Gas Holders - Storage Tank         |               | 4,574,078     |               | 2,927,946          | 64.01% |               | 5,856               | 0.13%  |              | 2,933,801     | 64.14% |
| 44302 Gas Holders - Equipment            |               | 9,772,265     |               | 4,879,274          | 49.93% |               | (8,276)             | -0.08% |              | 4,870,999     | 49.85% |
| Total Local Storage Plant                | ↔             | 17,020,409    | €             | 962'266'6          | 55.21% | ક્ક           | 760                 | 0.00%  | ₩.           | 9,398,157     | 55.22% |
| UNDERGROUND STORAGE PLANT                |               |               |               |                    |        |               |                     |        |              |               |        |
| 45100 Land Rights                        | ↔             | 32,062,296    | ↔             | 11,304,547         | 35.26% | ↔             | ı                   |        | ↔            | 11,304,547    | 35.26% |
| 45200 Structures and Improvements        |               | 55,119,051    |               | 25,607,371         | 46.46% |               | 2,417,457           | 4.39%  |              | 28,024,828    | 50.84% |
| 45300 Wells and Lines                    |               | 87,601,565    |               | 35,795,372         | 40.86% |               | 6,788,081           | 7.75%  |              | 42,583,453    | 48.61% |
| 45600 Compressor Equipment               |               | 214,182,254   |               | 101,040,469        | 47.17% |               | 5,464,989           | 2.55%  |              | 106,505,457   | 49.73% |
| 45700 Measuring and Regulating Equipment |               | 51,444,990    |               | 28,004,499         | 54.44% |               | 3,093,734           | 6.01%  |              | 31,098,233    | 60.45% |
| Total Underground Storage Plant          | ↔             | 440,410,156   | ↔             | 201,752,258        | 45.81% | <del>69</del> | 17,764,260          | 4.03%  | ₩.           | 219,516,518   | 49.84% |
| TRANSMISSION PLANT                       |               |               |               |                    |        |               |                     |        |              |               |        |
| 46100 Land Rights                        | ↔             | 37,709,004    | ↔             | 8,678,444          | 23.01% | ↔             | ı                   |        | ₩            | 8,678,444     | 23.01% |
| 46200 Structures and Improvements        |               | 53,543,879    |               | 22,850,410         | 42.68% |               | 2,209,823           | 4.13%  |              | 25,060,233    | 46.80% |
| 46501 Mains - Metallic                   |               | 1,041,972,208 |               | 335,943,553        | 32.24% |               | 50,391,533          | 4.84%  |              | 386,335,086   | 37.08% |
| 46600 Compressor Equipment               |               | 300,909,097   |               | 100,686,029        | 33.46% |               | 8,142,435           | 2.71%  |              | 108,828,465   | 36.17% |
| 46700 Measuring and Regulating Equipment |               | 142,620,842   |               | 47,909,743         | 33.59% |               | 4,790,974           | 3.36%  |              | 52,700,717    | 36.95% |
| Total Transmission Plant                 | <del>()</del> | 1,576,755,030 | <del>()</del> | 516,068,178        | 32.73% | €9            | 65,534,766          | 4.16%  | €            | 581,602,944   | 36.89% |
| DISTRIBUTION PLANT                       |               |               |               |                    |        |               |                     |        |              |               |        |
| Northern and Eastern Operations          | ¥             | 0 011 143     | <del>U</del>  | 2 673 340          | 29.67% | ¥             |                     |        | <del>U</del> | 2 673 340     | 20,67% |
| 47200 Structures and Improvements        | <b>→</b>      | 61 811 428    | <b>+</b>      | 12 154 988         | 19.66% | <b>}</b>      | 820.023             | 1 33%  | <b>.</b>     | 12 975 011    | 20.02  |
| 47301 Services - Metallic                |               | 92.761.004    |               | 33,891,075         | 36.54% |               | 18.963.987          | 20.44% |              | 52.855.062    | 56.98% |
|  |               | 354,120,371   |               | 81,863,168         | 23.12% | •             | 32,496,497          | 9.18%  |              | 114,359,665   | 32.29% |
| 47400 Regulators                         |               | 27,055,553    |               | 16,530,848         | 61.10% |               |                     |        |              | 16,530,848    | 61.10% |
|  |               | 29,092,211    |               | 9,592,231          | 32.97% |               | (35,141)            | -0.12% |              | 9,557,090     | 32.85% |
| 47501 Mains - Metallic                   |               | 351,222,754   |               | 139,790,069        | 39.80% |               | 84,250,318          | 23.99% | . ,          | 224,040,387   | 63.79% |

UNION GAS LIMITED
Depreciation Reserve Components
Redistributed Reserve
December 31, 2010

|  |     | Plant         |               | Investment Reserve | serve  | Net Salvage Reserve | eserve |               | Total Reserve |        |
|--|-----|---------------|---------------|--------------------|--------|---------------------|--------|---------------|---------------|--------|
| Account Description                      |     | Investment    |               | Amount             | Ratio  | Amount              | Ratio  |               | Amount        | Ratio  |
| ¥  |     | æ             |               | U                  | D=C/B  | ш                   | F=E/B  |               | G=C+E         | H=G/B  |
| 47502 Mains - Plastic                    |     | 201,072,312   |               | 45,467,391         | 22.61% | 18,186,957          | 9.04%  |               | 63,654,348    | 31.66% |
| 47700 Measuring and Regulating Equipment |     | 103,778,777   |               | 22,798,993         | 21.97% | 11,251,303          | 10.84% |               | 34,050,296    | 32.81% |
| 47800 Meters                             | - 1 | 52,403,372    |               | 16,884,195         | 32.22% | 192,261             | 0.37%  |               | 17,076,457    | 32.59% |
| Total Northern and Eastern Operations    | ↔   | 1,282,328,925 | ₩             | 381,646,299        | 29.76% | \$ 166,126,205      | 12.96% | ↔             | 547,772,503   | 42.72% |
| Southern Operations                      |     |               |               |                    |        |                     |        |               |               |        |
| 47100 Land Rights                        | ₩   | 5,494,304     | ઝ             | 1,138,636          | 20.72% | '<br>₩              |        | ↔             | 1,138,636     | 20.72% |
|  |     | 101,589,573   |               | 29,314,529         | 28.86% | 2,880,202           | 2.84%  |               | 32,194,731    | 31.69% |
| 47301 Services - Metallic                |     | 109,632,954   |               | 56,747,151         | 51.76% | 35,465,396          | 32.35% |               | 92,212,547    | 84.11% |
| 47302 Services - Plastic                 |     | 741,618,024   |               | 173,102,150        | 23.34% | 71,617,702          | 899.6  |               | 244,719,851   | 33.00% |
| 47400 Regulators                         |     | 70,083,173    |               | 39,811,017         | 56.81% |                     |        |               | 39,811,017    | 56.81% |
| 47401 Regulator and Meter Installations  |     | 67,553,639    |               | 22,050,886         | 32.64% | (47,843)            | -0.07% |               | 22,003,043    | 32.57% |
| 47501 Mains - Metallic                   |     | 399,123,055   |               | 172,683,322        | 43.27% | 100,726,777         | 25.24% |               | 273,410,100   | 68.50% |
| 47502 Mains - Plastic                    |     | 502,504,563   |               | 112,133,365        | 22.31% | 44,853,346          | 8.93%  |               | 156,986,711   | 31.24% |
| 47700 Measuring and Regulating Equipment |     | 29,226,321    |               | 7,691,380          | 26.32% | 3,597,667           | 12.31% |               | 11,289,046    | 38.63% |
| 47800 Meters                             |     | 191,615,166   |               | 62,332,792         | 32.53% | 951,448             | 0.50%  |               | 63,284,240    | 33.03% |
| Total Southern Operations                | €9- | 2,218,440,772 | ↔             | 677,005,228        | 30.52% | \$ 260,044,695      | 11.72% | ↔             | 937,049,923   | 42.24% |
| Total Distribution Plant                 | €9  | 3,500,769,697 | €             | \$1,058,651,527    | 30.24% | \$ 426,170,899      | 12.17% | <del>`</del>  | 1,484,822,426 | 42.41% |
| GENERAL PLANT                            |     |               |               |                    |        |                     |        |               |               |        |
| Depreciable                              |     |               |               |                    |        |                     |        |               |               |        |
| 48200 Structures and Improvements        | ↔   | 41,903,606    | ↔             | 13,681,141         | 32.65% | \$ (2,937,192)      | -7.01% | ↔             | 10,743,949    | 25.64% |
| 48400 Transportation Equipment           |     | 44,635,164    |               | 15,799,426         | 35.40% | 94,993              | 0.21%  |               | 15,894,419    | 35.61% |
| 48500 Heavy Work Equipment               |     | 16,556,906    |               | 3,703,799          | 22.37% |                     | 2.74%  |               | 4,156,989     | 25.11% |
| Total Depreciable                        | ઝ   | 103,095,676   | ↔             | 33,184,365         | 32.19% | \$ (2,389,009)      | -2.32% | ↔             | 30,795,357    | 29.87% |
| Amortizable                              |     |               |               |                    |        | ,                   |        |               |               |        |
| 48310 Office Furniture and Equipment     | ₩   | 11,113,877    | <del>69</del> | 6,229,896          | 26.06% | ۰<br><del>ده</del>  |        | <del>()</del> | 6,229,896     | 26.06% |
| 48320 Office Equipment - Computers       |     | 86,088,725    |               | 48,906,455         | 56.81% |                     |        |               | 48,906,455    | 56.81% |
| 48601 Tools and Other Equipment          |     | 31,739,914    |               | 15,893,892         | 50.08% |                     |        |               | 15,893,892    | 50.08% |
| 48801 Communication Equipment            |     | 16,483,099    |               | 9,232,388          | 56.01% | -                   |        |               | 9,232,388     | 56.01% |
| Total Amortizable                        | ↔   | 145,425,615   | ↔             | 80,262,631         | 55.19% | ı<br><del>⇔</del>   |        | ↔             | 80,262,631    | 55.19% |
| Total General Plant                      | ₩   | 248,521,291   | ↔             | 113,446,996        | 45.65% | \$ (2,389,009)      | -0.96% | ₩             | 111,057,988   | 44.69% |
| TOTALGAS UTILITY                         | €9  | 5,784,695,492 | \$            | \$1,899,678,216    | 32.84% | \$ 507,081,677      | 8.77%  | 8             | 2,406,759,893 | 41.61% |
|  |     |               |               |                    |        |                     |        |               |               |        |

UNION GAS LIMITED Average Net Salvage

|  |                  |          | fant Inv    | Plant Investment |              |                  | Salvage Rate | e Rate |              |             | ž             | Net Salvage   |                |               | Average |
|--|------------------|----------|-------------|------------------|--------------|------------------|--------------|--------|--------------|-------------|---------------|---------------|----------------|---------------|---------|
| Account Description                      | Additions        | s        | Retirements | nents            | Š            | Survivors        | Realized     | Future | Rea          | Realized    | _             | Future        |                | Total         | Rate    |
| A  | m                |          | U           |                  |              | D=8-C            | ш            | F      | 0=E*C        | ္           |               | H=F*D         |                | H+5=1         | J=I/B   |
| INTANGIBLE PLANT                         |                  |          |             |                  |              |                  |              |        |              |             |               |               |                |               |         |
| 40100 Franchises and Consents            |                  | ,<br>    |             | 762,675          | <del>S</del> | 1,218,909        |              |        | εs           | ا'          | 69            | 1             | υ              | 1             |         |
| Total Intangible Plant                   | \$ 1,981,584     |          | \$          | 762,675          | ↔            | 1,218,909        |              |        | ↔            | •           | ↔             | •             | ↔              | •             |         |
| LOCAL STORAGE PLANT                      |                  |          |             |                  |              |                  |              |        |              |             |               |               |                |               |         |
| 44200 Structures and Improvements        | \$ 2,674,066     |          | €9          | •                | ↔            | 2,674,066        |              | -0.2%  | ↔            | ı           | 69            | (5,348)       | <del>(/)</del> | (5,348)       | -0.2%   |
| 44301 Gas Holders - Storage Tank         | 4,754,078        | 920,     | =           | 180,000          |              | 4,574,078        |              | -0.2%  |              |             |               | (9,148)       |                | (9,148)       | -0.2%   |
| 44302 Gas Holders - Equipment            | 10,066,067       | ,067     | 55          | 293,802          |              | 9,772,265        | -10.0%       | -0.2%  | ٠            | (29,380)    |               | (19,545)      |                | (48,925)      | -0.5%   |
| Total Local Storage Plant                | \$ 17,494,211    | l<br>I   | \$ 4        | 473,802          | €9           | 17,020,409       | -6.2%        | -0.2%  | 8            | (29,380)    | <del>\$</del> | (34,041)      | 8              | (63,421)      | -0.4%   |
| UNDERGROUND STORAGE PLANT                |                  |          |             |                  |              |                  |              |        |              |             |               |               |                |               |         |
| 45100 Land Rights                        | \$ 32,062,296    |          | €           | 1                | 69           | 32,062,296       |              |        | ↔            | ,           | ↔             | 1             | ↔              | 1             |         |
| 45200 Structures and Improvements        | 55,762,710       | ,710     | Ò           | 643,659          |              | 55,119,051       | -43.9%       | -10.0% | Ö.           | 282,566)    | Ū             | (5,511,905)   |                | (5,794,471)   | -10.4%  |
| 45300 Wells and Lines                    | 88,526,941       | 941      | 6           | 925,376          | _            | 87,601,565       | -74.6%       | -20.0% | . <u>(ö</u>  | (066,069)   | Ξ             | (17,520,313)  |                | (18,210,643)  | -20.6%  |
| 45600 Compressor Equipment               | 234,191,224      | ,224     | 20,00       | 20,008,970       | 7            | 214,182,254      | -1.3%        | -5.0%  | . Ñ          | 260,117)    | Ξ             | (10,709,113)  |                | (10,969,229)  | -4.7%   |
| 45700 Measuring and Regulating Equipment | 53,070,424       | 424      | 1,6         | 1,625,434        | -,           | 51,444,990       | 21.1%        | -10.0% | , rò         | 342,967     | ,             | (5,144,499)   |                | (4,801,532)   | -9.0%   |
| Total Underground Storage Plant          | \$ 463,613,595   | !<br>[   | \$ 23,20    | 23,203,439       | \$ 4         | 440,410,156      | -3.8%        | -8.8%  | \$           | (890,047)   | e)<br>\$      | 38,885,830)   | ₩              | (39,775,877)  | -8.6%   |
| TRANSMISSION PLANT                       |                  |          |             |                  |              |                  |              |        |              |             |               |               |                |               |         |
| 46100 Land Rights                        | \$ 38,160,931    |          | \$ 45       | 451,927          | €9           | 37,709,004       |              |        | 69           | •           | ₩             | 1             | ↔              | :             |         |
| 46200 Structures and Improvements        | 54,109,649       | 649      | 26          | 565,770          | •,           | 53,543,879       | -25.7%       | -10.0% | È            | (145,403)   | Ŭ             | (5,354,388)   |                | (5,499,791)   | -10.2%  |
| 46501 Mains - Metallic                   | 1,059,797,242    | 242      | 17.8        | 825,034          | Ļ,           | 041,972,208      | -15.9%       | -15.0% | (2,8         | (2,834,180) | (15           | 156,295,831)  |                | (159,130,012) | -15.0%  |
| 46600 Compressor Equipment               | 315,158,985      | 985      | 14.2        | 14,249,888       | ĕ            | 300,909,097      | 24.8%        | -5.0%  | 3,5          | 3,533,972   | Ξ             | (15,045,455)  |                | (11,511,483)  | -3.7%   |
| 46700 Measuring and Regulating Equipment | 149,158,521      | 521      | 6,5         | 6,537,679        | 1,           | 142,620,842      | -10.2%       | -10.0% | 9)           | 666,843)    | Ξ             | 14,262,084)   |                | (14,928,927)  | -10.0%  |
| Total Transmission Plant                 | \$ 1,616,385,328 | !<br>!   | \$ 39,63    | 39,630,298       | \$ 1,57      | \$ 1,576,755,030 | -0.3%        | -12.1% | \$           | (112,454)   | \$ (19        | (190,957,758) | €9             | (191,070,212) | -11.8%  |
| DISTRIBUTION PLANT                       |                  |          |             |                  |              |                  |              |        |              |             |               |               |                |               |         |
| Northern and Eastern Operations          |                  |          |             |                  |              |                  |              |        |              |             |               |               |                |               |         |
| 47100 Land Rights                        | \$ 9,011,143     | <u> </u> | ₩           | ,                | €9           | 9,011,143        |              |        | 69           | ,           | €9            | •             | 69             | •             |         |
| 47200 Structures and Improvements        | 67,523,44        | 441      | 5,7         | 5,712,013        | v            | 61,811,428       | 21.7%        |        | 1,2          | 1,239,507   |               |               |                | 1,239,507     | 1.8%    |
| 47301 Services - Metallic                | 96,125,200       | 200      | 3,36        | 3,364,196        | υ,           | 92,761,004       | -134.5%      | -60.0% | (4,5         | (4,524,844) | (5            | (55,656,602)  |                | (60,181,446)  | -62.6%  |
| 47302 Services - Plastic                 | 356,436,043      | 043      | 2,3         | 2,315,672        | స            | 354,120,371      | -52.7%       | -40.0% | (1,2         | (1,220,359) | (14           | (141,648,148) | _              | (142,868,508) | -40.1%  |
| 47400 Regulators                         | 27,911,620       | 620      | 86          | 856,067          | .,           | 27,055,553       |              |        |              |             |               |               |                |               |         |
| 47401 Regulator and Meter Installations  | 30,022,678       | 678      | 8           | 930,467          | .,           | 29,092,211       | -5.9%        |        | **           | (54,898)    |               |               |                | (54,898)      | -0.2%   |
| 47501 Mains - Metallic                   | 356,737,730      | 730      | 5,51        | 514,976          | స            | 351,222,754      | -44.7%       | -60.0% | (2,46        | (2,465,194) | (2            | (210,733,652) | Ī              | (213,198,847) | -59.8%  |
| 47502 Mains - Plastic                    | 201,527,486      | 486      | 45          | 455,174          | ×            | 201,072,312      | -40.4%       | -40.0% | Ë            | (183,890)   | 8)            | (80,428,925)  |                | (80,612,815)  | -40.0%  |
| 47700 Measuring and Regulating Equipment | 107,761,746      | 746      | 36'8        | 3,982,969        | =            | 03,778,777       | -56.3%       | -50.0% | (2,2         | (2,242,412) | (2            | (51,889,389)  |                | (54,131,800)  | -50.2%  |
| 47800 Meters                             | 69,818,220       | ا<br>220 | 17,41       | ,414,848         |              | 52,403,372       | 2.6%         |        |              | 452,786     |               |               | İ              | 452,786       | %9.0    |
| Total Northern and Eastern Operations    | \$ 1,322,875,307 | 307 \$   |             | 40,546,382       | \$ 1,28      | ,282,328,925     | -22.2%       | -42.1% | \$ (8)<br>\$ | (8,999,304) | \$ (54        | (540,356,717) | €9             | (549,356,020) | -41.5%  |

UNION GAS LIMITED Average Net Salvage

|  |                  | Plant Investment |                  | Calvado Dato | o Doto |                  | N N      | Mot Calvaga        |         |                    | V. 1020 |
|--|------------------|------------------|------------------|--------------|--------|------------------|----------|--------------------|---------|--------------------|---------|
|  |                  | TO THE WAY       |                  | Caivag       | ומוכ   |                  | 2        | . Salvaye          |         |                    | אמומלום |
| Account Description                      | Additions        | Retirements      | Survivors        | Realized     | Future | Realized         | ш        | Future             |         | Total              | Rate    |
| A  | æ                | υ                | D=B-C            | ш            | Ŀ      | G=E•C            | _        | H=F•D              |         | H+S+H              | J=I/B   |
| Southern Operations                      |                  |                  |                  |              |        |                  |          |                    |         |                    |         |
| 47100 Land Rights                        | \$ 5,494,304     | •                | \$ 5,494,304     |              |        | ·<br>•           | 69       | •                  | 69      | İ                  |         |
| 47200 Structures and Improvements        | 119,052,665      | 17,463,092       | 101,589,573      | 25.8%        |        | 4,505,478        |          |                    |         | 4,505,478          | 3.8%    |
| 47301 Services - Metallic                | 123,937,007      | 14,304,053       | 109,632,954      | -38.0%       | -60.0% | (5,435,540)      | 9        | (65,779,772)       |         | (71,215,313)       | -57.5%  |
| 47302 Services - Plastic                 | 755,754,308      | 14,136,284       | 741,618,024      | -19.5%       | -40.0% | (2,756,575)      | (2)      | 296,647,210)       | ت       | (299,403,785)      | -39.6%  |
| 47400 Regulators                         | 75,400,868       | 5,317,695        | 70,083,173       |              |        |                  |          | •                  |         |                    |         |
| 47401 Regulator and Meter Installations  | 72,104,842       | 4,551,203        | 67,553,639       | -1.3%        |        | (59,166)         |          |                    |         | (59,166)           | -0.1%   |
| 47501 Mains - Metallic                   | 411,129,872      | 12,006,817       | 399,123,055      | -100.5%      | -60.0% | (12,066,851)     | (23      | (239,473,833)      | ٠       | (251,540,684)      | -61.2%  |
| 47502 Mains - Plastic                    | 506,075,977      | 3,571,414        | 502,504,563      | -39.4%       | -40.0% | (1,407,137)      | (20      | (201,001,825)      | . ::    | (202,408,962)      | -40.0%  |
| 47700 Measuring and Regulating Equipment | 31,231,903       | 2,005,582        | 29,226,321       | -66.6%       | -50.0% | (1,335,718)      | Ξ        | (14,613,161)       |         | (15,948,878)       | -51.1%  |
| 47800 Meters                             | 238,983,324      | 47,368,158       | 191,615,166      | 3.6%         |        | 1,705,254        |          |                    |         | 1,705,254          | 0.7%    |
| Total Southern Operations                | \$ 2,339,165,070 | \$ 120,724,298   | \$ 2,218,440,772 | -14.0%       | -36.9% | \$ (16,850,256)  | \$ (81   | (817,515,801)      | 8       | (834,366,056)      | -35.7%  |
| Total Distribution Plant                 | \$ 3,662,040,377 | \$ 161,270,680   | \$ 3,500,769,697 | -16.0%       | -38.8% | \$ (25,849,559)  | \$ (1,35 | \$ (1,357,872,517) | \$ (1,  | \$ (1,383,722,076) | -37.8%  |
| GENERAL PLANT                            |                  |                  |                  |              |        |                  |          |                    |         |                    |         |
| Depreciable                              | 44.000.14        |                  |                  |              | ò      | •                | •        | 1                  | e       | 000                | 0       |
| 40200 Structures and Improvements        | 1 4              | 901,202,2 ¢      | 41,903,000       | 000          | 20.02  | , 00<br>10<br>11 | A        | 6,380,721          | Ð       | 8,380,721          | 79.0%   |
| 48400   ransportation Equipment          | 119,294,853      | 74,659,689       | 44,635,164       | 23.3%        | 10.0%  | 17,395,708       |          | 4,463,516          |         | 21,859,224         | 18.3%   |
| Total Depreciable                        | \$ 190,534,199   | \$ 87,438,523    | \$ 103,095,676   | 21.3%        | 12.5%  | \$ 18,664,915    | 8        | 12.844.238         | 69      | 31.509.152         | 16.5%   |
| Amortizable                              |                  |                  |                  |              |        |                  |          |                    |         |                    |         |
| 48310 Office Furniture and Equipment     | \$ 30,194,227    | \$ 19,080,350    | \$ 11,113,877    |              |        |                  | ↔        | ٠                  | ↔       | •                  |         |
| 48320 Office Equipment - Computers       | 352,823,042      | 266,734,317      | 86,088,725       |              |        |                  |          |                    |         |                    |         |
| 48601 Tools and Other Equipment          | 47,433,687       | 15,693,773       | 31,739,914       |              |        |                  |          |                    |         |                    |         |
| 48801 Communication Equipment            | 26,347,366       | 9,864,267        | 16,483,099       |              |        |                  |          |                    |         |                    |         |
| Total Amortizable                        | \$ 456,798,322   | \$311,372,707    | \$ 145,425,615   |              |        | <del>69</del>    | ₩        |                    | ₩       |                    |         |
| Total General Plant                      | \$ 647,332,521   | \$398,811,230    | \$ 248,521,291   | 4.7%         | 5.2%   | \$ 18,664,915    | ₩        | 12,844,238         | ↔       | 31,509,152         | 4.9%    |
| TOTALGAS UTILITY                         | \$ 6,408,847,616 | \$624,152,124    | \$ 5,784,695,492 | -1.3%        | -27.2% | \$ (8,216,526)   | \$ (1,57 | \$ (1,574,905,908) | \$ (1,5 | \$ (1,583,122,434) | -24.7%  |

UNION GAS LIMITED Future Net Salvage Local Storage

|  | 12/31/10<br>Plant | Future F   | Future Retirements | Net Salva     | ide Rate |             | Future Net Salvage | ade |          | Future |
|--|-------------------|------------|--------------------|---------------|----------|-------------|--------------------|-----|----------|--------|
| Account Description                    | Investment        | Interim    | Final              | Interim Final | Final    | Interim     | Final              |     | Total    | Rate   |
| A                                      | В                 | O          | D=B-C              | ш             | ᄕ        | G=C*E       | H=D*F              |     | H+9=I    | J=1/B  |
| OCAL STORAGE PLANT                     |                   |            |                    |               |          |             |                    |     |          |        |
| 14200 Structures and Improvements \$ 2 | \$ 2,674,066      | \$ 100,145 | \$ 2,573,921       | -5.0%         | %0.0     | \$ (5,007)  | ·<br>\$            | ↔   | (5,007)  | -0.2%  |
| 14301 Gas Holders - Storage Tank       | 4,574,078         | 171,336    | 4,402,742          | -5.0%         | %0.0     | (8,567)     | 0                  |     | (8,567)  | -0.2%  |
| 14302 Gas Holders - Equipment          | 9,772,265         | 359,531    | 9,412,734          | -5.0%         | %0.0     | (17,977)    | 0                  |     | (17,977) | -0.2%  |
| Total Local Storage Plant              | \$ 17,020,409     | \$ 631,012 | \$ 16,389,397      | -5.0%         | %0.0     | \$ (31,551) | -<br>\$            | \$  | (31,551) | -0.2%  |

UNION GAS LIMITED
Current and Proposed Parameters
Vintage Group Procedure

|  |         | Cu         | Current Parameters | ameters |              |            | Propo   | osed Para    | meters | (at Dece       | Proposed Parameters (at December 31, 2010) | 010)  |
|--|---------|------------|--------------------|---------|--------------|------------|---------|--------------|--------|----------------|--|-------|
|  | P-Life/ | Curve      | NG                 | Rem.    | Avg.         | Fut        | P-Life/ | Curve        | Ŋ      | Rem.           | Avg.                                       | Fut.  |
| Account Description  | AYFR    | Shape      | ASL                | Life    | Sal.         | Sal.       | AYFR    | Shape        | ASL    | Life           | Sal.                                       | Sal.  |
| A  | В       | ပ          | ۵                  | ш       | L            | ပ          | I       | _            | ſ      | ¥              | _  | M     |
| INTANGIBLE PLANT   |         |            |                    |         |              |            |         |              |        |                |  |       |
| 40100 Franchises and Consents                                      | 20.00   | SQ         | 20.00              | 15.16   |              |            | 24.00   | SQ           | 24.12  | 12.90          |  |       |
| Total Intangible Plant   |         |            |                    |         |              |            |         |              | 24.12  | 12.90          |  |       |
| LOCAL STORAGE PLANT  |         |            |                    |         |              |            |         |              |        |                |  |       |
| 44200 Structures and Improvements                                  | 2017    | 200-SC     | 45.56              | 14.21   | -40.50       | -41.4      | 2025    | 200-SC       | 30.51  | 14.23          | -0.2                                       | -0.2  |
| 44301 Gas Holders - Storage Tank                                   | 2017    | 200-SC     | 46.39              | 14.21   | -15.90       | -18.9      | 2025    | 200-SC       | 33.41  | 14.22          | -0.2                                       | -0.2  |
| 44302 Gas Holders - Equipment                                      | 2017    | 200-SC     | 42.67              | 14.22   | -47.6        | -47.6      | 2025    | 200-SC       | 25.78  | 14.23          | -0.5                                       | -0.2  |
| Total Local Storage Plant  |         |            |                    |         |              |            |         |              | 28.20  | 14.23          | -0.4                                       |       |
| UNDERGROUND STORAGE PLANT  |         |            |                    |         |              |            |         |              |        |                |  |       |
| 45100 Land Rights  | 45.00   | 2          | 45.02              | 38.49   |              |            | 45.00   | 7            | 45.20  | 30.90          |  |       |
| 45200 Structures and Improvements                                  | 2035    | 200-SC     | 45.53              | 31.13   | -5.20        | -5.0       | 2035    | 200-SC       | 40.66  | 23.71          | -10.4                                      | -10.0 |
| 45300 Wells and Lines  | 45.00   | 7          | 45.52              | 36.43   | -20.10       | -20.0      | 45.00   | <b>L</b> 4   | 45.52  | 28.83          | -20.6                                      | -20.0 |
| 45600 Compressor Equipment   | 35.00   | R5         | 35.08              | 21.75   | -9.90        | -10.0      | 35.00   | R2.5         | 35.79  | 20.64          | 4.7  | 5.0   |
| 45700 Measuring and Regulating Equipment                           | 25.00   | R3         | 25.83              | 15.44   | -8.8<br>-    | -10.0      | 30.00   | R3           | 31.18  | 15.95          | -9.0                                       | -10.0 |
| Total Underground Storage Plant                                    |         |            |                    |         |              |            |         |              | 37.89  | 22.31          | -8.6                                       |       |
| TRANSMISSION PLANT   |         |            |                    |         |              |            |         |              |        |                |  |       |
| 46100 Land Rights  | 20.00   | R4         | 50.00              | 42.35   | 0.80         |            | 55.00   | R4           | 55.00  | 43.79          | -  |       |
| 46200 Structures and Improvements                                  | 40.00   | <b>R</b> 5 | 40.16              | 25.45   | 4.80         | -5.0       | 20.00   | R5           | 50.06  | 31.14          | -10.2                                      | -10.0 |
| 46501 Mains - Metallic   | 20.00   | <b>R</b> 4 | 50.13              | 37.44   | -17.20       | -20.0      | 55.00   | <b>%</b>     | 55.16  | 39.41          | -15.0                                      | -15.0 |
| 46600 Compressor Equipment   | 30.00   | S3         | 30.30              | 19.62   | 4.90         | -5.0       | 30.00   | S3           | 30.27  | 21.30          | -3.7                                       | -5.0  |
| 46700 Measuring and Regulating Equipment  Total Transmission Plant | 30.00   | 83         | 30.11              | 22.34   | -7.5         | -10.0      | 40.00   | S1.5         | 40.00  | 28.10<br>32.79 | -10.0                                      | -10.0 |
| DISTRIBUTION PLANT   |         |            |                    |         |              |            |         |              |        |                |  |       |
| Northern and Eastern Operations<br>47100 Land Richts               | 00.09   | 2          | 80.09              | 46.42   |              |            | 90.09   | 2            | 60.30  | 41.14          |  |       |
| 47200 Structures and Improvements                                  | 35.00   | <b>R</b>   | 35.63              | 22.29   | -9.5         | -10.0      | 40.00   | R0.5         | 41.45  | 32.72          | 1.8  |       |
| 47301 Services - Metallic  | 45.00   | <u>2</u>   | 45.01              | 30.83   | -58.9        | -60.0      | 50.00   | R1.5         | 52.49  | 31.95          | -62.6                                      | -60.0 |
| 47302 Services - Plastic   | 55.00   | 7          | 55.04              | 45.92   | -74.5        | -75.0      | 55.00   | <b>8</b> 3   | 55.09  | 41.45          | -40.1                                      | -40.0 |
|  | 30.00   | R2.5       | 30.22              | 21.30   | 0.3          |            | 20.00   | SO           | 20.00  | 10.27          |  |       |
|  | 30.00   | ડ ડ        | 30.35              | 21.41   | 4. 9<br>0. 0 | رن<br>0. ر | 35.00   | R2.5         | 35.51  | 22.97          | 0.2  | ć     |
| 4/501 Mains - Metallic   | 20.00   | <b>У</b>   | 49.98              | 37.18   | -24.6        | -25.0      | 22.00   | <del>У</del> | 22.22  | 31.87          | -58.x                                      | 0.00  |

UNION GAS LIMITED
Current and Proposed Parameters
Vintage Group Procedure

|  |         | <br>       | Current Parameters | ameters |                 |       | Propo   | Proposed Parameters (at December 31 | meters | (at Dece |          | 2010) |
|--|---------|------------|--------------------|---------|-----------------|-------|---------|-------------------------------------|--------|----------|----------|-------|
|  | P-Life/ | Curve      | NG                 | Rem.    | Avg.            | Fit   | P-Life/ | Curve                               | ΛG     | Rem.     |          | Fut.  |
| Account Description                      | AYFR    | Shape      | ASL                | Life    | Sal.            | Sal.  | AYFR    | Shape                               | ASL    | Life     | Sal.     | Sal.  |
| A  | 8       | O          | ۵                  | ш       | Н               | g     | Ŧ       | _                                   | -      | ¥        | 7.       | Σ     |
| 47502 Mains - Plastic                    | 90.00   | 7          | 60.05              | 49.67   | -39.9           | 40.0  | 90.09   | 7                                   | 60.16  | 45.59    | -40.0    | -40.0 |
| 47700 Measuring and Regulating Equipment | 28.00   | S2         | 28.22              | 19.62   | -28.7           | -30.0 | 40.00   | 7                                   | 40.63  | 31.07    | -50.2    | -50.0 |
| 47800 Meters                             | 27.00   | S1.5       | 27.21              | 17.91   | 1.9             |       | 25.00   | L1.5                                | 25.53  | 16.72    | 9.0      |       |
| Total Northern and Eastern Operations    |         |            |                    |         |                 | -<br> |         |                                     | 48.80  | 33.41    | -41.5    | -42.1 |
| Southern Operations                      |         |            |                    |         |                 |       |         |                                     |        |          |          |       |
| 47100 Land Rights                        | 90.09   | <b>L</b> 2 | 60.01              | 52.38   |                 |       | 90.09   | 7                                   | 90.09  | 48.03    |          |       |
| 47200 Structures and Improvements        | 35.00   | <b>7</b> 4 | 36.92              | 13.93   | <del>1</del> .3 | -10.0 | 40.00   | R0.5                                | 42.74  | 30.82    | 3.8      |       |
| 47301 Services - Metallic                | 45.00   | L3         | 45.26              | 22.85   | -62.3           | -60.0 | 50.00   | R1.5                                | 54.07  | 27.02    | -57.5    | -60.0 |
| 47302 Services - Plastic                 | 55.00   | 2          | 55.02              | 46.96   | -74.1           | -75.0 | 55.00   | R3                                  | 55.01  | 42.60    | -39.6    | -40.0 |
| 47400 Regulators                         | 30.00   | R2.5       | 30.41              | 21.07   | <del>1</del> .  |       | 20.00   | SQ                                  | 20.00  | 10.33    |          |       |
| 47401 Regulator and Meter Installations  | 30.00   | S1         | 30.30              | 20.40   | -4.6            | -5.0  | 35.00   | R2.5                                | 35.12  | 24.04    | -<br>0.1 |       |
| 47501 Mains - Metallic                   | 50.00   | <b>R</b> 4 | 50.26              | 31.13   | -25.0           | -25.0 | 55.00   | <b>R</b> 4                          | 55.48  | 32.28    | -61.2    | -60.0 |
| 47502 Mains - Plastic                    | 90.09   | <b>L</b> 2 | 60.03              | 51.17   | -39.9           | -40.0 | 90.09   | 2                                   | 60.09  | 47.13    | -40.0    | 40.0  |
| 47700 Measuring and Regulating Equipment | 28.00   | <b>S</b> 2 | 28.42              | 18.50   | -29.7           | -30.0 | 40.00   |                                     | 40.77  | 30.40    | -51.1    | -50.0 |
| 47800 Meters                             | 27.00   | S1.5       | 27.33              | 18.78   | 0.4             |       | 25.00   | L1.5                                | 25.54  | 17.51    | 0.7      |       |
| Total Southern Operations                |         |            |                    |         |                 |       |         |                                     | 47.02  | 33.25    | -35.7    | -42.1 |
| Total Distribution Plant                 |         |            |                    |         |                 |       |         |                                     | 47.65  | 33.31    | -37.8    | -38.8 |
| GENERAL PLANT                            |         |            |                    |         |                 |       |         |                                     |        |          |          |       |
| Depreciable                              |         |            |                    |         |                 |       |         |                                     |        |          |          |       |
| 48200 Structures and Improvements        | 2020    | 200-SC     | 39.71              | 17.09   | 18.8            | 20.0  | 2040    | 200-SC                              | 47.65  | 28.35    | 19.0     | 20.0  |
| 48400 Transportation Equipment           | 7.00    | L0.5       | 7.16               | 4.62    | 29.1            | 30.0  | 7.00    | L1.5                                | 7.31   | 4.10     | 18.3     | 10.0  |
| 48500 Heavy Work Equipment               | 15.00   | 1          | 15.28              | 10.33   | 31.6            | 30.0  | 15.00   | 7                                   | 14.99  | 10.83    | 4.7      | 9     |
| l otal Depreciable<br>Amortizablo        |         |            |                    |         |                 |       |         |                                     | 12.74  | 7.65     | 16.5     | 12.5  |
| A8310 Office Furniture and Equipment     | 15,00   | Ü          | 15.00              | 90      |                 |       | 7.00    | ç                                   | 75.00  | a<br>C   |          |       |
| 48320 Office Faujoment - Computers       | 4 00    | y 0        | 00.4               | 2.5     |                 |       | 9.29    | y (                                 | 4 00   | 1 73     |          |       |
| 48601 Tools and Other Equipment          | 15.00   | SQ         | 15.00              | 8.85    |                 |       | 15.00   | S                                   | 15.00  | 7.49     |          |       |
| 48801 Communication Equipment            | 15.00   | SQ         | 15.00              | 7.53    |                 |       | 15.00   | SQ                                  | 15.00  | 7.42     |          |       |
| Total Amortizable                        |         |            |                    |         |                 |       |         |                                     | 5.71   | 2.60     |          |       |
| Total General Plant                      |         |            |                    |         |                 |       |         |                                     | 7.40   | 3.81     | 4.9      | 5.2   |
| TOTALGAS UTILITY                         |         |            |                    |         |                 |       | -       |                                     | 37.70  | 25.83    | -24.7    | -27.2 |
|  |         |            |                    |         |                 |       |         |                                     |        |          |          |       |

## **ANALYSIS**

### INTRODUCTION

This section provides an explanation of the supporting schedules developed in the Union depreciation study to estimate appropriate projection curves, projection lives and net salvage statistics for each rate category. The form and content of the schedules developed for an account depend upon the method of analysis adopted for the category.

This section also includes an example of the supporting schedules developed for Account 47800S – Distribution Meters. Documentation for all other plant accounts is contained in the study work papers. The supporting schedules developed in the Union study include:

Schedule A – Generation Arrangement;

Schedule B – Age Distribution;

Schedule C – Plant History;

Schedule D – Actuarial Life Analysis;

Schedule E – Graphics Analysis; and

Schedule F – Historical Net Salvage Analysis.

The format and content of these schedules are briefly described below.

## SCHEDULE A - GENERATION ARRANGEMENT

The purpose of this schedule is to obtain appropriate weighted—average life statistics for a rate category. The weighted—average remaining—life is the sum of Column H divided by the sum of Column I. The weighted average life is the sum of Column C divided by the sum of Column I.

It should be noted that the generation arrangement does not include parameters for net salvage. Computed Net Plant (Column C) and Accruals (Column I) must be adjusted for net salvage to obtain a correct measurement of theoretical reserves and annualized depreciation accruals.

The following table provides a description of each column in the generation arrangement.

| Column | Title              | Description   |
|--------|--------------------|---|
| A      | Vintage            | Vintage or placement year of surviving plant.   |
| В      | Age                | Age of surviving plant at beginning of study year.  |
| С      | Surviving Plant    | Actual dollar amount of surviving plant.  |
| D      | Average Life       | Estimated average life of each vintage. This statistic is the sum of the realized life and the unrealized life, which is the product of the remaining life (Column E) and the theoretical proportion surviving. |
| E      | Remaining Life     | Estimated remaining life of each vintage.   |
| F      | Net Plant Ratio    | Theoretical net plant ratio of each vintage.  |
| G      | Allocation Factor  | A pivotal ratio which determines the amortization period of the difference between the recorded and computed reserve.   |
| Н      | Computed Net Plant | Plant in service less theoretical reserve for each vintage.   |
| I      | Accrual            | Ratio of computed net plant (Column H) and remaining life (Column E).   |

Table 2. Generation Arrangement

## SCHEDULE B - AGE DISTRIBUTION

This schedule provides the age distribution and realized life of surviving plant shown in Column C of the Generation Arrangement (Schedule A). The format of the schedule depends upon the availability of either aged or unaged data. Derived additions for vintage years older than the earliest activity year in an account for unaged data are obtained from the age distribution of surviving plant at the beginning of the earliest activity year. The amount surviving from these vintages is shown in Column D. The realized life (Column G) is derived from the dollar years of service provided by a vintage over the period of years the vintage has been in service. Plant additions for vintages older than the earliest activity year in an account are represented by the opening balances shown in Column D.

The computed proportion surviving (Column D) for unaged is derived from a computed mortality analysis. The average service life displayed in the title block is the life statistic derived for the most recent activity year, given the derived age distribution at the start of the year and the specified retirement dispersion. The realized life (Column F) is obtained by finding the slope of an SC retirement dispersion, which connects the computed survivors of a vintage (Column E) to the recorded vintage addition (Column B). The realized life is the area bounded by the SC dispersion, the computed proportion surviving and the age of the vintage.

### SCHEDULE C - PLANT HISTORY

An Unadjusted Plant History schedule provides a summary of recorded plant data extracted from the continuing property records maintained by the Company. Activity year total amounts shown on this schedule for aged data are obtained from a historical arrangement of the database in which all plant accounting transactions are identified by vintage and activity year. Activity year totals for unaged data are obtained from a transaction file without vintage identification. Information displayed in the unadjusted plant history is consistent with regulated investments reported internally by the Company.

An Adjusted Plant History schedule provides a summary of recorded plant data extracted from the continuing property records maintained by the Company with sales, transfers, and adjustments appropriately aged for depreciation study purposes. Activity year total amounts shown on this schedule for aged data are obtained from a historical arrangement of the data base in which all plant accounting transactions are identified by vintage and activity year. Ageing of adjusting transactions is achieved using transaction codes that identify an adjusting year associated with the dollar amount of a transaction. Adjusting transactions processed in the adjusted plant history are not aged in the Company's records or in the unadjusted plant history.

### SCHEDULE D - ACTUARIAL LIFE ANALYSIS

These schedules provide a summary of the dispersion and life indications obtained from an actuarial life analysis for a specified placement band. The observation band (Column A) is specified to produce a rolling—band, shrinking—band, or progressive—band analysis depending upon the movement of the end points of the band. The degree of censoring (or point of truncation) of the observed life table is shown in Column B for each observation band. The estimated average service life, best fitting Iowa dispersion, and a statistical measure of the goodness of fit are shown for each degree polynomial (First, Second, and Third) fitted to the estimated hazard rates. Options available in the analysis include the width and location of both the placement and observation bands; the interval of years included in a selected rolling, shrinking, or progressive band analysis; the estimator of the hazard rate (actuarial, conditional proportion retired, or maximum likelihood); the elements to include on the diagonal of a weight matrix (exposures, inverse of age, inverse of variance, or unweighted); and the age at which an observed life table is truncated.

Estimated projection lives (Columns C, F, and I) are flagged with an asterisk if negative hazard rates are indicated by the fitted polynomial. All negative hazard rates are set equal to zero in the calculation of the graduated survivor curve. The Conformance Index (Columns E, H, and K) is the square root of the mean sum—

of-squared differences between the graduated survivor curve and the best fitting Iowa curve. A Conformance Index of zero would indicate a perfect fit.

## SCHEDULE E - GRAPHICS ANALYSIS

This schedule provides a graphics plot of a) the observed proportion surviving for a selected placement and observation band; b) the statistically best fitting dispersion and derived projection life; and c) the projection curve and projection life selected to describe future forces of mortality.

The graphics analysis also provides a plot of the observed hazard rates and graduated hazard function for a selected placement and observation band. The estimator of the hazard rates and weighting used in fitting orthogonal polynomials to the observed data are displayed in the title block of the displayed graph.

## SCHEDULE F - HISTORICAL NET SALVAGE ANALYSIS

This schedule provides a moving average analysis of the ratio of realized net salvage (Column I) to the associated retirements (Column B). The schedule also provides a moving average analysis of the components of net salvage related to retirements. The ratio of gross salvage to retirements is shown in Column D and the ratio of cost of removal to retirements is shown in Column G.

Distribution

Southern Operations Account: 47800S Meters

Dispersion: 25 - L1.5 Procedure: Vintage Group Schedule A Page 1 of 2

### Generation Arrangement

|         | Dece | mber 31, 2010 |       |       | Net    |        |            |         |
|---------|------|---------------|-------|-------|--------|--------|------------|---------|
|         |      | Surviving     | Avg.  | Rem.  | Plant  | Alloc. | Computed   |         |
| Vintage | Age  | Plant         | Life  | Life  | Ratio  | Factor | Net Plant  | Accrual |
| Α       | В    | С             | D     | E     | F      | G      | H=C*F*G    | I=H/E   |
| 2010    | 0.5  | 20,777,031    | 25.00 | 24.52 | 0.9806 | 1.0000 | 20,374,126 | 831,072 |
| 2009    | 1.5  | 12,389,967    | 25.00 | 23.56 | 0.9423 | 1.0000 | 11,675,089 | 495,572 |
| 2008    | 2.5  | 9,148,914     | 25.00 | 22.63 | 0.9049 | 1.0000 | 8,279,122  | 365,927 |
| 2007    | 3.5  | 7,209,704     | 25.00 | 21.72 | 0.8688 | 1.0000 | 6,263,688  | 288,389 |
| 2006    | 4.5  | 10,128,857    | 25.01 | 20.85 | 0.8336 | 1.0000 | 8,443,343  | 405,033 |
| 2005    | 5.5  | 8,478,288     | 25.00 | 20.01 | 0.8004 | 1.0000 | 6,785,867  | 339,170 |
| 2004    | 6.5  | 6,839,689     | 24.98 | 19.20 | 0.7689 | 1.0000 | 5,258,700  | 273,828 |
| 2003    | 7.5  | 8,080,575     | 25.04 | 18.44 | 0.7363 | 1.0000 | 5,949,417  | 322,682 |
| 2002    | 8.5  | 8,452,375     | 24.87 | 17.71 | 0.7120 | 1.0000 | 6,018,061  | 339,893 |
| 2001    | 9.5  | 7,085,137     | 24.86 | 17.01 | 0.6843 | 1.0000 | 4,848,462  | 285,018 |
| 2000    | 10.5 | 7,175,163     | 24.90 | 16.36 | 0.6568 | 1.0000 | 4,712,892  | 288,103 |
| 1999    | 11.5 | 7,539,720     | 24.90 | 15.75 | 0.6326 | 1.0000 | 4,769,909  | 302,826 |
| 1998    | 12.5 | 9,507,022     | 25.01 | 15.19 | 0.6075 | 1.0000 | 5,775,928  | 380,204 |
| 1997    | 13.5 | 6,365,640     | 25.37 | 14.68 | 0.5786 | 1.0000 | 3,682,929  | 250,919 |
| 1996    | 14.5 | 5,403,121     | 25.57 | 14.21 | 0.5556 | 1.0000 | 3,002,179  | 211,331 |
| 1995    | 15.5 | 11,290,823    | 25.72 | 13.77 | 0.5354 | 1.0000 | 6,045,281  | 438,975 |
| 1994    | 16.5 | 4,285,972     | 25.49 | 13.37 | 0.5244 | 1.0000 | 2,247,638  | 168,127 |
| 1993    | 17.5 | 4,439,612     | 25.94 | 12.99 | 0.5009 | 1.0000 | 2,223,767  | 171,129 |
| 1992    | 18.5 | 4,606,790     | 26.00 | 12.65 | 0.4864 | 1.0000 | 2,240,735  | 177,197 |
| 1991    | 19.5 | 5,226,828     | 26.39 | 12.32 | 0.4667 | 1.0000 | 2,439,598  | 198,063 |
| 1990    | 20.5 | 4,970,569     | 26.53 | 12.01 | 0.4526 | 1.0000 | 2,249,557  | 187,361 |
| 1989    | 21.5 | 3,970,905     | 26.65 | 11.71 | 0.4393 | 1.0000 | 1,744,492  | 148,979 |
| 1988    | 22.5 | 1,784,563     | 25.16 | 11.42 | 0.4540 | 1.0000 | 810,264    | 70,930  |
| 1987    | 23.5 | 2,738,588     | 27.55 | 11.15 | 0.4045 | 1.0000 | 1,107,856  | 99,402  |
| 1986    | 24.5 | 1,329,970     | 25.66 | 10.87 | 0.4238 | 1.0000 | 563,614    | 51,837  |
| 1985    | 25.5 | 1,415,134     | 26.22 | 10.60 | 0.4044 | 1.0000 | 572,266    | 53,963  |
| 1984    | 26.5 | 164,227       | 25.65 | 10.34 | 0.4030 | 1.0000 | 66,185     | 6,402   |
| 1983    | 27.5 | 1,083,980     | 28.27 | 10.08 | 0.3563 | 1.0000 | 386,262    | 38,337  |
| 1982    | 28.5 | 2,209,466     | 30.01 | 9.81  | 0.3270 | 1.0000 | 722,479    | 73,627  |
| 1981    | 29.5 | 1,003,015     | 29.35 | 9.55  | 0.3255 | 1.0000 | 326,457    | 34,179  |
| 1980    | 30.5 | 2,757,197     | 31.46 | 9.29  | 0.2954 | 1.0000 | 814,428    | 87,654  |
| 1979    | 31.5 | 786,807       | 29.06 | 9.03  | 0.3108 | 1.0000 | 244,560    | 27,075  |
| 1978    | 32.5 | 1,029,527     | 30.61 | 8.78  | 0.2867 | 1.0000 | 295,175    | 33,635  |
| 1977    | 33.5 | 949,696       | 30.71 | 8.52  | 0.2775 | 1.0000 | 263,549    | 30,928  |
| 1975    | 35.5 | 381,958       | 31.33 | 8.02  | 0.2561 | 1.0000 | 97,802     | 12,193  |
| 1972    | 38.5 | 93,294        | 34.60 | 7.30  | 0.2110 |        |            |         |

Distribution

Southern Operations Account: 47800S Meters

Dispersion: 25 - L1.5

Procedure: Vintage Group

Schedule A Page 2 of 2

### **Generation Arrangement**

| Vintage | <u>Dece</u> | ember 31, 2010<br>Surviving<br>Plant | Avg.<br>Life | Rem.<br>Life | Net<br>Plant<br>Ratio | Alloc.<br>Factor | Computed<br>Net Plant | Accrual     |
|---------|-------------|--------------------------------------|--------------|--------------|-----------------------|------------------|-----------------------|-------------|
| A       | В           | C                                    | D            | E            | F                     | G                | H=C*F*G               | I=H/E       |
| 1971    | 39.5        | 170,681                              | 35.52        | -<br>7.07    | 0.1989                | 1.0000           | 33,956                | 4,805       |
| 1970    | 40.5        | 42,675                               | 34.06        | 6.84         | 0.2008                | 1.0000           | 8,570                 | 1,253       |
| 1968    | 42.5        | 3,037                                | 35.65        | 6.40         | 0.1794                | 1.0000           | 545                   | 85          |
| 1967    | 43.5        | 52,540                               | 38.37        | 6.18         | 0.1611                | 1.0000           | 8,467                 | 1,369       |
| 1966    | 44.5        | 7,255                                | 38.26        | 5.97         | 0.1562                | 1.0000           | 1,133                 | 190         |
| 1964    | 46.5        | 18,595                               | 40.35        | 5.57         | 0.1380                | 1.0000           | 2,566                 | 461         |
| 1962    | 48.5        | 7,970                                | 41.88        | 5.18         | 0.1236                | 1.0000           | 986                   | 190         |
| 1961    | 49.5        | 50,282                               | 44.29        | 4.99         | 0.1127                | 1.0000           | 5,665                 | 1,135       |
| 1951    | 59.5        | 335                                  | 54.73        | 3.32         | 0.0606                | 1.0000           | 20                    | 6           |
| 1947    | 63.5        | 445                                  | 60.49        | 2.73         | 0.0452                | 1.0000           | 20                    | 7           |
| 1929    | 81.5        | 11                                   | 75.72        |              |                       | 1.0000           |                       |             |
| 1901    | 109.5       | 161,215                              | 108.20       |              |                       | 1.0000           |                       |             |
| Total   | 10.9        | \$191,615,166                        | 25.54        | 17.51        | 0.6857                | 1.0000           | \$131,383,285         | \$7,502,157 |

Distribution

**Southern Operations** 

Account: 47800S Meters

Schedule B Page 1 of 2

### Age Distribution

|         |                         |                      | 1997               | Experi              | ence to 12/31           | /2010            |
|---------|-------------------------|----------------------|--------------------|---------------------|-------------------------|------------------|
| Vintage | Age as of<br>12/31/2010 | Derived<br>Additions | Opening<br>Balance | Amount<br>Surviving | Proportion<br>Surviving | Realized<br>Life |
| Α       | В                       | C                    | D                  |                     | F=E/(C+D)               | G                |
| 2010    | 0.5                     | 20,777,031           |                    | 20,777,031          | 1.0000                  | 0.500            |
| 2009    | 1.5                     | 12,401,298           |                    | 12,389,967          | 0.9991                  | 1.499            |
| 2008    | 2.5                     | 9,187,183            |                    | 9,148,914           | 0.9958                  | 2.496            |
| 2007    | 3.5                     | 7,277,245            |                    | 7,209,704           | 0.9907                  | 3.486            |
| 2006    | 4.5                     | 10,242,925           |                    | 10,128,857          | 0.9889                  | 4.482            |
| 2005    | 5.5                     | 8,789,045            |                    | 8,478,288           | 0.9646                  | 5.452            |
| 2004    | 6.5                     | 7,307,605            |                    | 6,839,689           | 0.9360                  | 6.405            |
| 2003    | 7.5                     | 8,455,498            |                    | 8,080,575           | 0.9557                  | 7.430            |
| 2002    | 8.5                     | 9,975,855            |                    | 8,452,375           | 0.8473                  | 8.204            |
| 2001    | 9.5                     | 8,300,745            |                    | 7,085,137           | 0.8536                  | 9.128            |
| 2000    | 10.5                    | 8,387,526            |                    | 7,175,163           | 0.8555                  | 10.089           |
| 1999    | 11.5                    | 9,076,148            |                    | 7,539,720           | 0.8307                  | 10.977           |
| 1998    | 12.5                    | 11,442,904           |                    | 9,507,022           | 0.8308                  | 11.955           |
| 1997    | 13.5                    | 7,171,244            |                    | 6,365,640           | 0.8877                  | 13.165           |
| 1996    | 14.5                    |                      | 6,125,395          | 5,403,121           | 0.8821                  | 14.179           |
| 1995    | 15.5                    | •                    | 12,680,543         | 11,290,823          | 0.8904                  | 15.119           |
| 1994    | 16.5                    |                      | 5,801,575          | 4,285,972           | 0.7388                  | 15.644           |
| 1993    | 17.5                    |                      | 5,423,388          | 4,439,612           | 0.8186                  | 16.814           |
| 1992    | 18.5                    |                      | 6,055,843          | 4,606,790           | 0.7607                  | 17.554           |
| 1991    | 19.5                    |                      | 6,796,465          | 5,226,828           | 0.7691                  | 18.596           |
| 1990    | 20.5                    |                      | 6,885,306          | 4,970,569           | 0.7219                  | 19.351           |
| 1989    | 21.5                    |                      | 5,328,549          | 3,970,905           | 0.7452                  | 20.056           |
| 1988    | 22.5                    |                      | 3,885,396          | 1,784,563           | 0.4593                  | 19.108           |
| 1987    | 23.5                    |                      | 3,810,609          | 2,738,588           | 0.7187                  | 22.013           |
| 1986    | 24.5                    |                      | 3,519,867          | 1,329,970           | 0.3778                  | 20.600           |
| 1985    | 25.5                    |                      | 3,151,458          | 1,415,134           | 0.4490                  | 21.617           |
| 1984    | 26.5                    |                      | 1,443,552          | 164,227             | 0.1138                  | 21.467           |
| 1983    | 27.5                    |                      | 1,961,020          | 1,083,980           | 0.5528                  | 24.478           |
| 1982    | 28.5                    |                      | 3,330,663          | 2,209,466           | 0.6634                  | 26.575           |
| 1981    | 29.5                    |                      | 2,280,158          | 1,003,015           | 0.4399                  | 26.249           |
| 1980    | 30.5                    |                      | 3,973,393          | 2,757,197           | 0.6939                  | 28.671           |
| 1979    | 31.5                    |                      | 3,392,567          | 786,807             | 0.2319                  | 26.563           |
| 1978    | 32.5                    |                      | 2,794,384          | 1,029,527           | 0.3684                  | 28.377           |
| 1977    | 33.5                    |                      | 2,695,086          | 949,696             | 0.3524                  | 28.719           |
| 1976    | 34.5                    |                      | 1,289,525          |                     | 0.0000                  | 24.563           |
| 1975    | 35.5                    |                      | 1,538,094          | 381,958             | 0.2483                  | 29.765           |
| 1974    | 36.5                    |                      | 761,589            | ,                   | 0.0000                  | 29.728           |

Distribution

**Southern Operations** 

Account: 47800S Meters

Schedule B Page 2 of 2

### Age Distribution

|         |            |               | 1997          | Experi        | ence to 12/31/ | /2010    |
|---------|------------|---------------|---------------|---------------|----------------|----------|
| 3.5.1   | Age as of  | Derived       | Opening       | Amount        | Proportion     | Realized |
| Vintage | 12/31/2010 | Additions     | Balance       | Surviving     | Surviving      | Life     |
| Α       | В          | С             | D             | E             | F=E/(C+D)      | G        |
| 1973    | 37.5       |               | 507,771       |               | 0.0000         | 30.3369  |
| 1972    | 38.5       |               | 459,584       | 93,294        | 0.2030         | 33.5440  |
| 1971    | 39.5       |               | 561,586       | 170,681       | 0.3039         | 34.6038  |
| 1970    | 40.5       |               | 547,894       | 42,675        | 0.0779         | 33.2639  |
| 1969    | 41.5       |               | 349,528       |               | 0.0000         | 33.6040  |
| 1968    | 42.5       |               | 261,891       | 3,037         | 0.0116         | 35.0669  |
| 1967    | 43.5       |               | 272,995       | 52,540        | 0.1925         | 37.8736  |
| 1966    | 44.5       |               | 238,905       | 7,255         | 0.0304         | 37.8319  |
| 1965    | 45.5       |               | 177,057       |               | 0.0000         | 37.5041  |
| 1964    | 46.5       |               | 183,463       | . 18,595      | 0.1014         | 40.0504  |
| 1963    | 47.5       |               | 58,240        |               | 0.0000         | 38.1028  |
| 1962    | 48.5       |               | 92,237        | 7,970         | 0.0864         | 41.6778  |
| 1961    | 49.5       |               | 148,679       | 50,282        | 0.3382         | 44.1212  |
| 1960    | 50.5       |               | 111,642       |               | 0.0000         | 41.3618  |
| 1959    | 51.5       |               | 92,600        |               | 0.0000         | 41.3652  |
| 1958    | 52.5       |               | 24,569        | ,             | 0.0000         | 40.2199  |
| 1957    | 53.5       |               | 109           |               | 0.0000         | 40.0000  |
| 1956    | 54.5       |               | 75            |               | 0.0000         | 45.0000  |
| 1951    | 59.5       |               | 774           | 335           | 0.4327         | 54.7164  |
| 1950    | 60.5       |               | 155           |               | 0.0000         | 51.1568  |
| 1947    | 63.5       |               | 1,078         | 445           | 0.4131         | 60.4880  |
| 1929    | 81.5       |               | 99            | 11            | 0.1112         | 75.7231  |
| 1903    | 107.5      |               | 5,342         |               | 0.0000         | 95.5941  |
| 1901    | 109.5      |               | 1,170,372     | 161,215       | 0.1377         | 108.2008 |
| Total   | 10.9       | \$138,792,252 | \$100,191,072 | \$191,615,166 | 0.8018         |          |

### UNION GAS LIMITED Distribution Plant (North and South)

Account: 47800 Meters

### **Unadjusted Plant History**

| Year | Beginning<br>Balance | Additions  | Retirements | Sales, Transfers<br>& Adjustments | Ending<br>Balance |
|------|----------------------|------------|-------------|-----------------------------------|-------------------|
| А    | В                    | С          | D           | E                                 | F=B+C-D+E         |
| 1997 | 136,333,799          | 8,933,032  | 1,550,639   |                                   | 143,716,192       |
| 1998 | 143,716,192          | 14,344,533 | 2,093,663   |                                   | 155,967,062       |
| 1999 | 155,967,062          | 11,296,028 | 2,227,148   |                                   | 165,035,942       |
| 2000 | 165,035,942          | 10,609,719 | 2,142,798   | (753,655)                         | 172,749,207       |
| 2001 | 172,749,207          | 11,588,165 | 3,665,128   |                                   | 180,672,245       |
| 2002 | 180,672,245          | 11,930,969 | 3,431,606   |                                   | 189,171,608       |
| 2003 | 189,171,608          | 10,370,426 | 4,433,385   | (210,088)                         | 194,898,561       |
| 2004 | 194,898,561          | 9,402,113  | 5,688,134   |                                   | 198,612,541       |
| 2005 | 198,612,541          | 11,047,559 | 4,436,217   |                                   | 205,223,883       |
| 2006 | 205,223,883          | 12,521,942 | 4,888,698   |                                   | 212,857,127       |
| 2007 | 212,857,127          | 9,209,991  | 4,978,716   |                                   | 217,088,402       |
| 2008 | 217,088,402          | 11,305,527 | 7,745,686   |                                   | 220,648,243       |
| 2009 | 220,648,243          | 17,431,236 | 8,623,676   | 750                               | 229,456,552       |
| 2010 | 229,456,552          | 23,423,104 | 8,877,512   | 16,394                            | 244,018,539       |

# UNION GAS LIMITED Distribution Plant (North and South)

Account: 47800 Meters

### **Adjusted Plant History**

| Year | Beginning<br>Balance | Additions  | Retirements | Sales, Transfers<br>& Adjustments | Ending<br>Balance |
|------|----------------------|------------|-------------|-----------------------------------|-------------------|
| А    | В                    | С          | D           | E                                 | F=B+C-D+E         |
| 1997 | 136,335,965          | 8,933,032  | 1,550,639   |                                   | 143,718,358       |
| 1998 | 143,718,358          | 14,344,533 | 2,093,663   |                                   | 155,969,227       |
| 1999 | 155,969,227          | 11,296,028 | 2,227,148   |                                   | 165,038,108       |
| 2000 | 165,038,108          | 10,609,719 | 2,142,798   | (753,655)                         | 172,751,373       |
| 2001 | 172,751,373          | 11,588,165 | 3,665,128   |                                   | 180,674,410       |
| 2002 | 180,674,410          | 11,855,941 | 3,431,606   | (2,166)                           | 189,096,580       |
| 2003 | 189,096,580          | 10,445,454 | 4,433,385   | (210,088)                         | 194,898,561       |
| 2004 | 194,898,561          | 9,436,606  | 5,688,134   |                                   | 198,647,033       |
| 2005 | 198,647,033          | 11,014,030 | 4,436,217   |                                   | 205,224,846       |
| 2006 | 205,224,846          | 12,529,447 | 4,888,698   |                                   | 212,865,595       |
| 2007 | 212,865,595          | 9,223,224  | 4,978,716   |                                   | 217,110,103       |
| 2008 | 217,110,103          | 11,540,371 | 7,745,686   |                                   | 220,904,788       |
| 2009 | 220,904,788          | 17,275,545 | 8,623,676   | 750                               | 229,557,407       |
| 2010 | 229,557,407          | 23,322,250 | 8,877,512   | 16,394                            | 244,018,539       |

### Schedule D Page 1 of 1

## UNION GAS LIMITED Distribution Plant (North and South)

Account: 47800 Meters

T-Cut: None

Placement Band: 1901-2010

Hazard Function: Proportion Retired

anotion. I roportion retired

**Rolling Band Life Analysis** 

|                     |           | F               | irst Degr       | ee             | Second Degree   |                 |                | ee Third Degree |                 |                |  |
|---------------------|-----------|-----------------|-----------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|----------------|--|
| Observation<br>Band | Censoring | Average<br>Life | Disper-<br>sion | Conf.<br>Index | Average<br>Life | Disper-<br>sion | Conf.<br>Index | Average<br>Life | Disper-<br>sion | Conf.<br>Index |  |
| А                   | В         | С               | D               | E              | F               | G               | Н              | ĺ               | J               | K              |  |
| 1997-2001           | 0.0       | 35.4            | L0.5            | 14.19          | 29.1            | L1.5 *          | 5.00           | 26.8            | S1.5 *          | 1.55           |  |
| 1998-2002           | 0.0       | 33.3            | L0.5            | 12.29          | 27.9            | L1.5 *          | 4.38           | 26.3            | S1.5 *          | 1.29           |  |
| 1999-2003           | 0.0       | 31.3            | L0.5            | 10.22          | 27.0            | L1.5 *          | 3.72           | 25.8            | S1.5 *          | 1.11           |  |
| 2000-2004           | 0.0       | 28.9            | L0.5            | 8.37           | 25.6            | L1.5 *          | 3.25           | 24.8            | S1.5 *          | 0.80           |  |
| 2001-2005           | 0.0       | 28.1            | L0.5            | 7.31           | 25.6            | L1.5 *          | 2.92           | 24.6            | S1 *            | 0.69           |  |
| 2002-2006           | 0.0       | 28.0            | L0.5            | 6.59           | 26.0            | L1.5 *          | 2.81           | 24.8            | S1 *            | 0.79           |  |
| 2003-2007           | 0.0       | 27.7            | L0.5            | 6.39           | 26.2            | L1.5 *          | 3.08           | 24.8            | S0.5 *          | 0.90           |  |
| 2004-2008           | 0.0       | 26.5            | L0.5            | 5.78           | 25.5            | L1.5 *          | 3.35           | 24.1            | S0.5 *          | 1.33           |  |
| 2005-2009           | 0.0       | 25.3            | L0.5            | 4.32           | 25.0            | L1 *            | 3.23           | 23.9            | S0.5            | 1.67           |  |
| 2006-2010           | 0.0       | 23.9            | L1              | 2.78           | 23.9            | L1.5 *          | 2.47           | 23.3            | S0              | 1.58           |  |

### Schedule D Page 1 of 1

### UNION GAS LIMITED Distribution Plant (North and South)

Account: 47800 Meters

T-Cut: None

Placement Band: 1901-2010

Hazard Function: Proportion Retired

**Shrinking Band Life Analysis** 

|                     |           | F               | irst Degre      | ee             | Second Degree   |                 |                | Third Degree    |                 |                |
|---------------------|-----------|-----------------|-----------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|----------------|
| Observation<br>Band | Censoring | Average<br>Life | Disper-<br>sion | Conf.<br>Index | Average<br>Life | Disper-<br>sion | Conf.<br>Index | Average<br>Life | Disper-<br>sion | Conf.<br>Index |
| Α                   | В         | С               | D               | E              | F               | G               | Н              | ſ               | J               | K              |
| 1997-2010           | 0.0       | 27.1            | L0.5            | 5.54           | 25.7            | L1.5 *          | 2.77           | 25.2            | L1.5 *          | 1.72           |
| 1999-2010           | 0.0       | 26.3            | L0.5            | 4.91           | 25.3            | L1.5 *          | 2.64           | 24.8            | L1.5 *          | 1.51           |
| 2001-2010           | 0.0       | 25.4            | L1              | 4.21           | 24.7            | L1.5 *          | 2.55           | 24.2            | L1.5            | 1.37           |
| 2003-2010           | 0.0       | 24.7            | L1              | 3.54           | 24.4            | L1.5 *          | 2.48           | 23.8            | L1.5            | 1.42           |
| 2005-2010           | 0.0       | 24.5            | L1              | 3.14           | 24.4            | L1.5 *          | 2.59           | 23.7            | S0              | 1.54           |
| 2007-2010           | 0.0       | 23.3            | L1              | 2.40           | 23.3            | L1              | 2.34           | 22.8            | S0              | 1.64           |
| 2009-2010           | 0.0       | 22.1            | L1.5*           | 2.54           | 22.0            | L1              | 2.27           | 21.9            | L1              | 2.16           |

#### Schedule D Page 1 of 1

## UNION GAS LIMITED Distribution Plant (North and South)

Account: 47800 Meters

T-Cut: None

Placement Band: 1901-2010

Hazard Function: Proportion Retired

**Progressing Band Life Analysis** 

|                     |           | F               | irst Degre      | ee             | Second Degree   |                 |                | Third Degree    |                 |                |
|---------------------|-----------|-----------------|-----------------|----------------|-----------------|-----------------|----------------|-----------------|-----------------|----------------|
| Observation<br>Band | Censoring | Average<br>Life | Disper-<br>sion | Conf.<br>Index | Average<br>Life | Disper-<br>sion | Conf.<br>Index | Average<br>Life | Disper-<br>sion | Conf.<br>Index |
| Α                   | В         | С               | D               | E              | F               | G               | Н              | 1               | J               | K              |
| 1997-1998           | 15.4      | 39.5            | L0.5            | 13.97          | 32.4            | L1.5 *          | 9.19           | 28.1            | S1 *            | 11.12          |
| 1997-2000           | 0.2       | 38.5            | L0.5            | 16.34          | 31.9            | L1.5 *          | 6.32           | 28.3            | S1 *            | 3.30           |
| 1997-2002           | 0.0       | 34.3            | L0.5            | 12.98          | 28.5            | L1.5 *          | 4.58           | 26.6            | S1.5 *          | 1.41           |
| 1997-2004           | 0.0       | 31.3            | L0.5            | 10.12          | 27.0            | L1.5 *          | 3.52           | 25.7            | S1 *            | 1.01           |
| 1997-2006           | 0.0       | 30.7            | L0.5            | 9.05           | 27.2            | L1.5 *          | 3.33           | 25.9            | S1 *            | 0.82           |
| 1997-2008           | 0.0       | 29.3            | L0.5            | 7.88           | 26.7            | L1.5 *          | 3.28           | 25.6            | S1 *            | 1.02           |
| 1997-2010           | 0.0       | 27.1            | L0.5            | 5.54           | 25.7            | L1.5 *          | 2.77           | 25.2            | L1.5 *          | 1.72           |

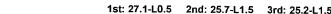
**Distribution Plant (North and South)** 

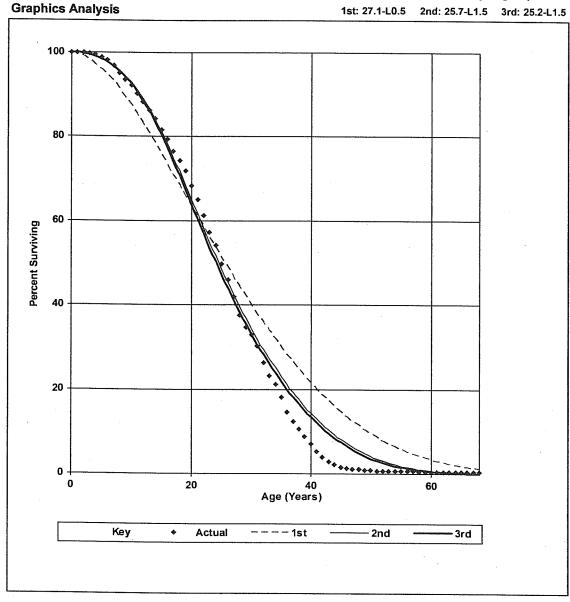
Account: 47800 Meters

T-Cut: None

Placement Band: 1901-2010 Observation Band: 1997-2010

Hazard Function: Proportion Retired





Distribution Plant (North and South)

Account: 47800 Meters

T-Cut: 50

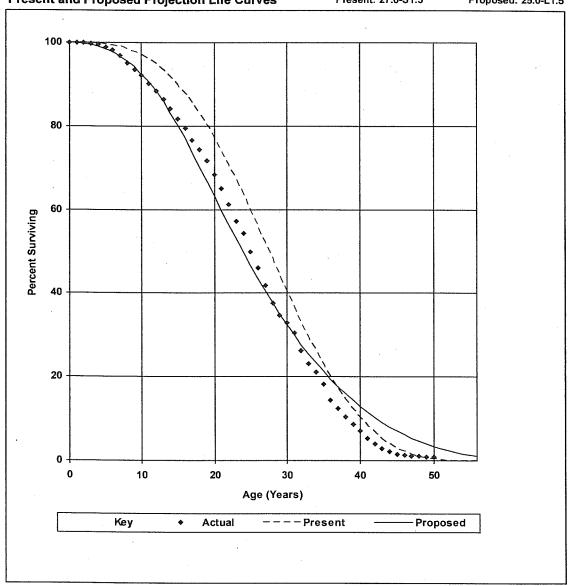
Placement Band: 1901-2010

Observation Band: 1997-2010

**Present and Proposed Projection Life Curves** 

Present: 27.0-S1.5

Proposed: 25.0-L1.5



### UNION GAS LIMITED Distribution Plant (North and South)

Account: 47800 Meters

**Unadjusted Net Salvage History** 

|       |             | Gros      | Gross Salvage |      | Cost   | of Retir | ina  | Net       | Salvage | 3    |
|-------|-------------|-----------|---------------|------|--------|----------|------|-----------|---------|------|
|       |             |           |               | 5-Yr |        |          | 5-Yr |           |         | 5-Yr |
| Year  | Retirements | Amount    | Pct.          | Avg. | Amount | Pct.     | Avg. | Amount    | Pct.    | Avg. |
| Α     | В           | С         | D=C/B         | E    | F '    | G=F/B    | Н    | I=C-F     | J=I/B   | К    |
| 1997  | 1,550,639   | 79,666    | 5.1           |      |        | 0.0      |      | 79,666    | 5.1     |      |
| 1998  | 2,093,663   | 113,857   | 5.4           |      |        | 0.0      |      | 113,857   | 5.4     |      |
| 1999  | 2,227,148   | 94,959    | 4.3           |      |        | 0.0      |      | 94,959    | 4.3     |      |
| 2000  | 2,142,798   | 63,180    | 2.9           |      |        | 0.0      |      | 63,180    | 2.9     |      |
| 2001  | 3,665,128   | 323,002   | 8.8           | 5.8  |        | 0.0      | 0.0  | 323,002   | 8.8     | 5.8  |
| 2002  | 3,431,606   | 247,628   | 7.2           | 6.2  |        | 0.0      | 0.0  | 247,628   | 7.2     | 6.2  |
| 2003  | 4,433,385   | 220,927   | 5.0           | 6.0  |        | 0.0      | 0.0  | 220,927   | 5.0     | 6.0  |
| 2004  | 5,688,134   | 149,526   | 2.6           | 5.2  |        | 0.0      | 0.0  | 149,526   | 2.6     | 5.2  |
| 2005  | 4,436,217   | 153,292   | 3.5           | 5.1  |        | 0.0      | 0.0  | 153,292   | 3.5     | 5.1  |
| 2006  | 4,888,698   | 218,535   | 4.5           | 4.3  |        | 0.0      | 0.0  | 218,535   | 4.5     | 4.3  |
| 2007  | 4,978,716   | 136,606   | 2.7           | 3.6  |        | 0.0      | 0.0  | 136,606   | 2.7     | 3.6  |
| 2008  | 7,745,686   | 94,403    | 1.2           | 2.7  |        | 0.0      | 0.0  | 94,403    | 1.2     | 2.7  |
| 2009  | 8,623,676   | 161,693   | 1.9           | 2.5  |        | 0.0      | 0.0  | 161,693   | 1.9     | 2.5  |
| 2010  | 8,877,512   | 93,665    | 1.1           | 2.0  |        | 0.0      | 0.0  | 93,665    | 1.1     | 2.0  |
| Total | 64,783,005  | 2,150,940 | 3.3           |      |        | 0.0      |      | 2,150,940 | 3.3     |      |

### **UNION GAS LIMITED** Distribution Plant (North and South)

Account: 47800 Meters

**Adjusted Net Salvage History** 

| ,,    | a itot outrugo | y         |         |      |        |          |      |           |        |      |
|-------|----------------|-----------|---------|------|--------|----------|------|-----------|--------|------|
|       |                | Gros      | s Salva | ıge  | Cost   | of Retir | ing  | Net       | Salvag | 9    |
|       |                |           |         | 5-Yr |        |          | 5-Yr |           |        | 5-Yr |
| Year  | Retirements    | Amount    | Pct.    | Avg. | Amount | Pct.     | Avg. | Amount    | Pct.   | Avg. |
| Α     | В              | С         | D=C/B   | Ε    | F      | G=F/B    | Н    | I=C-F     | J=1/B  | К    |
| 1997  | 1,550,639      | 79,666    | 5.1     |      |        | 0.0      |      | 79,666    | 5.1    |      |
| 1998  | 2,093,663      | 113,857   | 5.4     |      |        | 0.0      |      | 113,857   | 5.4    |      |
| 1999  | 2,227,148      | 94,959    | 4.3     |      |        | 0.0      |      | 94,959    | 4.3    |      |
| 2000  | 2,142,798      | 63,180    | 2.9     |      |        | 0.0      |      | 63,180    | 2.9    |      |
| 2001  | 3,665,128      | 323,002   | 8.8     | 5.8  |        | 0.0      | 0.0  | 323,002   | 8.8    | 5.8  |
| 2002  | 3,431,606      | 247,628   | 7.2     | 6.2  |        | 0.0      | 0.0  | 247,628   | 7.2    | 6.2  |
| 2003  | 4,433,385      | 220,927   | 5.0     | 6.0  |        | 0.0      | 0.0  | 220,927   | 5.0    | 6.0  |
| 2004  | 5,688,134      | 149,526   | 2.6     | 5.2  |        | 0.0      | 0.0  | 149,526   | 2.6    | 5.2  |
| 2005  | 4,436,217      | 153,292   | 3.5     | 5.1  |        | 0.0      | 0.0  | 153,292   | 3.5    | 5.1  |
| 2006  | 4,888,698      | 218,535   | 4.5     | 4.3  |        | 0.0      | 0.0  | 218,535   | 4.5    | 4.3  |
| 2007  | 4,978,716      | 136,606   | 2.7     | 3.6  |        | 0.0      | 0.0  | 136,606   | 2.7    | 3.6  |
| 2008  | 7,745,686      | 94,403    | 1.2     | 2.7  |        | 0.0      | 0.0  | 94,403    | 1.2    | 2.7  |
| 2009  | 8,623,676      | 161,693   | 1.9     | 2.5  |        | 0.0      | 0.0  | 161,693   | 1.9    | 2.5  |
| 2010  | 8,877,512      | 93,665    | 1.1     | 2.0  |        | 0.0      | 0.0  | 93,665    | 1.1    | 2.0  |
| Total | 64,783,005     | 2,150,940 | 3.3     |      |        | 0.0      |      | 2,150,940 | 3.3    |      |

# UNION GAS LIMITED Comparison of Cost of Service Year Ending December 31

| Line<br>No. | Particulars (\$000's)            | Forecast 2013 | Forecast 2012 | Difference |
|-------------|----------------------------------|---------------|---------------|------------|
|             |                                  | (a)           | (b)           | (c)        |
| 1           | Cost of gas                      | 706,756       | 730,925       | (24,169)   |
| 2           | Operating and maintenance        | 377,189       | 375,869       | 1,320      |
| 3           | Depreciation                     | 196,467       | 204,145       | (7,678)    |
| 4           | Other financing                  | 1,179         | 362           | 817        |
| 5           | Property taxes                   | 64,022        | 62,916        | 1,106      |
| 6           | Other expense                    | -             | -             | -          |
| 7           | Income taxes                     | 8,390         | 18,090        | (9,700)    |
| 8           | Cost of service excluding return | 1,354,003     | 1,392,306     | (38,304)   |

# UNION GAS LIMITED Gas Purchase Expense Year Ending December 31, 2013

| Line      |                             |             |                | % of Total |
|-----------|-----------------------------|-------------|----------------|------------|
| No.       | Particulars                 | Volume (TJ) | Cost (\$000's) | Volume     |
|           |                             | (a)         | (b)            | (c)        |
| Section A |                             |             |                |            |
|           | Supply Transportation       |             |                |            |
| 1         | Western Canadian Firm       | 94,306      | 194,446        |            |
| 2         | U.S. Firm                   | 43,546      | 20,475         |            |
| 3         | Adjustments                 |             | (105)          |            |
| 4         | Total Supply Transport      | 137,852     | 214,817        |            |
|           | Supply Commodity            |             |                |            |
| 5         | Western Canadian Firm       | 75,809      | 346,611        | 49%        |
| 6         | U.S. Firm                   | 43,546      | 223,660        | 28%        |
| 7         | Ontario Delivered Supplies  | 16,356      | 88,742         | 11%        |
| 8         | Northern Bundled T-Service  | 18,497      | -              | 12%        |
| 9         | Adjustments                 | -           | -              | 0%         |
| 10        | Other                       | -           | -              | 0%         |
| 11        | Total Supply Commodity      | 154,208     | 659,013        | 100%       |
|           | Storage                     |             |                |            |
| 12        | STS and Related Services    |             | 19,874         |            |
| 13        | Total Supply at Cost        |             | 893,703        |            |
| Section B |                             |             |                |            |
|           | Storage Inventory Change    |             |                |            |
| 14        | LNG                         | -           | -              |            |
| 15        | Other Company Owned         | (1,596)     | (8,569)        |            |
| 16        | 3rd Party                   | -           | -              |            |
| 17        | Total Gas (to) from Storage | (1,596)     | (8,569)        |            |
| Section C |                             |             |                |            |
| 18        | Total Third Party Storage   |             | 425            |            |
| 19        | Total Section A, B, & C     |             | 885,559        |            |

# UNION GAS LIMITED Gas Purchase Expense Year Ending December 31, 2013

| Line |  |             |                |
|------|--|-------------|----------------|
| No.  | Particulars                                      | Volume (TJ) | Cost (\$000's) |
|      |  | (a)         | (b)            |
|      | Gas Supply                                       |             |                |
| 1    | Total Supply at Cost                             | 154,208     | 894,128        |
| 2    | Deferred Costs                                   | <u> </u>    | (135,680)      |
| 3    | Total Gas Supply                                 | 154,208     | 758,448        |
|      |  |             |                |
| 4    | Gas (to) from Storage                            | (1,596)     | (8,569)        |
| 5    | Winter Peaking Service                           |             | -              |
| 6    | Other Transportation                             |             | 972            |
| 7    | Company Use Adj.                                 |             | (1,960)        |
| 8    | Linepack   |             | (32)           |
| 9    | Deferral Adjustment                              |             | (42,790)       |
| 10   | UFG Adjustment                                   |             | 1,923          |
| 11   | Accounting Adjustment                            |             | -              |
| 12   | Total Cost of Gas                                | 152,613     | 707,992        |
| 13   | Less: Unregulated costs                          |             | (3,168)        |
| 14   |  |             | 704,824        |
| 15   | Add: Costs related to short-term storage revenue |             | 1,933          |
| 16   | Total Utility Cost of Gas                        |             | 706,757        |
|      |  |             |                |

### **UNION GAS LIMITED**

### Unaccounted for Gas Volume For the Year Ending December 31, 2013

| Line<br>No. | <u>Particulars</u>   | <u>Volume</u> (a) | Weighting (b) | Volume Weighted (c) |
|-------------|--|-------------------|---------------|---------------------|
|             | Determination of Forecast UFG volume for 2013                          |                   |               |                     |
|             | 3 year average of actual UFG (10 <sup>3</sup> m <sup>3</sup> ):        |                   |               |                     |
| 1           | 2010   | 67,283            | 50%           | 33,642              |
| 2           | 2009   | 201,845           | 33%           | 66,609              |
| 3           | 2008   | 143,880           | 17%           | 24,460              |
| 4           | Average actual UFG volume  |                   |               | 124,711             |
|             | 3 year average of actual throughput (10 <sup>6</sup> m <sup>3</sup> ): |                   |               |                     |
| 5           | 2010   | 35,090            | 50%           | 17,545              |
| 6           | 2009   | 31,677            | 33%           | 10,453              |
| 7           | 2008   | 34,978            | 17%           | 5,946               |
| 8           | Average actual UFG throughput  |                   |               | 33,944              |
| 9           | UFG ratio for 2013 (line 4 / line 8 / 1,000)                           |                   |               | 0.367%              |
| 10          | 2013 total forecast throughput (10 <sup>6</sup> m <sup>3</sup> )       |                   |               | 32,010              |
| 11          | Estimated UFG volume for 2013 (10 <sup>3</sup> m <sup>3</sup> ) (1)    |                   |               | 117,604             |
| 12          | Estimated UFG for 2013 (\$000's) (2)                                   |                   |               | 23,828              |
| 13          | Unregulated Allocation - Short-Term (\$000's)                          |                   | 2.514%        | (599)               |
| 14          | Unregulated Allocation - Long-Term (\$000's)                           |                   | 7.036%        | (1,676)             |

- (1) Line 9 \* line 10 \* 1,000.
- (2) Calculated using EB-2010-0359 reference price of  $$202.61/10^3$  m<sup>3</sup>.

### <u>UNION GAS LIMITED</u> Gas Supply / Demand Balance <u>Forecast 2012 to 2016</u>

| Line No. | Particulars (TJ)                   | 2012<br>(a) | 2013<br>(b) | 2014<br>(c) | 2015<br>(d) | 2016<br>(e) |
|----------|------------------------------------|-------------|-------------|-------------|-------------|-------------|
| 1        | Forecasted Demand (1)              | 234,413     | 226,432     | 225,108     | 225,108     | 225,108     |
| 2        | Other Demand                       | 4,062       | 4,269       | 4,489       | 4,488       | 4,454       |
| 3        | Total Demand Served                | 238,475     | 230,701     | 229,597     | 229,596     | 229,562     |
|          | Total Supply                       |             |             |             |             |             |
| 4        | Western Canadian Firm              | 107,848     | 107,522     | 107,247     | 104,185     | 70,863      |
| 5        | U.S. Firm                          | 43,884      | 43,639      | 43,466      | 42,461      | 18,363      |
| 6        | Ontario Delivered Supplies         | 83,306      | 79,779      | 77,916      | 81,664      | 133,103     |
| 7        | Local Production                   | 1,021       | 1,018       | 1,018       | 1,018       | 1,021       |
| 8        | Inventory Withdrawals/(Injections) | 2,416       | (1,257)     | (51)        | 267         | 6,213       |
| 9        | Total                              | 238,475     | 230,701     | 229,597     | 229,596     | 229,562     |

<sup>(1)</sup> Forecasted demand includes Sales Service and Bundled T-service Demands and Supplies. Excludes Northern T-Service, T1 & T3 Volumes.

### <u>UNION GAS LIMITED</u> Calculation of Alberta Border and Ontario Landed Reference Prices

For the 12 month period ending December 31, 2011

| Line        | n d l                                       |     | T 11                      | F 1 11                    | M 11                      |                           | 34 11                     | T 11                      | T 1 11                    |                           | 6 11                      | 0 - 11                    | N. 11                     | D 11                      | T . 1 . 4                 |
|-------------|---|-----|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| No.         | Particulars                                 | _   | Jan-11                    | Feb-11                    | Mar-11                    | Apr-11                    | May-11                    | Jun-11                    | Jul-11                    | Aug-11                    | Sep-11                    | Oct-11                    | Nov-11                    | Dec-11                    | Total or Average          |
| 1           | Days  |     | 31                        | 28                        | 31                        | 30                        | 31                        | 30                        | 31                        | 31                        | 30                        | 31                        | 30                        | 31                        | 365                       |
| 2<br>3<br>4 | Empress Basis (US\$/mmbtu) Foreign Exchange | (1) | 4.211<br>(0.620)<br>1.013 | 4.221<br>(0.640)<br>1.014 | 4.189<br>(0.611)<br>1.015 | 4.159<br>(0.607)<br>1.016 | 4.190<br>(0.607)<br>1.016 | 4.241<br>(0.607)<br>1.018 | 4.303<br>(0.607)<br>1.018 | 4.347<br>(0.607)<br>1.019 | 4.365<br>(0.607)<br>1.020 | 4.444<br>(0.607)<br>1.021 | 4.667<br>(0.550)<br>1.022 | 4.974<br>(0.550)<br>1.023 | 4.359<br>(0.602)<br>1.018 |
| 5           | Alberta Border (Cdn\$/GJ)                   | (2) | 3.449                     | 3.442                     | 3.442                     | 3.418                     | 3.452                     | 3.505                     | 3.567                     | 3.613                     | 3.633                     | 3.713                     | 3.988                     | 4.290                     | 3.626                     |
|             | North Supply Cost Calculation               |     |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |
| 6           | Total Volume (PJ)                           |     | 3.469                     | 3.103                     | 3.465                     | 3.321                     | 3.441                     | 3.316                     | 3.437                     | 3.429                     | 3.313                     | 3.437                     | 3.312                     | 3.436                     | 40.48                     |
| 7           | Cost at Market Price (\$000's)              |     | 11,963                    | 10,678                    | 11,926                    | 11,352                    | 11,878                    | 11,622                    | 12,261                    | 12,389                    | 12,037                    | 12,761                    | 13,208                    | 14,739                    | 146,814                   |
| 8           | Weighted Average Price (Cdn\$/GJ)           |     |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | 3.627                     |
| 9           |   |     |                           |                           |                           |                           |                           |                           |                           |                           | Alberta l                 | Border Refe               | rence Price (             | Cdn\$/GJ)                 | 3.627                     |
| 10          |   |     |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | Add : Fuel (              | Cdn\$/GJ)                 | 0.105                     |
| 11          |   |     |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           | Add : Tolls (             | (Cdn\$/GJ)                | 1.638                     |
| 12          |   |     |                           |                           |                           |                           |                           |                           |                           |                           | Ontario L                 | anded Refer               | ence Price (0             | Cdn\$/GJ)                 | 5.370                     |

<sup>(1) 21</sup> Day Strip dates used - November 1, 2010 to December 1, 2010.

<sup>(2)</sup> Alberta Border Price = ((NYMEX 21-day Average + Empress Basis) \* (Foreign Exchange Rate))/MMBtu to GJ Conversion Rate. MMBtu to GJ Conversion Rate: 1.055056 GJ /MMBtu.

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#### **UNION GAS LIMITED**

#### Summary of Upstream Transportation Contracts - Effective November 1, 2011 Northern and Eastern Operations Areas

| Line |                                    | Primary Receipt        | Primary Delivery   | Contract  | Contract       | Contract            | Unitized                    | Channel    | 100%<br>LF Toll |
|------|------------------------------------|------------------------|--------------------|-----------|----------------|---------------------|-----------------------------|------------|-----------------|
| No.  | Upstream Pipeline                  | Point                  | Point Point        | Quantity  | Units          | Termination Date    | Demand Charge<br>(\$Cdn/GJ) | Charge     | (\$Cdn/GJ)      |
| NO.  | Opstream Experime                  | (a)                    | (b)                | (c)       | (d)            | (e)                 | (\$Can/GJ)<br>(f)           | (\$Cdn/GJ) | (h=f+g)         |
|      | TransCanada Pipeline               | (a)                    | (D)                | ( c)      | (a)            | (e)                 | (1)                         | (g)        | (n=1+g)         |
| 1    | Empress to Union NCDA FT           | Empress                | Union NCDA         | 1,545     | GJ             | 01-Nov-2012         | 2.099                       | 0.144      | 2.243           |
| 2    | Empress to Union EDA FT            | Empress                | Union EDA          | 8,675     | GJ             | 01-Nov-2012         | 2.099                       | 0.144      | 2.243           |
| 3    | Empress to Union NDA FT            | Empress                | Union NDA          | 67,625    | GJ             | 01-Jan-2013         | 1.632                       | 0.110      | 1.742           |
| 4    | Empress to Union WDA FT            | Empress                | Union WDA          | 39,880    | GJ             | 01-Jan-2013         | 1.062                       | 0.071      | 1.133           |
| 5    | Empress to Union SSMDA FT          | Empress                | Union SSMDA        | 9,143     | GJ             | 01-Jan-2013         | 1.632                       | 0.110      | 1.742           |
| 6    | Empress to Union EDA FT            | Empress                | Union EDA          | 50,576    | GJ             | 01-Jan-2013         | 2.099                       | 0.144      | 2.243           |
| 7    | Empress to Union NCDA FT           | Empress                | Union NCDA         | 9,211     | GJ             | 01-Jan-2013         | 2.099                       | 0.144      | 2.243           |
| 8    | Empress to Union MDA FT            | Empress                | Union MDA          | 4,522     | GJ             | 01-Jan-2013         | 0.639                       | 0.041      | 0.680           |
| 9    | Parkway to Union EDA FT            | Parkway                | Union EDA          | 30,000    | GJ             | 01-Nov-2016         | 0.268                       | 0.015      | 0.284           |
| 10   | Parkway to Union EDA FT            | Parkway                | Union EDA          | 5,000     | GJ             | 01-Nov-2017         | 0.268                       | 0.015      | 0.284           |
| 11   | Parkway to Union CDA FT-NR         | Parkway                | Union CDA          | 64,000    | GJ             | 01-Nov-2012         | 0.068                       | 0.001      | 0.069           |
| 12   | Parkway to Union CDA FT            | Parkway                | Union CDA          | 16,000    | GJ             | 01-Nov-2012         | 0.068                       | 0.001      | 0.069           |
| 13   | TCPL FT - Total                    | Tarkway                | Cilion CDA         | 306,177   | GJ             | 01-1101-2012        | 0.000                       | 0.001      | 0.007           |
| 13   | TCTLTT - Total                     |                        |                    | 300,177   | G <sub>3</sub> |                     |                             |            |                 |
|      | TransCanada Storage Transportation | Service Firm Withd     | rawal              |           |                |                     |                             |            |                 |
| 14   | NCDA                               | Parkway                | Union NCDA         | 13,704    | GJ             | 01-Jan-2013         |                             |            |                 |
| 15   | WDA                                | Parkway                | Union WDA          | 31,420    | GJ             | 01-Jan-2013         |                             |            |                 |
| 16   | SSMDA                              | Dawn                   | Union SSMDA        | 35,022    | GJ             | 01-Jan-2013         |                             |            |                 |
| 17   | NDA                                | Parkway                | Union NDA          | 48,375    | GJ             | 01-Jan-2013         |                             |            |                 |
| 18   | EDA                                | Parkway                | Union EDA          | 68,520    | GJ             | 01-Jan-2013         | 0.263                       | 0.018      | 0.281           |
| 19   | TCPL Firm STS Withdrawal - Total   | Tarkway                | Cilion ED/A        | 197,041   | GJ             | 01 Juli 2013        | 0.203                       | 0.010      | 0.201           |
| 17   | Ter Er inn 515 withdrawar - Total  |                        |                    | 177,041   | G3             |                     |                             |            |                 |
|      | TransCanada Storage Transportation | n Service Firm Injecti | on                 |           |                |                     |                             |            |                 |
| 20   | NCDA                               | Union NCDA             | Parkway            | 0         | GJ             | 01-Jan-2013         |                             | 0.009      | 0.009           |
| 21   | WDA                                | Union WDA              | Parkway            | 3,150     | GJ             | 01-Jan-2013         | 1.033                       | 0.069      | 1.102           |
| 22   | SSMDA                              | Union SSMDA            | Parkway            | 0         | GJ             | 01-Jan-2013         |                             |            |                 |
| 23   | EDA                                | Union EDA              | Parkway            | 47,571    | GJ             | 01-Jan-2013         |                             |            |                 |
| 24   | NDA                                | Union NDA              | Parkway            | 49,100    | GJ             | 01-Jan-2013         | 0.405                       | 0.025      | 0.430           |
| 25   | TCPL Firm STS Injection - Total    |                        |                    | 99,821    | GJ             |                     |                             |            |                 |
|      | ,                                  |                        |                    | , -       |                |                     |                             |            |                 |
|      | Michigan Consolidated Gas Compan   | v (MichCon)/Great L    | akes Gas Transmiss | ion (GLGT | )/TransCa      | nada Pipeline (TCPI | ۷)                          |            |                 |
| 26   | TCPL to Union SSMDA                | S.S. Marie             | Union SSMDA        | 6,143     | GJ             | 01-Nov-2014         | ,                           |            |                 |
| 27   | GLGT to TCPL                       | Belle River Mills      | S.S. Marie         | 5,829     | DTH            | 01-Nov-2014         |                             |            |                 |
| 28   | MichCon to GLGT                    | MichCon Generic        | Belle River Mills  | 5,829     | DTH            | 01-Nov-2014         |                             |            |                 |
| 29   | MichCon/GLGT/TCPL FT - Total       |                        |                    | 6,143     | GJ             |                     | 0.171                       | 0.001      | 0.172           |
|      | Centra Transmission Holdings Inc.  |                        |                    |           |                |                     |                             |            |                 |
| 30   | Centra Transmission Holdings Inc.  | Spruce                 | Union MDA          | 8,000     | MCF            | 01-Nov-2012         |                             |            |                 |
| 31   | Centra Pipelines Minnesota Inc.    | Sprague                | Baudette           | 8,000     | MCF            | 01-Nov-2012         |                             |            |                 |
| 32   | CTHI FT - Total                    | _                      |                    | 8,473     | GJ             |                     | 0.230                       |            | 0.230           |
|      |                                    |                        |                    |           |                |                     |                             |            |                 |

### <u>UNION GAS LIMITED</u> Summary of Upstream Transportation Contracts - Effective November 1, 2011 <u>Southern Operations Areas</u>

| 3<br>4 | TransCanada Pipeline                         | (a)                   |                       | Quantity | Units | Termination Date | (\$Cdn/GJ) | (\$Cdn/GJ) | (\$Cdn/GJ) |
|--------|--|-----------------------|-----------------------|----------|-------|------------------|------------|------------|------------|
| 3<br>4 | TransCanada Pineline                         | (a)                   | (b)                   | ( c)     | (d)   | (e)              | (f)        | (g)        | (h=f+g)    |
| 3<br>4 | Trumpeumuu Trpemie                           |                       |                       |          |       |                  |            |            |            |
| 3<br>4 | Dawn to Union CDA FT                         | Dawn                  | Union CDA             | 60,000   | GJ    | 01-Nov-2012      | 0.210      | 0.011      | 0.221      |
| 4      | Empress to Union CDA FT                      | Empress               | Union CDA             | 3,699    | GJ    | 01-Feb-2013      | 2.099      | 0.144      | 2.243      |
|        | Empress to Union CDA FT                      | Empress               | Union CDA             | 13,149   | GJ    | 01-Nov-2012      | 2.099      | 0.144      | 2.243      |
|        | Empress to Union CDA FT                      | Empress               | Union CDA             | 40,000   | GJ    | 01-Nov-2012      | 2.099      | 0.144      | 2.243      |
| 5      | Empress to Union CDA FT                      | Empress               | Union CDA             | 1,979    | GJ    | 01-Jan-2013      | 2.099      | 0.144      | 2.243      |
| 6      | Empress to Union CDA FT                      | Empress               | Union CDA             | 12,500   | GJ    | 01-Jan-2016      | 2.099      | 0.144      | 2.243      |
| 7      | TCPL FT - Total                              |                       |                       | 131,327  | GJ    |                  |            |            |            |
|        | Alliance Pipelines/Vector Pipelines          |                       |                       |          |       |                  |            |            |            |
| 8      | Alliance                                     | Northern Alberta      | Cdn/US Interconnect   | 2,266.2  | 103M3 | 01-Dec-2015      |            |            |            |
| 9      | Alliance (L.P.)                              | Cdn/US Interconnect   | Vector                | 80,000   | MCF   | 01-Dec-2015      |            |            |            |
| 10     | Vector (L.P.) FT1                            | Chicago               | Cdn/US Interconnect   | 80,000   | DTH   | 01-Dec-2015      |            |            |            |
| 11     | Vector Canada FT1                            | Cdn/US Interconnect   | Dawn (Union)          | 84,405   | GJ    | 01-Dec-2015      |            |            |            |
| 12     | Alliance/Vector - Total                      |                       |                       | 84,405   | GJ    |                  | 1.665      | 0.002      | 1.666      |
|        | Panhandle Eastern Pipe Line Field Zone       |                       |                       |          |       |                  |            |            |            |
| 13     | PEPL FT                                      | Panhandle Field Zone  | Ojibway (Union)       | 25,000   | DTH   | 01-Nov-2017      |            |            |            |
| 14     | PEPL - Total                                 |                       | , ,                   | 26,376   | GJ    |                  | 0.411      | 0.043      | 0.453      |
|        | Trunkline Gas Company/Panhandle Eastern P    | ipe Line              |                       |          |       |                  |            |            |            |
| 15     | Trunkline FT                                 | East Louisiana        | Bourbon               | 20,467   | DTH   | 01-Nov-2012      |            |            |            |
| 16     | PEPL EFT                                     | Bourbon               | Ojibway (Union)       | 20,000   | DTH   | 01-Nov-2012      |            |            |            |
| 17     | TGC/PEPL FT - Total                          |                       |                       | 21,101   | GJ    |                  | 0.184      | 0.027      | 0.210      |
|        | Vector Pipelines                             |                       |                       |          |       |                  |            |            |            |
| 18     | Vector (L.P.) FT1                            | Chicago               | Cdn/US Interconnect   | 81,000   | DTH   | 01-Dec-2015      |            |            |            |
| 19     | Vector Canada FT1                            | Cdn/US Interconnect   | Dawn (Union)          | 85,460   | GJ    | 01-Dec-2015      |            |            |            |
| 20     | Vector - Total                               |                       |                       | 85,460   | GJ    |                  | 0.242      | 0.002      | 0.243      |
|        | Other:                                       |                       |                       |          |       |                  |            |            |            |
| 21     | St.Clair Pipelines L.P. (St.Clair Pipeline)  | St. Clair/Intl Border | St. Clair/Intl Border | 200,000  | MCF   | 01-Nov-2012      |            |            |            |
| 22     | 1 /  |                       |                       | 213,479  | GJ    |                  | 0.004      |            | 0.004      |
| 23     | St.Clair Pipelines L.P. (Bluewater Pipeline) | Bluewater/Intl Border | Bluewater/Intl Border | 115,000  | MCF   | 01-Nov-2012      |            |            |            |
| 24     | 1  |                       |                       | 122,750  | GJ    |                  | 0.014      |            | 0.014      |
| 25     | TransCanada Pipeline (1)                     | Niagara               | Kirkwall              | 21,101   | GJ    | 01-Nov-22        | 0.126      |            | 0.126      |
| 26     | Transcanada Elpenne                          |                       |                       |          | GJ    | 01 1107-22       | 0.120      |            | 0.120      |
| 20     |  |                       |                       | 21,101   | GJ    |                  |            |            |            |

Exchange Rate 1 US = Conversion Factor

0.981354269 CAD 1.055056

Note:

(1) Contract start date is November 1, 2012

#### **UNION GAS LIMITED**

# Allocation of Assets (Storage) - Southern Operations Area (Based on April 1, 2012 to March 31, 2013 - for the 2013 Test Year) $(10^3 \text{ m}^3)$

| Line |                  |         | ite Excess | SPS        | Net Aggregate   | Infranchise |                 |
|------|------------------|---------|------------|------------|-----------------|-------------|-----------------|
| No.  | Rate Class       | Sto     | rage       | Adjustment | Excess Storage  | Factor      | Allocation      |
|      |                  | (a)     | (b)        | (c)        | (d) = (b) + (c) | (e)         | (f) = (d) * (e) |
| 1    | M1/M2 Res        | 603,805 |            | (83,914)   | 519,891         | 100.00%     | 519,891         |
| 2    | M1/M2 Comm./Ind. | 501,733 |            | (69,728)   | 432,005         | 100.00%     | 432,005         |
|      |                  |         |            |            |                 |             |                 |
| 3    | M2 Total         |         | 1,105,538  | (153,642)  | 951,896         | 100.00%     | 951,896         |
| 4    | M4               |         | 37,133     |            | 37,133          | 100.00%     | 37,133          |
| 5    | M5A              |         | 60,008     |            | 60,008          | 100.00%     | 60,008          |
| 6    | M7               |         | 15,051     |            | 15,051          | 100.00%     | 15,051          |
| 7    | M9               |         | 7,725      |            | 7,725           | 100.00%     | 7,725           |
| 8    | M10              |         | 15         |            | 15              | 100.00%     | 15              |
| 9    | Total            |         | 1,225,469  | (153,642)  | 1,071,827       |             | 1,071,827       |

- The average number of M1/M2 residential customers: 897,471.
- For residential customers: storage space per customer will equal 579 m<sup>3</sup>.
- The annual forecast volume for all M1/M2 commercial / industrial winter peak customers: 1,713,633 10<sup>3</sup> m<sup>3</sup>.
- For non-contract commercial / industrial customers: storage space per customer will equal 25% of their annual weather normalized volume.
- SPS entitlement: 16% of applicable customer's SSS entitlement.
- The Global Proration Infranchise Factor, which was previously applied to the storage entitlement calculated for customers who were migrating to T1/T3 or
- unbundling service has been removed as a result of the Natural Gas Storage Allocations Policy hearing Decision (EB-2007-0724/0725).

# $\frac{UNION\;GAS\;LIMITED}{Allocation\;of\;Assets\;-\;(Storage\;and\;Transportation)\;-\;Northern\;and\;Eastern\;Operations\;Area}$ $\frac{As\;of\;November\;2012\;-\;For\;2013}{As\;of\;November\;2012\;-\;For\;2013}$

| Line |                                | TCPL FT Pipe                   | Redelivery                     | Delivery                       | Storage             |
|------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------|
| No.  | Particulars                    | $(10^3 \text{m}^3/\text{day})$ | $(10^3 \text{m}^3/\text{day})$ | $(10^3 \text{m}^3/\text{day})$ | $(10^6 \text{m}^3)$ |
|      |                                | (a)                            | (b)                            | (c)                            | (d)                 |
|      | Central Delivery Area          |                                |                                |                                |                     |
| 1    | Residential 01                 | 107.5                          | 362.7                          | 61.1                           | 16.8                |
| 2    | Commercial 01                  | 47.4                           | 166.5                          | 34.0                           | 7.4                 |
| 3    | Commercial/Industrial 10       | 79.6                           | 250.3                          | 26.6                           | 12.5                |
| 4    | <u>Rate 20</u>                 | <u>0.0</u>                     | <u>0.0</u>                     | 0.0                            | 0.0                 |
| 5    | Total                          | <u>234.5</u>                   | <u>779.6</u>                   | <u>121.6</u>                   | <u>36.7</u>         |
|      | Eastern Delivery Area          |                                |                                |                                |                     |
| 6    | Residential 01                 | 711.3                          | 1,012.1                        | 625.0                          | 61.6                |
| 7    | Commercial 01                  | 251.8                          | 377.1                          | 238.7                          | 21.8                |
| 8    | Commercial/Industrial 10       | 416.0                          | 534.9                          | 313.2                          | 36.0                |
| 9    | <u>Rate 20</u>                 | <u>189.3</u>                   | 90.5                           | 54.0                           | <u>5.9</u>          |
| 10   | Total                          | <u>1,568.4</u>                 | <u>2.014.5</u>                 | <u>1,230.9</u>                 | <u>125.3</u>        |
|      | Northern Delivery Area         |                                |                                |                                |                     |
| 11   | Residential 01                 | 708.5                          | 1,470.3                        | 516.2                          | 75.2                |
| 12   | Commercial 01                  | 250.9                          | 544.6                          | 204.7                          | 26.6                |
| 13   | Commercial/Industrial 10       | 313.3                          | 614.3                          | 196.4                          | 33.3                |
| 14   | Rate 20                        | <u>19.4</u>                    | <u>15.8</u>                    | <u>7.4</u>                     | 0.6                 |
| 15   | Total                          | <u>1,292.1</u>                 | <u>2,644.9</u>                 | 924.7                          | <u>135.7</u>        |
|      | Sault Ste. Marie Delivery Area |                                |                                |                                | · <u></u>           |
| 16   | Residential 01                 | 99.2                           | 395.1                          | 0.0                            | 18.3                |
| 17   | Commercial 01                  | 36.1                           | 149.4                          | 0.0                            | 6.6                 |
| 18   | Commercial/Industrial 10       | 68.7                           | 214.3                          | 0.0                            | 9.6                 |
| 19   | Rate 20                        | <u>13.1</u>                    | <u>17.8</u>                    | 0.0                            | 0.6                 |
| 20   | Total                          | <u>217.1</u>                   | <u>776.6</u>                   | 0.0                            | <u>35.1</u>         |
|      | Western Delivery Area          | <del></del>                    | <del></del>                    | <del></del> -                  | <del></del>         |
| 21   | Residential 01                 | 513.4                          | 494.4                          | 46.9                           | 31.2                |
| 22   | Commercial 01                  | 153.7                          | 159.7                          | 15.2                           | 9.3                 |
| 23   | Commercial/Industrial 10       | 208.7                          | 183.2                          | 17.4                           | 9.0                 |
| 24   | Rate 20                        | <u>99.4</u>                    | <u>48.0</u>                    | 4.5                            | <u>3.1</u>          |
| 25   | Total                          | 975.2                          | <u>885.3</u>                   | <u>84.0</u>                    | <u>52.6</u>         |
|      | Manitoba Delivery Area         | <del></del>                    | <del></del>                    |                                |                     |
| 26   | Residential 01                 | 72.0                           | 4.0                            | 0.0                            | 0.9                 |
| 27   | Commercial 01                  | 27.5                           | 1.5                            | 0.0                            | 0.3                 |
| 28   | Commercial/Industrial 10       | 21.1                           | 1.2                            | 0.0                            | 0.2                 |
| 29   | Rate 20                        | 0.0                            | 0.0                            | 0.0                            | 0.0                 |
| 30   | Total                          | 120.6                          | <u>6.7</u>                     | 0.0                            | 1.4                 |
|      | Total                          |                                | _                              | <del></del>                    |                     |
| 31   | Residential 01                 | 2,211.9                        | 3,738.7                        | 1,249.2                        | 204.0               |
| 32   | Commercial 01                  | 767.5                          | 1,398.8                        | 492.5                          | 72.0                |
| 33   | Commercial/Industrial 10       | 1,107.3                        | 1,798.1                        | 553.6                          | 100.6               |
| 34   | Rate 20                        | 321.2                          | 1,750.1<br>172.1               | 65.9                           | 10.2                |
| 35   | Total                          | <u>4,407.8</u>                 | 7,107.7                        | 2,361.2                        | 386.8               |
| 55   | 2 0 0002                       | 1,107.0                        | 7,107.7                        | 2,301.2                        | 200.0               |

# UNION GAS LIMITED Allocation of Northern Assets For 2013 Test Year

| Line |                                | TCPL FT    | Redelivery | Delivery   | Storage    |
|------|--------------------------------|------------|------------|------------|------------|
| No.  | Particulars                    | Allocation | Allocation | Allocation | Allocation |
|      |                                | (a)        | (b)        | (c)        | (d)        |
|      | Central Delivery Area          |            |            |            |            |
| 1    | * Residential 01               | 4.6        | 15.5       | 2.6        | 721.5      |
| 2    | ** Commercial 01               | 75.6%      | 264.8%     | 54.0%      | 32.3%      |
| 3    | ** Commercial/Industrial 10    | 75.6%      | 237.1%     | 25.2%      | 32.3%      |
|      | Eastern Delivery Area          |            |            |            |            |
| 4    | * Residential 01               | 8.2        | 11.6       | 7.2        | 707.0      |
| 5    | ** Commercial 01               | 143.2%     | 213.9%     | 135.4%     | 33.8%      |
| 6    | ** Commercial/Industrial 10    | 143.3%     | 183.7%     | 107.6%     | 33.9%      |
|      | Northern Delivery Area         |            |            |            |            |
| 7    | * Residential 01               | 7.5        | 15.5       | 5.4        | 792.8      |
| 8    | ** Commercial 01               | 110.3%     | 238.8%     | 89.7%      | 31.9%      |
| 9    | ** Commercial/Industrial 10    | 110.4%     | 215.8%     | 69.0%      | 32.0%      |
|      | Sault Ste. Marie Delivery Area |            |            |            |            |
| 10   | * Residential 01               | 4.1        | 16.2       | 0.0        | 749.8      |
| 11   | ** Commercial 01               | 67.7%      | 279.5%     | 0.0%       | 34.0%      |
| 12   | ** Commercial/Industrial 10    | 67.7%      | 210.8%     | 0.0%       | 25.8%      |
|      | Western Delivery Area          |            |            |            |            |
| 13   | * Residential 01               | 9.8        | 9.5        | 0.9        | 597.2      |
| 14   | ** Commercial 01               | 141.6%     | 146.7%     | 13.9%      | 23.4%      |
| 15   | ** Commercial/Industrial 10    | 126.5%     | 110.8%     | 10.5%      | 15.0%      |
|      | Manitoba Delivery Area         |            |            |            |            |
| 16   | * Residential 01               | 8.8        | 0.5        | 0.0        | 103.7      |
| 17   | ** Commercial 01               | 290.7%     | 16.1%      | 0.0%       | 9.4%       |
| 18   | ** Commercial/Industrial 10    | 291.5%     | 16.2%      | 0.0%       | 9.4%       |

<sup>(\*)</sup> Rate 01 Residential allocation is in  $m^3$ /day/customer for FT, Redelivery and Delivery. For storage, the allocation is in  $m^3$ .

<sup>(\*\*)</sup> Rate 01 and 10 Commercial allocations are shown as a percentage of avgerage day volume.

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> Exhibit D3 Tab 3

> Schedule 1

### **UNION GAS LIMITED**

## Operating and Maintenance Expense by Administrator Calender Year Ending December 31

| Line<br>No. | Particulars (\$000's)                               | Forecast 2013 |
|-------------|---|---------------|
|             |   |               |
|             |   |               |
| 1           | Affiliate Services (Inbound & Outbound)             | (1,818)       |
| 2           | Audit Services                                      | 487           |
| 3           | Bad Debt Expense                                    | 6,600         |
| 4           | Business Development, Storage & Transmission        | 16,615        |
| 5           | Corporate Adjustments                               | 549           |
| 6           | Distribution Operations                             | 127,776       |
| 7           | Employee & Labour Relations                         | 88,724        |
| 8           | Energy Conservation                                 | 31,843        |
| 9           | Engineering, Construction & STO                     | 47,590        |
| 10          | Environment, Health & Governance                    | 887           |
| 11          | Executive   | 3,281         |
| 12          | Finance   | 10,742        |
| 13          | Government Affairs / Relations                      | 993           |
| 14          | Insurance   | 9,484         |
| 15          | IT - Information Systems                            | 12,009        |
| 16          | IT - Information Technology Infrastructure          | 14,832        |
| 17          | IT - Other  | 2,806         |
| 18          | Legal   | 1,407         |
| 19          | Marketing & Customer Care                           | 62,914        |
| 20          | Procurement / Supply Chain                          | 2,078         |
| 21          | Project Systems & Controls                          | 209           |
| 22          | Regulatory, Municipal Relations and Public Affairs  | 16,982        |
| 23          | Tax   | 1,209         |
| 24          | Total   | 458,199       |
| 25          | Capitalization                                      | (68,029)      |
| 26          | Non-Utility Allocation                              | (12,981)      |
| 27          | Total Net Utility Operating and Maintenance Expense | 377,189       |
| 28          | Excess Utility Cross-Charge                         | (2,261)       |
| 29          | Total Net Utility O&M Less Cross-Charge             | 374,928       |

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# <u>UNION GAS LIMITED</u> Operating and Maintenance Expense by Cost Type 2013 Test vs. 2012 Bridge

| Line | D (* 1 (*000)                                       | Forecast | Forecast | D.cc       | 0/       |
|------|---|----------|----------|------------|----------|
| No.  | Particulars (\$000's)                               | 2013     | 2012     | Difference | <u>%</u> |
|      |   | (a)      | (b)      | (c)        | (d)      |
| 1    | Salaries/Wages                                      | 193,787  | 187,950  | 5,837      | 3.11%    |
| 2    | Benefits  | 61,684   | 72,269   | (10,585)   | (14.65%) |
| 3    | Materials   | 9,958    | 9,242    | 716        | 7.75%    |
| 4    | Employee Expenses/Training                          | 14,330   | 14,110   | 220        | 1.56%    |
| 5    | Contract Services                                   | 66,376   | 63,670   | 2,706      | 4.25%    |
| 6    | Consulting  | 13,172   | 11,082   | 2,090      | 18.86%   |
| 7    | General   | 22,190   | 21,592   | 598        | 2.77%    |
| 8    | Transportation and Maintenance                      | 7,478    | 7,414    | 64         | 0.87%    |
| 9    | Company Used Gas                                    | 2,501    | 2,473    | 28         | 1.13%    |
| 10   | Utility Costs                                       | 4,682    | 4,562    | 120        | 2.63%    |
| 11   | Communications                                      | 6,380    | 6,243    | 137        | 2.19%    |
| 12   | Demand Side Management Programs                     | 24,232   | 23,605   | 627        | 2.66%    |
| 13   | Advertising   | 2,386    | 2,288    | 98         | 4.29%    |
| 14   | Insurance   | 9,056    | 8,605    | 451        | 5.24%    |
| 15   | Donations   | 788      | 775      | 13         | 1.68%    |
| 16   | Financial   | 1,871    | 1,860    | 11         | 0.57%    |
| 17   | Lease   | 4,191    | 4,151    | 40         | 0.96%    |
| 18   | Cost Recovery from Third Parties                    | (2,549)  | (2,883)  | 334        | (11.58%) |
| 19   | Computers   | 6,465    | 6,158    | 307        | 4.98%    |
| 20   | Regulatory Hearing & OEB Cost Assessment            | 4,300    | 5,200    | (900)      | (17.31%) |
| 21   | Outbound Affiliate Services                         | (13,706) | (13,667) | (39)       | 0.29%    |
| 22   | Inbound Affiliate Services                          | 11,888   | 11,494   | 394        | 3.43%    |
| 23   | Bad Debt  | 6,600    | 6,600    | -          | 0.00%    |
| 24   | Other   | 139      | 141      | (2)        | (1.07%)  |
| 25   | Total Gross Operating and Maintenance Expense       | 458,199  | 454,934  | 3,265      | 0.72%    |
|      |   |          |          |            |          |
| 26   | Indirect Capitalization                             | (48,660) | (49,154) | 494        | (1.01%)  |
| 27   | Direct Capitalization                               | (19,369) | (17,058) | (2,311)    | 13.55%   |
| 28   | Total Utility Operating and Maintenance Expense     | 390,170  | 388,722  | 1,448      | 0.37%    |
| 29   | Non-Utility Allocations                             | (12,981) | (12,853) | (128)      | 0.99%    |
| 30   | Total Net Utility Operating and Maintenance Expense | 377,189  | 375,869  | 1,320      | 0.35%    |

### Operating and Maintenance Expense by Cost Type

### 2013 Forecast vs. 2012 Forecast

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| Line |  |           |
|------|--|-----------|
| No.  | Notes:   | (\$000's) |
|      |  |           |
|      | Salaries / Wages   | 102 505   |
| 1    | 2013 Forecast  | 193,787   |
| 2    | 2012 Forecast  | 187,950   |
| 3    | Difference   | 5,837     |
|      | Reasons:   |           |
| 4    | Merit increase   | 6,900     |
| 5    | Market Development - Energy Technology and Innovation Canada | 100       |
| 6    | Other  | (1,163)   |
| 7    | Total difference: 2013 Forecast vs. 2012 Forecast            | 5,837     |
|      | Danafita   |           |
| 0    | Benefits 2013 Formand  | C1 C04    |
| 8    | 2013 Forecast  | 61,684    |
| 9    | 2012 Forecast  | 72,269    |
| 10   | Difference   | (10,585)  |
|      | Reasons:   |           |
| 11   | Increased non pension benefit costs                          | 1,441     |
| 12   | Decreased pension benefit costs                              | (12,026)  |
| 13   | Total difference: 2013 Forecast vs. 2012 Forecast            | (10,585)  |
|      | Materials  |           |
| 14   | 2013 Forecast  | 9,958     |
| 15   | 2012 Forecast  | 9,242     |
| 16   | Difference   | 716       |
|      | D.   |           |
| 1-   | Reasons:   | <b></b> . |
| 17   | Other  | 716       |
| 18   | Total difference: 2013 Forecast vs. 2012 Forecast            | 716       |

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### Operating and Maintenance Expense by Cost Type 2013 Forecast vs. 2012 Forecast

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| Line |  |           |
|------|--|-----------|
| No.  | Notes:   | (\$000's) |
|      |  |           |
|      |  |           |
|      | Employee Expenses / Training                                 |           |
| 1    | 2013 Forecast  | 14,330    |
| 2    | 2012 Forecast  | 14,110    |
| 3    | Difference   | 220       |
|      | Reasons:   |           |
| 4    | Travel   | 83        |
| 5    | Training   | 125       |
| 6    | Other  | 12        |
| 7    | Total difference: 2013 Forecast vs. 2012 Forecast            | 220       |
|      |  |           |
|      | Contract Services  |           |
| 8    | 2013 Forecast  | 66,376    |
| 9    | 2012 Forecast  | 63,670    |
| 10   | Difference   | 2,706     |
|      |  |           |
|      | Reasons:   |           |
| 11   | Pipeline integrity   | 900       |
| 12   | Line locates   | 583       |
| 13   | Banner transactional fee                                     | 300       |
| 14   | Other  | 923       |
| 15   | Total difference: 2013 Forecast vs. 2012 Forecast            | 2,706     |
|      | Consulting   |           |
| 16   | 2013 Forecast  | 13,172    |
| 17   | 2012 Forecast  | 11,082    |
| 18   | Difference   | 2,090     |
| 10   | 2  |           |
|      | Reasons:   |           |
| 19   | Market Development - Energy Technology and Innovation Canada | 2,010     |
| 20   | Other  | 80        |
| 21   | Total difference: 2013 Forecast vs. 2012 Forecast            | 2,090     |

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### Operating and Maintenance Expense by Cost Type 2013 Forecast vs. 2012 Forecast

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| Line    |  |                 |
|---------|--|-----------------|
| No.     | Notes:   | (\$000's)       |
|         | General  |                 |
| 1       | 2013 Forecast  | 22,190          |
| 2       | 2012 Forecast  | 21,592          |
| 3       | Difference   | 598             |
|         |  |                 |
|         | Reasons:   |                 |
| 4       | Other  | 598             |
| 5       | Total difference: 2013 Forecast vs. 2012 Forecast                  | 598             |
|         |  |                 |
|         | <u>Transportation and Maintenance</u>                              |                 |
| 6       | 2013 Forecast  | 7,478           |
| 7       | 2012 Forecast  | 7,414           |
| 8       | Difference   | 64              |
|         | D.   |                 |
| 0       | Reasons:   | <i>C</i> 1      |
| 9<br>10 | Volume and price Total difference: 2013 Forecast vs. 2012 Forecast | <u>64</u><br>64 |
| 10      | Total difference. 2013 Polecast vs. 2012 Polecast                  |                 |
|         | Company Used Gas   |                 |
| 11      | 2013 Forecast  | 2,501           |
| 12      | 2012 Forecast  | 2,473           |
| 13      | Difference   | 28              |
|         |  |                 |
|         | Reasons:   |                 |
| 14      | Volume and price   | 28              |
| 15      | Total difference: 2013 Forecast vs. 2012 Forecast                  | 28              |
|         |  |                 |
|         | <u>Utility Costs</u>   | 4.500           |
| 16      | 2013 Forecast  | 4,682           |
| 17      | 2012 Forecast  | 4,562           |
| 18      | Difference   | 120             |
|         | Reasons:   |                 |
| 19      | Increased utility costs  | 120             |
| 20      | Total difference: 2013 Forecast vs. 2012 Forecast                  | 120             |
|         |  |                 |

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### Operating and Maintenance Expense by Cost Type 2013 Forecast vs. 2012 Forecast

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| Line |   |           |
|------|---|-----------|
| No.  | Notes:  | (\$000's) |
|      | Communications                                      |           |
| 1    | 2013 Forecast                                       | 6,380     |
| 2    | 2012 Forecast                                       | 6,243     |
| 3    | Difference  | 137       |
|      | Daggara   |           |
| 4    | Reasons:  | 127       |
| 4    | Other   | 137       |
| 5    | Total difference: 2013 Forecast vs. 2012 Forecast   | 137       |
|      | Demand Side Management Programs                     |           |
| 6    | 2013 Forecast                                       | 24,232    |
| 7    | 2012 Forecast                                       | 23,605    |
| 8    | Difference  | 627       |
|      |   |           |
|      | Reasons:  |           |
| 9    | DSM program costs                                   | 627       |
| 10   | Total difference: 2013 Forecast vs. 2012 Forecast   | 627       |
|      |   |           |
|      | Advertising   |           |
| 11   | 2013 Forecast                                       | 2,386     |
| 12   | 2012 Forecast                                       | 2,288     |
| 13   | Difference  | 98        |
|      | Reasons:  |           |
| 14   | Other   | 98        |
| 15   | Total difference: 2013 Forecast vs. 2012 Forecast   | 98        |
|      |   |           |
|      | <u>Insurance</u>                                    |           |
| 16   | 2013 Forecast                                       | 9,056     |
| 17   | 2012 Forecast                                       | 8,605     |
| 18   | Difference  | 451       |
|      | Reasons:  |           |
| 19   | Higher insurance premiums                           | 451       |
| 20   | Total difference: 2013 Forecast vs. 2012 Forecast   | 451       |
| 20   | Total difference. 2015 I offenst vs. 2012 I offenst | -TJ1      |

### Operating and Maintenance Expense by Cost Type

### 2013 Forecast vs. 2012 Forecast

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| Line |   |           |
|------|---|-----------|
| No.  | Notes:  | (\$000's) |
|      |   |           |
|      | <u>Donations</u>                                  |           |
| 1    | 2013 Forecast                                     | 788       |
| 2    | 2012 Forecast                                     | 775       |
| 3    | Difference  | 13        |
|      | Reasons:  |           |
| 4    | Other   | 13        |
| 5    | Total difference: 2013 Forecast vs. 2012 Forecast | 13        |
|      | Financial   |           |
| 6    | 2013 Forecast                                     | 1,871     |
| 7    | 2012 Forecast                                     | 1,860     |
| 8    | Difference  | 11        |
|      | Reasons:  |           |
| 9    | Other   | 11        |
| 10   | Total difference: 2013 Forecast vs. 2012 Forecast | 11        |
|      | Lease   |           |
| 11   | 2013 Forecast                                     | 4,191     |
| 12   | 2012 Forecast                                     | 4,151     |
| 13   | Difference  | 40        |
|      | Reasons:  |           |
| 14   | Other   | 40        |
| 15   | Total difference: 2013 Forecast vs. 2012 Forecast | 40        |
|      | Cost Recovery from Third Parties                  |           |
| 16   | 2013 Forecast                                     | (2,549)   |
| 17   | 2012 Forecast                                     | (2,883)   |
| 18   | Difference  | 334       |
|      | Reasons:  |           |
| 19   | Other   | 334       |
| 20   | Total difference: 2013 Forecast vs. 2012 Forecast | 334       |
| -    |   |           |

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### Operating and Maintenance Expense by Cost Type

### 2013 Forecast vs. 2012 Forecast

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| Line |   |           |
|------|---|-----------|
| No.  | Notes:  | (\$000's) |
|      | Computers   |           |
| 1    | 2013 Forecast                                     | 6,465     |
| 2    | 2012 Forecast                                     | 6,158     |
| 3    | Difference  | 307       |
|      | Reasons:  |           |
| 4    | Other   | 307       |
| 5    | Total difference: 2013 Forecast vs. 2012 Forecast | 307       |
|      | Regulatory Hearing & OEB Cost Assessment          |           |
| 6    | 2013 Forecast                                     | 4,300     |
| 7    | 2012 Forecast                                     | 5,200     |
| 8    | Difference  | (900)     |
|      | Reasons:  |           |
| 9    | Rebasing  | (900)     |
| 10   | Total difference: 2013 Forecast vs. 2012 Forecast | (900)     |
|      | Outbound Affiliate Services                       |           |
| 11   | 2013 Forecast                                     | (13,706)  |
| 12   | 2012 Forecast                                     | (13,667)  |
| 13   | Difference  | (39)      |
|      | Reasons:  |           |
| 14   | Other   | (39)      |
| 15   | Total difference: 2013 Forecast vs. 2012 Forecast | (39)      |
|      | Inbound Affiliate Services                        |           |
| 16   | 2013 Forecast                                     | 11,888    |
| 17   | 2012 Forecast                                     | 11,494    |
| 18   | Difference  | 394       |
|      | Reasons:  |           |
| 19   | Other   | 394       |
| 20   | Total difference: 2013 Forecast vs. 2012 Forecast | 394       |
|      |   |           |

Operating and Maintenance Expense by Cost Type

### 2013 Forecast vs. 2012 Forecast

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| Line |   |           |
|------|---|-----------|
| No.  | Notes:  | (\$000's) |
|      | Bad Debt  |           |
| 1    | 2013 Forecast                                     | 6,600     |
| 2    | 2012 Forecast                                     | 6,600     |
| 3    | Difference  | -         |
| 4    | Total difference: 2013 Forecast vs. 2012 Forecast | <u> </u>  |
|      | <u>Other</u>                                      |           |
| 5    | 2013 Forecast                                     | 139       |
| 6    | 2012 Forecast                                     | 141       |
| 7    | Difference  | (2)       |
|      | Reasons:  |           |
| 8    | Other   | (2)       |
| 9    | Total difference: 2013 Forecast vs. 2012 Forecast | (2)       |

Filed: 2011-11-10 EB-2011-0210 Exhibit D3 Tab 4 Schedule 1 Page 1 of 3

### UNION GAS LIMITED

### Provision for Depreciation, Amortization and Depletion Calendar Year Ending December 31, 2013

| Line |   |              |         |
|------|---|--------------|---------|
| No.  | Particulars (\$000's)                                 |              |         |
|      |   |              |         |
|      | Total provision for depreciation and                  |              |         |
| 1    | amortization before adjustments (per page 3)          |              | 198,732 |
| 2    | Adjustments: vehicle depreciation through clearing    |              | 2,265   |
| 3    | Provision for depreciation amortization and depletion | <del>-</del> | 196,467 |

Filed: 2011-11-10 EB-2011-0210 Exhibit D3 Tab 4 Schedule 1 Page 2 of 3

### UNION GAS LIMITED

### Provision for Depreciation, Amortization and Depletion

### Calendar Year Ending December 31, 2013

| Line     |  | Average            | Rate           |                 |
|----------|--|--------------------|----------------|-----------------|
| No.      | Particulars (\$000's)                              | Plant (1)          | (%)            | Provision       |
|          |  | (a)                | (b)            | (c)             |
|          | Intangible plant:                                  |                    |                |                 |
| 1        | Franchises and consents                            | 1,321              |                | 63              |
| 2        | Intangible plant - Other                           | 6,356              |                | 122             |
| 3        |  | 7,677              |                | 185             |
|          | Local Storage Plant                                |                    |                |                 |
| 4        | Structures and improvements                        | 3,299              | 2.85%          | 94              |
| 5        | Gas holders - storage                              | 4,574              | 2.54%          | 116             |
| 6        | Gas holders - equipment                            | 13,250             | 3.54%          | 469             |
| 7        | Regulatory Overheads                               | 1,656              | 30             | 55              |
| 8        |  | 22,779             |                | 734             |
|          | Storage:   |                    |                |                 |
| 9        | Land rights  | 32,062             | 2.10%          | 673             |
| 10       | Structures and improvements                        | 47,792             | 2.50%          | 1,195           |
| 11       | Wells and lines                                    | 90,073             | 2.48%          | 2,234           |
| 12       | Compressor equipment                               | 235,882            | 2.68%          | 6,322           |
| 13       | Measuring & regulating equipment                   | 46,275             | 3.11%          | 1,439           |
| 14       | Other Storage Equipment                            | 2,302              | 20.00%         | 460             |
| 15       | Regulatory Overheads                               | 14,664             | 35             | 419             |
| 16       |  | 469,050            |                | 12,742          |
| 4.5      | Transmission:                                      | 25.046             | 1.50           |                 |
| 17       | Land rights  | 37,846             | 1.76%          | 666             |
| 18       | Structures and improvements                        | 54,602             | 2.03%          | 1,108           |
| 19       | Mains  | 1,078,915          | 1.98%          | 21,362          |
| 20       | Compressor equipment                               | 337,120            | 3.23%          | 10,889          |
| 21       | Measuring & regulating equipment                   | 166,532            | 2.60%          | 4,330           |
| 22       | Regulatory Overheads                               | 44,785             | 40             | 1,120           |
| 23       |  | 1,719,800          |                | 39,475          |
| 24       | Distribution - Southern Operations:                | 7.571              | 1 (50/         | 125             |
| 24       | Land rights  | 7,571              | 1.65%          | 125             |
| 25<br>26 | Structures and improvements<br>Services - metallic | 129,114            | 2.22%<br>2.81% | 2,866           |
|          |  | 113,773            |                | 3,197           |
| 27<br>28 | Services - plastic                                 | 783,833<br>68.701  | 2.51%          | 19,674          |
| 28<br>29 | Regulators   | 68,701<br>70,003   | 5.00%          | 3,439           |
| 30       | Regulator and meter installations Mains - metallic | · ·                | 2.80%          | 1,956<br>11,738 |
| 31       | Mains - plastic                                    | 414,764<br>531,747 | 2.83%          |                 |
| 32       | Measuring & regulating equipment                   | 531,747<br>38,524  | 2.31%          | 12,284          |
| 33       | Meters   | 226,902            | 3.66%          | 1,410<br>8,668  |
| 33<br>34 | Regulatory Overheads                               | 72,124             | 3.82%<br>35    | 8,668<br>2,061  |
| 35       |  | 2,457,056          |                | 67,418          |
|          |  |                    |                |                 |

### Provision for Depreciation, Amortization and Depletion

### Calendar Year Ending December 31, 2013

| Line |   | Average   | Rate   |           |
|------|---|-----------|--------|-----------|
| No.  | Particulars (\$000's)                               | Plant (1) | (%)    | Provision |
|      |   | (a)       | (b)    | (c)       |
|      | Distribution plant - Northern & Eastern Operations: |           |        |           |
| 1    | Land rights   | 9,443     | 1.71%  | 161       |
| 2    | Structures & improvements                           | 62,145    | 2.41%  | 1,498     |
| 3    | Services - metallic                                 | 96,441    | 3.22%  | 3,106     |
| 4    | Services - plastic                                  | 374,732   | 2.60%  | 9,743     |
| 5    | Regulators  | 27,294    | 5.00%  | 1,365     |
| 6    | Regulator and meter installations                   | 29,845    | 2.92%  | 871       |
| 7    | Mains - metallic                                    | 379,283   | 3.02%  | 11,454    |
| 8    | Mains - plastic                                     | 208,318   | 2.38%  | 4,958     |
| 9    | Compressor equipment                                | -         | 2.3070 | -         |
| 10   | Measuring & regulating equipment                    | 110,387   | 3.77%  | 4,162     |
| 11   | Meters  | 65,744    | 4.03%  | 2,649     |
| 12   | Regulatory Overheads                                | 32,523    | 35     | 929       |
| 12   | regulatory overheads                                | 32,323    | 33     |           |
| 13   |   | 1,396,155 |        | 40,896    |
|      | General:  |           |        |           |
| 14   | Structures and improvements                         | 44,184    | 1.92%  | 848       |
| 15   | Office furniture and equipment                      | 6,405     | 6.67%  | 427       |
| 16   | Office equipment - computers                        | 101,827   | 25.00% | 25,457    |
| 17   | Transportation equipment                            | 41,741    | 13.27% | 5,539     |
| 18   | Heavy work equipment                                | 18,649    | 6.92%  | 1,291     |
| 19   | Tools and other equipment                           | 29,694    | 6.67%  | 1,981     |
| 20   | Communications equipment                            | 15,145    | 6.67%  | 1,010     |
| 21   | Communications structures                           | 225       | 6.67%  | 15        |
| 22   | Regulatory Overheads                                | 7,143     | 10     | 714       |
| 23   |   | 265,013   |        | 37,282    |
| 24   | Contributions in aid of construction                |           |        |           |
| 25   | Sub-total   | 6,337,530 |        | 198,732   |
| 26   | Total provision for depreciation and amortization   | 6,337,530 |        | 198,732   |
| 27   | Depreciation through clearing                       |           |        | 2,265     |
| 28   |   | 6,337,530 |        | 196,467   |
|      |   |           |        |           |

<sup>(1)</sup> A simple average of the opening and closing plant balances was used to calculate the annual depreciation provision.

Filed: 2011-11-10 EB-2011-0210 Exhibit D3 Tab 5 Schedule 1

# <u>UNION GAS LIMITED</u> Calculation of Utility Income Taxes <u>Year Ended December 31</u>

| Line<br>No.           | Particulars (\$000's)  | Forecast 2013                             |
|-----------------------|--|---|
|                       | Determination of Taxable Income  |   |
| 1                     | Utility income before interest and income taxes (1)  | 252,931                                   |
| 2 3                   | Adjustments required to arrive at taxable utility income:<br>Interest expense<br>Utility permanent differences                                   | (145,358)<br>4,693                        |
| 4                     |  | 112,266                                   |
| 5<br>6<br>7<br>8<br>9 | Utility timing differences Capital Cost Allowance Depreciation (2) Depreciation through clearing (2) Other Gas Cost Deferral and Other (current) | (185,690)<br>196,467<br>2,265<br>(32,921) |
| 10                    |  | (19,879)                                  |
| 11                    | Taxable income  Calculation of Utility Income Taxes  | 92,387                                    |
| 12<br>13<br>14        | Income taxes (line 11 * line 18) Gas Cost Deferral and Other (current) Deferred tax drawdown   | 23,559<br>-<br>(15,169)                   |
| 15                    | Total taxes  | 8,390                                     |
|                       | Tax Rates  |   |
| 16<br>17<br>18        | Federal tax Provincial tax Total tax rate  | 15.00%<br>10.50%<br>25.50%                |
| Note: (1) (2)         | Exhibit F3, Tab 2, Schedule 1.<br>Exhibit D3, Tab 4, Schedule 1.   |   |

## <u>UNION GAS LIMITED</u> Calculation of Capital Cost Allowance (CCA) <u>Calendar Year Ending December</u> 31, 2013

| Line |         |  | Average     | Rate   |           |
|------|---------|--|-------------|--------|-----------|
| No.  | Particu | lars (\$000's)   | CCA Balance | (%)    | Provision |
|      |         |  | (a)         | (b)    | (c)       |
|      |         |  |             |        |           |
|      | Class   |  |             |        |           |
| 1    | 1       | Buildings, structures and improvements, services, meters, mains            | 1,259,974   | 4.0%   | 50,399    |
| 2    | 1       | Non-residential building acquired after March 19, 2007                     | 83,527      | 6.0%   | 5,012     |
| 3    | 2       | Mains acquired before 1988   | 147,495     | 6.0%   | 8,850     |
| 4    | 3       | Buildings acquired before 1988   | 4,279       | 5.0%   | 214       |
| 5    | 6       | Other buildings  | 173         | 10.0%  | 17        |
| 6    | 7       | Compression equipment acquired after February 22, 2005                     | 165,697     | 15.0%  | 24,855    |
| 7    | 8       | Compression assets, office furniture, equipment                            | 79,640      | 20.0%  | 15,928    |
| 8    | 10      | Transportation, computer equipment   | 18,611      | 30.0%  | 5,583     |
| 9    | 12      | Computer software, small tools   | 7,701       | 100.0% | 7,701     |
| 10   | 13      | Leasehold improvements   | 332         | N/A    | 113       |
| 11   | 17      | Roads, sidewalk, parking lot or storage areas                              | 946         | 8.0%   | 76        |
| 12   | 38      | Heavy work equipment   | 6,878       | 30.0%  | 2,063     |
| 13   | 41      | Storage assets   | 8,019       | 25.0%  | 2,005     |
| 14   | 45      | Computer hardware acquired after March 22, 2004 and before March 19, 2007  | 246         | 45.0%  | 111       |
| 15   | 49      | Transmission pipelines acquired after February 22, 2005                    | 204,628     | 8.0%   | 16,370    |
| 16   | 50      | Computer hardware acquired after March 18, 2007                            | 22,934      | 55.0%  | 12,614    |
| 17   | 51      | Distribution pipelines acquired after March 18, 2007                       | 562,998     | 6.0%   | 33,780    |
| 18   | 52      | Computer hardware acquired after January 27, 2009 and before February 2011 | 0           | 100.0% | 0         |
| 10   | Total   |  | 2 574 079   |        | 105 600   |
| 19   | Total   |  | 2,574,078   |        | 185,690   |

### Note:

(1) The CCA rate depends on the type of the leasehold and the terms of the lease.

Filed: 2011-11-10 EB-2011-0210 Exhibit D3 Tab 6 Schedule 1

# <u>UNION GAS LIMITED</u> Salaries, Variable Pay, and Employee Benefits Calendar Year Ended December 31, 2013

|      |               |                                   |                           | (\$000's)                         |                              |
|------|---------------|-----------------------------------|---------------------------|-----------------------------------|------------------------------|
| Line |               |                                   | Total                     | Total                             | Total                        |
| No.  | Particulars   | FTE                               | Salaries (1)              | Variable Pay (2)                  | Benefit (3)                  |
|      |               | (a)                               | (b)                       | (c)                               | (d)                          |
| 1    | Management    | 1,038                             | 98,711                    | 16,054                            | 29,900                       |
| 2    | Analyst       | 274                               | 17,928                    | 1,004                             | 6,851                        |
| 3    | Unionized     | 914                               | 67,244                    | 1,659                             | 22,538                       |
| 4    | Non-Unionized | 91                                | 4,608                     | 313                               | 2,123                        |
| 5    | Total         | 2,317                             | 188,491                   | 19,030                            | 61,412                       |
|      | \$/FTE        | Average<br>Yearly<br>Compensation | Average<br>Yearly<br>Wage | Average<br>Yearly<br>Variable Pay | Average<br>Yearly<br>Benefit |
| 6    | Management    | 139,376                           | 95,102                    | 15,467                            | 28,807                       |
| 7    | Analyst       | 93,965                            | 65,336                    | 3,660                             | 24,968                       |
| 8    | Unionized     | 100,075                           | 73,593                    | 1,816                             | 24,666                       |
| 9    | Non-Unionized | 77,469                            | 50,679                    | 3,437                             | 23,353                       |
| 10   | Average       | 116,070                           | 81,351                    | 8,213                             | 26,505                       |

#### Note:

- (1) "Total Salaries" include both O&M and Capital related salaries.
- (2) "Total Variable Pay" includes both short term and long term incentive plans.
- (3) "Total Benefit" includes Pension reported on a US GAAP basis.

Filed: 2011-11-10 EB-2011-0210 Exhibit D3 Tab 6 Schedule 2

### **UNION GAS LIMITED**

## FTE Report by Administrator for the years ending December 31

| Line<br>No. | Particulars                                    | Actual 2010 (a) | Outlook 2011 (b) | Forecast 2012 (c) | Forecast 2013 (d) |
|-------------|--|-----------------|------------------|-------------------|-------------------|
|             |  | (u)             | (0)              | (6)               | (u)               |
| 1           | Executive                                      | 8               | 9                | 8                 | 8                 |
| 2           | Business Development                           | 146             | 152              | 150               | 152               |
| 3           | Operations                                     | 1,313           | 1,351            | 1,357             | 1,358             |
| 4           | Regulatory                                     | 48              | 48               | 61                | 61                |
| 5           | Information Technology                         | 170             | 168              | 177               | 177               |
| 6           | Corporate Services                             | 477             | 523              | 513               | 515               |
| 7           | Human Resources                                | 49              | 47               | 53                | 46                |
| 8           | Total  | 2,211           | 2,298            | 2,319             | 2,317             |
| 9           | Vacancy assumption in forecast                 |                 | (69)             | (69)              | (69)              |
| 10          | Forecasted FTE                                 |                 | 2,229            | 2,250             | 2,248             |
|             | Variance explanation:                          |                 |                  |                   |                   |
|             | Role additions:                                |                 |                  |                   |                   |
| 11          | Business Development                           |                 | 2                | 2                 | 2                 |
| 12          | Operations                                     |                 | 9                | 10                | 1                 |
| 13          | Regulatory                                     |                 | 1                | 5                 | 0                 |
| 14          | Information Technology                         |                 | 4                |                   |                   |
| 15          | Corporate Services                             |                 | 3                | 7                 | 2                 |
| 16          | DSM Roles                                      |                 | 5                | 2                 |                   |
| 17          | Human Resources (temporary staffing)           |                 | (3)              | 5                 | (7)               |
|             | Role reductions:                               |                 |                  |                   |                   |
| 18          | Business Development                           |                 |                  | (6)               |                   |
| 19          | Corporate Services                             |                 | (3)              | (15)              |                   |
| 20          | Vacancies +/- budget assumption                |                 | (6)              |                   |                   |
| 21          | Seasonal in Operations laid off in 2010        |                 | 23               |                   |                   |
| 22          | Retirement overlaps in Operations              |                 | (6)              |                   |                   |
| 23          | Information Technology contractors to full tir | ne              | (11)             | 11                |                   |
| 24          | Total Variance                                 |                 | 18               | 21                | (2)               |

Filed: 2011-11-10 EB-2011-0210 Exhibit D4 Tab 1 Schedule 1

# UNION GAS LIMITED Comparison of Cost of Service Year Ending December 31

| Line | D- (d'1- γ- (Φ000)-)             | Forecast  | Outlook   | D:cc       |
|------|----------------------------------|-----------|-----------|------------|
| No.  | Particulars (\$000's)            | 2012      | 2011      | Difference |
|      |                                  | (a)       | (b)       | (c)        |
| 1    | Cost of gas                      | 730,925   | 759,739   | (28,814)   |
| 2    | Operating and maintenance        | 375,869   | 364,337   | 11,532     |
| 3    | Depreciation                     | 204,145   | 196,962   | 7,183      |
| 4    | Other financing                  | 362       | 351       | 11         |
| 5    | Property taxes                   | 62,916    | 61,681    | 1,235      |
| 6    | Other expense                    | -         | -         | -          |
| 7    | Income taxes                     | 18,090    | 26,685    | (8,595)    |
| 8    | Cost of service excluding return | 1,392,306 | 1,409,755 | (17,448)   |

Filed: 2011-11-10 EB-2011-0210 Exhibit D4 Tab 2 Schedule 1 Page 1 of 2

## UNION GAS LIMITED Gas Purchase Expense Year Ending December 31, 2012

| Line      |                             | Volume    | Cost      | % of Total |
|-----------|-----------------------------|-----------|-----------|------------|
| No.       | Particulars                 | (TJ)      | (\$000's) | Volume     |
|           |                             | (a)       | (b)       | (c)        |
| Section A |                             |           |           |            |
|           | Supply Transportation       |           |           |            |
| 1         | Western Canadian Firm       | 94,568    | 193,765   |            |
| 2         | U.S. Firm                   | 43,790    | 22,016    |            |
| 3         | Adjustments                 |           | (232)     |            |
| 4         | Total Supply Transport      | 138,359   | 215,550   |            |
|           | Supply Commodity            |           |           |            |
| 5         | Western Canadian Firm       | 75,637    | 320,860   | 48%        |
| 6         | U.S. Firm                   | 43,790    | 209,371   | 28%        |
| 7         | Ontario Delivered Supplies  | 18,237    | 93,027    | 12%        |
| 8         | Northern Bundled T-Service  | 18,931    | -         | 12%        |
| 9         | Adjustments                 | -         | -         | 0%         |
| 10        | Other                       | <u></u> _ |           | 0%         |
| 11        | Total Supply Commodity      | 156,595   | 623,257   | 100%       |
|           | Storage                     |           |           |            |
| 12        | STS and Related Services    |           | 21,752    |            |
| 13        | Total Supply at Cost        |           | 860,558   |            |
| Section B |                             |           |           |            |
|           | Storage Inventory Change    |           |           |            |
| 14        | LNG                         | -         | -         |            |
| 15        | Other Company Owned         | 1,489     | 7,996     |            |
| 16        | 3rd Party                   | <u></u> _ |           |            |
| 17        | Total Gas (to) from Storage | 1,489     | 7,996     |            |
| Section C |                             |           |           |            |
| 18        | Total Third Party Storage   |           | 398       |            |
| 19        | Total Section A, B, & C     |           | 868,952   |            |

Filed: 2011-11-10 EB-2011-0210 Exhibit D4 Tab 2 Schedule 1 Page 2 of 2

#### UNION GAS LIMITED

### Gas Purchase Expense Year Ending December 31, 2012

| Line |  | Volume  | Cost      |
|------|--|---------|-----------|
| No.  | Particulars                                      | (TJ)    | (\$000's) |
|      |  | (a)     | (b)       |
|      | Gas Supply                                       |         |           |
| 1    | Total Supply at Cost                             | 156,595 | 860,956   |
| 2    | Deferred Cost                                    |         | (91,626)  |
| 3    | Total Gas Supply                                 | 156,595 | 769,330   |
| 4    | Gas (to) from Storage                            | 1,489   | 7,996     |
| 5    | Winter Peaking Service                           |         | -         |
| 6    | Other Transportation                             |         | 972       |
| 7    | Company Use Adj.                                 |         | (4,098)   |
| 8    | Linepack   |         | (5)       |
| 9    | Deferral Adjustment                              |         | (44,422)  |
| 10   | UFG Adjustment                                   |         | 2,340     |
| 11   | Accounting Adjustment                            |         | -         |
| 12   | Total Cost of Gas                                | 158,084 | 732,111   |
| 13   | Less: Unregulated costs                          |         | (3,164)   |
| 14   | -  |         | 728,947   |
| 15   | Add: Costs related to short-term storage revenue |         | 1,978     |
| 16   | Total Utility Cost of Gas                        |         | 730,925   |

Filed: 2011-11-10 EB-2011-0210 Exhibit D4 Tab 2 Schedule 2

# UNION GAS LIMITED Unaccounted for Gas Volume For the Year Ending December 31, 2012

| Line       |   | Volume  | Weighting        | Volume<br>Weighted |
|------------|---|---------|------------------|--------------------|
| <u>No.</u> | <u>Particulars</u>  | (a)     | (b)              | (c)                |
|            | Determination of Forecast UFG volume for 2012   |         |                  |                    |
|            | 3 year average of actual UFG (10 <sup>3</sup> m <sup>3</sup> ):                               |         |                  |                    |
| 1          | 2010  | 67,283  | 50%              | 33,642             |
| 2          | 2009  | 201,845 | 33%              | 66,609             |
| 3          | 2008  | 143,880 | 17%              | 24,460             |
| 4          | Average actual UFG volume   |         |                  | 124,711            |
|            | 3 year average of actual throughput (10 <sup>6</sup> m <sup>3</sup> ):                        |         |                  |                    |
| 5          | 2010  | 35,090  | 50%              | 17,545             |
| 6          | 2009  | 31,677  | 33%              | 10,453             |
| 7          | 2008  | 34,978  | 17%              | 5,946              |
| 8          | Average actual UFG throughput   |         |                  | 33,944             |
| 9          | UFG ratio for 2012 (line 4 / line 8 / 1,000)  |         |                  | 0.367%             |
| 10         | 2012 total forecast throughput (10 <sup>6</sup> m <sup>3</sup> )                              |         |                  | 34,791             |
| 11         | Estimated UFG volume for 2012 $(10^3 \mathrm{m}^3)^{(1)}$                                     |         |                  | 127,821            |
| 12         | Estimated UFG for 2012 (\$000's) (2)  |         |                  | 25,898             |
| 13<br>14   | Unregulated Allocation - Short-Term (\$000's)<br>Unregulated Allocation - Long-Term (\$000's) |         | 2.471%<br>7.001% | (640)<br>(1,813)   |

#### Note:

- (1) Line 9 \* line 10 \* 1,000.
- (2) Calculated using EB-2010-0359 reference price of  $202.61/10^3$  m<sup>3</sup>.

Filed: 2011-11-10 EB-2011-0210 Exhibit D4 Tab 3 Schedule 1

# <u>UNION GAS LIMITED</u> Operating and Maintenance Expense by Administrator Calender Year Ending December 31

| Line<br>No. | Particulars (\$000's)                               | Forecast 2012 |
|-------------|---|---------------|
| 110.        | 1 articulars (\$000 s)                              | 2012          |
|             |   |               |
| 1           | Affiliate Services (Inbound & Outbound)             | (2,173)       |
| 2           | Audit Services                                      | 476           |
| 3           | Bad Debt Expense                                    | 6,600         |
| 4           | Business Development, Storage & Transmission        | 16,010        |
| 5           | Corporate Adjustments                               | 5,470         |
| 6           | Distribution Operations                             | 121,685       |
| 7           | Employee & Labour Relations                         | 94,864        |
| 8           | Energy Conservation                                 | 30,954        |
| 9           | Engineering, Construction & STO                     | 45,135        |
| 10          | Environment, Health & Governance                    | 862           |
| 11          | Executive   | 3,201         |
| 12          | Finance   | 10,469        |
| 13          | Government Affairs / Relations                      | 975           |
| 14          | Insurance   | 9,013         |
| 15          | IT - Information Systems                            | 11,807        |
| 16          | IT - Information Technology Infrastructure          | 14,564        |
| 17          | IT - Other  | 2,726         |
| 18          | Legal   | 1,384         |
| 19          | Marketing & Customer Care                           | 59,509        |
| 20          | Procurement / Supply Chain                          | 2,016         |
| 21          | Project Systems & Controls                          | 202           |
| 22          | Regulatory, Municipal Relations and Public Affairs  | 18,014        |
| 23          | Tax   | 1,171         |
| 24          | Total   | 454,934       |
| 25          | Capitalization                                      | (66,212)      |
| 26          | Non-Utility Allocation                              | (12,853)      |
| 27          | Total Net Utility Operating and Maintenance Expense | 375,869       |
| 28          | Excess Utility Cross-Charge                         | (2,261)       |
| 29          | Total Net Utility O&M Less Cross-Charge             | 373,608       |

Filed: 2011-11-10 EB-2011-0210 Exhibit D4 Tab 3 Schedule 2 Page 1 of 8

## <u>UNION GAS LIMITED</u> Operating and Maintenance Expense by Cost Type 2012 Bridge vs. 2011 Outlook

| Line |   | Forecast | Outlook  |            |          |
|------|---|----------|----------|------------|----------|
| No.  | Particulars (\$000's)                               | 2012     | 2011     | Difference | %        |
|      |   | (a)      | (b)      | (c)        | (d)      |
| 1    | Salaries/Wages                                      | 187,950  | 180,753  | 7,197      | 3.98%    |
| 2    | Benefits  | 72,269   | 78,657   | (6,388)    | (8.12%)  |
| 3    | Materials   | 9,242    | 9,244    | (2)        | (0.02%)  |
| 4    | Employee Expenses/Training                          | 14,110   | 13,073   | 1,037      | 7.93%    |
| 5    | Contract Services                                   | 63,670   | 60,809   | 2,861      | 4.71%    |
| 6    | Consulting  | 11,082   | 8,791    | 2,291      | 26.06%   |
| 7    | General   | 21,592   | 21,583   | 9          | 0.04%    |
| 8    | Transportation and Maintenance                      | 7,414    | 6,446    | 968        | 15.02%   |
| 9    | Company Used Gas                                    | 2,473    | 2,957    | (484)      | (16.38%) |
| 10   | Utility Costs                                       | 4,562    | 4,546    | 16         | 0.34%    |
| 11   | Communications                                      | 6,243    | 7,247    | (1,004)    | (13.86%) |
| 12   | Demand Side Management Programs                     | 23,605   | 17,874   | 5,731      | 32.06%   |
| 13   | Advertising   | 2,288    | 2,228    | 60         | 2.70%    |
| 14   | Insurance   | 8,605    | 8,815    | (210)      | (2.39%)  |
| 15   | Donations   | 775      | 747      | 28         | 3.80%    |
| 16   | Financial   | 1,860    | 2,191    | (331)      | (15.10%) |
| 17   | Lease   | 4,151    | 3,728    | 423        | 11.35%   |
| 18   | Cost Recovery from Third Parties                    | (2,883)  | (2,421)  | (462)      | 19.08%   |
| 19   | Computers   | 6,158    | 5,651    | 507        | 8.97%    |
| 20   | Regulatory Hearing & OEB Cost Assessment            | 5,200    | 3,616    | 1,584      | 43.81%   |
| 21   | Outbound Affiliate Services                         | (13,667) | (11,401) | (2,266)    | 19.88%   |
| 22   | Inbound Affiliate Services                          | 11,494   | 9,675    | 1,819      | 18.80%   |
| 23   | Bad Debt  | 6,600    | 7,200    | (600)      | (8.33%)  |
| 24   | Other   | 141      | 571      | (430)      | (75.37%) |
| 25   | Total Gross Operating and Maintenance Expense       | 454,934  | 442,580  | 12,354     | 2.79%    |
|      |   |          |          |            |          |
| 26   | Indirect Capitalization                             | (49,154) | (48,301) | (853)      | 1.77%    |
| 27   | Direct Capitalization                               | (17,058) | (18,159) | 1,101      | (6.06%)  |
| 28   | Total Utility Operating and Maintenance Expense     | 388,722  | 376,120  | 12,602     | 3.35%    |
| 29   | Non-Utility Allocations                             | (12,853) | (11,783) | (1,070)    | 9.08%    |
| 30   | Total Net Utility Operating and Maintenance Expense | 375,869  | 364,337  | 11,532     | 3.17%    |

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### **UNION GAS LIMITED**

| Line   |   |                |
|--------|---|----------------|
| No.    | Particulars   | (\$000's)      |
|        |   |                |
|        | Salaries / Wages  |                |
| 1      | 2012 Forecast   | 187,950        |
| 2      | 2011 Outlook  | 180,753        |
| 3      | Difference  | 7,197          |
|        | Reasons:  |                |
| 4      | Merit increase  | 5 600          |
| 4<br>5 |   | 5,600<br>1,500 |
|        | Decreased direct capital charges  Modest Development France Technology and Impossible Consider. | •              |
| 6      | Market Development - Energy Technology and Innovation Canada<br>Other                           | 96             |
| 7      |   | 7.107          |
| 8      | Total difference: 2012 Forecast vs. 2011 Outlook  | 7,197          |
|        | Benefits  |                |
| 9      | 2012 Forecast   | 72,269         |
| 10     | 2011 Outlook  | 78,657         |
|        | Difference  | (6,388)        |
|        |   |                |
|        | Reasons:  |                |
| 11     | Increased non pension benefit costs   | 1,612          |
| 12     | Increased pension benefit costs   | (8,000)        |
| 13     | Total difference: 2012 Forecast vs. 2011 Outlook  | (6,388)        |
|        | <u>Materials</u>  |                |
| 14     | 2012 Forecast   | 0.242          |
| 15     | 2012 Forecast<br>2011 Outlook   | 9,242          |
|        | Difference  | 9,244          |
| 16     | Difference  | (2)            |
|        | Reasons:  |                |
| 17     | Other   | (2)            |
| 18     | Total difference: 2012 Forecast vs. 2011 Outlook  | (2)            |

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### **UNION GAS LIMITED**

| Line  |             |
|---|-------------|
| No. Particulars   | (\$000's)   |
| Employee Expenses / Training                                    |             |
| 1 2012 Forecast   | 14,110      |
| 2 2011 Outlook  | 13,073      |
| 3 Difference  | 1,037       |
|   |             |
| Reasons:  |             |
| 4 Travel  | 166         |
| 5 Meals, entertainment, accomodation                            | 923         |
| 6 Other   | (52)        |
| 7 Total difference: 2012 Forecast vs. 2011 Outlook              | 1,037       |
|   | <del></del> |
| Contract Services   |             |
| 8 2012 Forecast   | 63,670      |
| 9 2011 Outlook  | 60,809      |
| 10 Difference   | 2,861       |
|   |             |
| Reasons:  |             |
| Distribution integrity - cross bore                             | 1,000       |
| 12 Pipeline integrity   | 800         |
| Line locates  | 913         |
| 14 Banner transactional fee                                     | 700         |
| 15 Other  | (552)       |
| Total difference: 2012 Forecast vs. 2011 Outlook                | 2,861       |
|   |             |
| Consulting  |             |
| 17 2012 Forecast  | 11,082      |
| 18 2011 Outlook   | 8,791       |
| 19 Difference   | 2,291       |
|   |             |
| Reasons:  |             |
| 20 Market Development - Energy Technology and Innovation Canada | 2,303       |
| 21 Other  | (12)        |
| Total difference: 2012 Forecast vs. 2011 Outlook                | 2,291       |

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### **UNION GAS LIMITED**

| Line   |  |           |
|--------|--|-----------|
| No.    | Particulars  | (\$000's) |
|        | General  |           |
| 1      | 2012 Forecast  | 21,592    |
| 2      | 2011 Outlook   | 21,583    |
| 3      | Difference   | 9         |
|        | December   |           |
| 4      | Reasons:   | 400       |
| 4      | HST deferral   | 400       |
| 5      | Community investment                                   | 374       |
| 6<br>7 | Other Total difference: 2012 Forecast vs. 2011 Outlook | (765)     |
| ,      | Total difference. 2012 Polecast vs. 2011 Outlook       |           |
|        | Transportation and Maintenance                         |           |
| 8      | 2012 Forecast  | 7,414     |
| 9      | 2011 Outlook   | 6,446     |
| 10     | Difference   | 968       |
|        | Reasons:   |           |
| 11     | Volume and price                                       | 968       |
| 12     | Total difference: 2012 Forecast vs. 2011 Outlook       | 968       |
| 12     | Total difference: 2012 Forceast vs. 2011 Outlook       |           |
|        | Company Used Gas                                       |           |
| 13     | 2012 Forecast  | 2,473     |
| 14     | 2011 Outlook   | 2,957     |
| 15     | Difference   | (484)     |
|        | Reasons:   |           |
| 16     | Volume and price                                       | (484)     |
| 17     | Total difference: 2012 Forecast vs. 2011 Outlook       | (484)     |
|        |  |           |
|        | <u>Utility Costs</u>                                   |           |
| 18     | 2012 Forecast  | 4,562     |
| 19     | 2011 Outlook   | 4,546     |
| 20     | Difference   | 16        |
|        | Reasons:   |           |
| 21     | Increased utility costs                                | 16        |
| 22     | Total difference: 2012 Forecast vs. 2011 Outlook       | 16        |
|        |  |           |

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### **UNION GAS LIMITED**

| Line |  |           |
|------|--|-----------|
| No.  | Particulars                                      | (\$000's) |
|      | Communications                                   |           |
| 1    | 2012 Forecast                                    | 6,243     |
| 2    | 2011 Outlook                                     | 7,247     |
| 3    | Difference                                       | (1,004)   |
|      |  |           |
|      | Reasons:   |           |
| 4    | Radio removal                                    | (1,164)   |
| 5    | Data nework additions                            | 288       |
| 6    | Other  | (128)     |
| 7    | Total difference: 2012 Forecast vs. 2011 Outlook | (1,004)   |
|      |  |           |
|      | Demand Side Management Programs                  |           |
| 8    | 2012 Forecast                                    | 23,605    |
| 9    | 2011 Outlook                                     | 17,874    |
| 10   | Difference                                       | 5,731     |
|      |  |           |
|      | Reasons:   |           |
| 11   | DSM program costs                                | 5,731     |
| 12   | Total difference: 2012 Forecast vs. 2011 Outlook | 5,731     |
|      |  |           |
|      | Advertising                                      |           |
| 13   | 2012 Forecast                                    | 2,288     |
| 14   | 2011 Outlook                                     | 2,228     |
| 15   | Difference                                       | 60        |
|      |  |           |
|      | Reasons:   |           |
| 16   | Other  | 60        |
| 17   | Total difference: 2012 Forecast vs. 2011 Outlook | 60        |
|      |  |           |
|      | <u>Insurance</u>                                 |           |
| 18   | 2012 Forecast                                    | 8,605     |
| 19   | 2011 Outlook                                     | 8,815     |
| 20   | Difference                                       | (210)     |
|      |  |           |
|      | Reasons:   |           |
| 21   | Lower insurance premiums                         | (210)     |
| 22   | Total difference: 2012 Forecast vs. 2011 Outlook | (210)     |
|      |  |           |

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### **UNION GAS LIMITED**

| Line |  |           |
|------|--|-----------|
| No.  | Particulars                                      | (\$000's) |
|      | <u>Donations</u>                                 |           |
| 1    | 2012 Forecast                                    | 775       |
| 2    | 2011 Outlook                                     | 747       |
| 3    | Difference                                       | 28        |
|      | Reasons:   |           |
| 4    | Other  | 28        |
| 5    | Total difference: 2012 Forecast vs. 2011 Outlook | 28        |
|      | Financial  |           |
| 6    | 2012 Forecast                                    | 1,860     |
| 7    | 2011 Outlook                                     | 2,191     |
| 8    | Difference                                       | (331)     |
|      | Reasons:   |           |
| 9    | Other  | (331)     |
| 10   | Total difference: 2012 Forecast vs. 2011 Outlook | (331)     |
|      | <u>Lease</u>                                     |           |
| 11   | 2012 Forecast                                    | 4,151     |
| 12   | 2011 Outlook                                     | 3,728     |
| 13   | Difference                                       | 423       |
|      | Reasons:   |           |
| 14   | Storage leases                                   | 453       |
| 15   | Other  | (30)      |
| 16   | Total difference: 2012 Forecast vs. 2011 Outlook | 423       |
|      |  |           |
|      | Cost Recovery from Third Parties                 |           |
| 17   | 2012 Forecast                                    | (2,883)   |
| 18   | 2011 Outlook                                     | (2,421)   |
| 19   | Difference                                       | (462)     |
|      | Reasons:   |           |
| 20   | Other  | (462)     |
| 21   | Total difference: 2012 Forecast vs. 2011 Outlook | (462)     |

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### **UNION GAS LIMITED**

| Line<br>No. | Particulars                                      | (\$000's)           |
|-------------|--|---------------------|
| NO.         | Farticulars                                      | (\$000 s)           |
|             | Commutage  |                     |
| 1           | <u>Computers</u> 2012 Forecast                   | 6,158               |
| 2           | 2012 Polecast<br>2011 Outlook                    |                     |
| 3           | Difference                                       | <u>5,651</u><br>507 |
| 3           | Difference                                       |                     |
|             | Reasons:   |                     |
| 4           | Software maintenance/licenses                    | 451                 |
| 5           | Other  | 56                  |
| 6           | Total difference: 2012 Forecast vs. 2011 Outlook | 507                 |
| -           |  |                     |
|             | Regulatory Hearing & OEB Cost Assessment         |                     |
| 7           | 2012 Forecast                                    | 5,200               |
| 8           | 2011 Outlook                                     | 3,616               |
| 9           | Difference                                       | 1,584               |
|             |  |                     |
|             | Reasons:   |                     |
| 10          | Rebasing   | 1,584               |
| 11          | Total difference: 2012 Forecast vs. 2011 Outlook | 1,584               |
|             |  |                     |
|             | Outbound Affiliate Services                      |                     |
| 12          | 2012 Forecast                                    | (13,667)            |
| 13          | 2011 Outlook                                     | (11,401)            |
| 14          | Difference                                       | (2,266)             |
|             | Descense   |                     |
| 15          | Reasons: Other                                   | (2.266)             |
| 16          | Total difference: 2012 Forecast vs. 2011 Outlook | (2,266)             |
| 10          | Total difference. 2012 Forecast vs. 2011 Outlook | (2,266)             |
|             | Inbound Affiliate Services                       |                     |
| 17          | 2012 Forecast                                    | 11,494              |
| 18          | 2011 Outlook                                     | 9,675               |
| 19          | Difference                                       | 1,819               |
|             |  |                     |
|             | Reasons:   |                     |
| 20          | Other  | 1,819               |
| 21          | Total difference: 2012 Forecast vs. 2011 Outlook | 1,819               |
|             |  |                     |

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### **UNION GAS LIMITED**

| Line |  |           |
|------|--|-----------|
| No.  | Particulars                                      | (\$000's) |
|      |  |           |
|      | Bad Debt   |           |
| 1    | 2012 Forecast                                    | 6,600     |
| 2    | 2011 Outlook                                     | 7,200     |
| 3    | Difference                                       | (600)     |
|      |  |           |
|      | Reasons:   |           |
| 4    | WACOG and bad debt experience                    | (600)     |
| 5    | Total difference: 2012 Forecast vs. 2011 Outlook | (600)     |
|      |  |           |
|      | Other  |           |
| 6    | 2012 Forecast                                    | 141       |
| 7    | 2011 Outlook                                     | 571       |
| 8    | Difference                                       | (430)     |
|      |  |           |
|      | Reasons:   |           |
| 9    | Other  | (430)     |
| 10   | Total difference: 2012 Forecast vs. 2011 Outlook | (430)     |
|      |  |           |

Filed: 2011-11-10 EB-2011-0210 Exhibit D4 Tab 4 Schedule 1 Page 1 of 3

#### **UNION GAS LIMITED**

Provision for Depreciation, Amortization and Depletion Calendar Year Ending December 31, 2012

| Line |   |         |
|------|---|---------|
| No.  | Particulars (\$000's)                                 |         |
|      | Total provision for depreciation and                  |         |
| 1    | amortization before adjustments (per page 3)          | 206,090 |
| 2    | Adjustments: vehicle depreciation through clearing    | 1,945   |
| 3    | Provision for depreciation amortization and depletion | 204,145 |

Filed: 2011-11-10 EB-2011-0210 Exhibit D4 Tab 4 Schedule 1 Page 2 of 3

### UNION GAS LIMITED

### Provision for Depreciation, Amortization and Depletion Calendar Year Ending December 31, 2012

| Line |                                     | Average   | Rate   |           |
|------|-------------------------------------|-----------|--------|-----------|
| No.  | Particulars (\$000's)               | Plant (1) | (%)    | Provision |
|      |                                     | (a)       | (b)    | (c)       |
|      | Intangible plant:                   |           |        |           |
| 1    | Franchises and consents             | 1,321     |        | 63        |
| 2    | Intangible plant - Other            | 6,363     |        | 122       |
| 3    |                                     | 7,684     |        | 185       |
|      | Local Storage Plant                 |           |        |           |
| 4    | Structures and improvements         | 3,044     | 3.30%  | 100       |
| 5    | Gas holders - storage               | 4,574     | 2.68%  | 123       |
| 6    | Gas holders - equipment             | 11,766    | 3.68%  | 433       |
| 7    | Regulatory Overheads                | 1,121     | 30     | 37        |
| 8    |                                     | 20,505    |        | 693       |
|      | Storage:                            |           |        |           |
| 9    | Land rights                         | 32,062    | 2.23%  | 715       |
| 10   | Structures and improvements         | 52,005    | 2.34%  | 1,217     |
| 11   | Wells and lines                     | 89,144    | 2.66%  | 2,371     |
| 12   | Compressor equipment                | 238,852   | 3.19%  | 7,620     |
| 13   | Measuring & regulating equipment    | 48,498    | 4.30%  | 2,085     |
| 14   | Other Storage Equipment             | 2,302     | 20.00% | 460       |
| 15   | Regulatory Overheads                | 12,128    | 35     | 347       |
| 16   |                                     | 474,991   |        | 14,815    |
|      | Transmission:                       |           |        |           |
| 17   | Land rights                         | 37,770    | 2.00%  | 755       |
| 18   | Structures and improvements         | 54,631    | 2.66%  | 1,453     |
| 19   | Mains                               | 1,058,173 | 2.37%  | 25,079    |
| 20   | Compressor equipment                | 338,743   | 3.52%  | 11,924    |
| 21   | Measuring & regulating equipment    | 155,040   | 3.61%  | 5,597     |
| 22   | Regulatory Overheads                | 27,467    | 40     | 687       |
| 23   |                                     | 1,671,824 |        | 45,495    |
|      | Distribution - Southern Operations: |           |        |           |
| 24   | Land rights                         | 7,372     | 1.67%  | 123       |
| 25   | Structures and improvements         | 110,184   | 2.91%  | 3,206     |
| 26   | Services - metallic                 | 111,373   | 3.69%  | 4,110     |
| 27   | Services - plastic                  | 764,398   | 3.18%  | 24,308    |
| 28   | Regulators                          | 75,389    | 3.30%  | 2,490     |
| 29   | Regulator and meter installations   | 69,447    | 3.51%  | 2,435     |
| 30   | Mains - metallic                    | 410,512   | 2.54%  | 10,427    |
| 31   | Mains - plastic                     | 517,431   | 2.34%  | 12,108    |
| 32   | Measuring & regulating equipment    | 34,271    | 4.64%  | 1,590     |
| 33   | Meters                              | 212,931   | 3.70%  | 7,878     |
| 34   | Regulatory Overheads                | 54,047    | 35     | 1,544     |
| 35   |                                     | 2,367,355 |        | 70,219    |

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#### **UNION GAS LIMITED**

## Provision for Depreciation, Amortization and Depletion Calendar Year Ending December 31, 2012

| Line |   | Average   | Rate   |           |
|------|---|-----------|--------|-----------|
| No.  | Particulars (\$000's)                               | Plant (1) | (%)    | Provision |
|      |   | (a)       | (b)    | (c)       |
|      | Distribution plant - Northern & Eastern Operations: |           |        |           |
| 1    | Land rights   | 9,321     | 1.68%  | 157       |
| 2    | Structures & improvements                           | 61,773    | 3.13%  | 1,933     |
| 3    | Services - metallic                                 | 95,016    | 3.58%  | 3,401     |
| 4    | Services - plastic                                  | 364,101   | 3.19%  | 11,615    |
| 5    | Regulators  | 29,710    | 3.34%  | 992       |
| 6    | Regulator and meter installations                   | 29,613    | 3.50%  | 1,036     |
| 7    | Mains - metallic                                    | 359,481   | 2.52%  | 9,059     |
| 8    | Mains - plastic                                     | 204,743   | 2.35%  | 4,811     |
| 9    | Compressor equipment                                | -         | 3.34%  | -         |
| 10   | Measuring & regulating equipment                    | 107,756   | 4.63%  | 4,989     |
| 11   | Meters  | 60,819    | 3.67%  | 2,232     |
| 12   | Regulatory Overheads                                | 22,346    | 35     | 638       |
| 13   |   | 1,344,679 |        | 40,863    |
|      | General:  |           |        |           |
| 14   | Structures and improvements                         | 43,834    | 2.13%  | 934       |
| 15   | Office furniture and equipment                      | 6,829     | 6.67%  | 455       |
| 16   | Office equipment - computers                        | 95,184    | 25.00% | 23,796    |
| 17   | Transportation equipment                            | 41,477    | 10.07% | 4,177     |
| 18   | Transportation equipment - aircraft                 |           |        | -         |
| 19   | Heavy work equipment                                | 17,465    | 4.55%  | 795       |
| 20   | Tools and other equipment                           | 29,300    | 6.67%  | 1,954     |
| 21   | Communications equipment                            | 14,226    | 6.67%  | 949       |
| 22   | Communications structures                           | 1,471     | 4.88%  | 72        |
| 23   | Regulatory Overheads                                | 6,879     | 10     | 688       |
| 24   |   | 256,665   |        | 33,820    |
| 25   | Contributions in aid of construction                | -         |        | -         |
| 26   | Sub-total   | 6,143,703 |        | 206,090   |
| 27   | Total provision for depreciation and amortization   | 6,143,703 |        | 206,090   |
| 28   | Depreciation through clearing                       |           |        | 1,945     |
| 29   |   | 6,143,703 |        | 204,145   |

#### Note:

(1) A simple average of the opening and closing plant balances was used to calculate the annual depreciation provision.

Filed: 2011-11-10 EB-2011-0210 Exhibit D4 Tab 5 Schedule 1

# <u>UNION GAS LIMITED</u> Calculation of Utility Income Taxes <u>Year Ended December 31</u>

| Line<br>No. |   |           |  |  |
|-------------|---|-----------|--|--|
|             | Determination of Taxable Income                           |           |  |  |
| 1           | Utility income before interest and income taxes (1)       | 276,701   |  |  |
|             | Adjustments required to arrive at taxable utility income: |           |  |  |
| 2           | Interest expense  | (145,359) |  |  |
| 3           | Utility permanent differences                             | 4,524     |  |  |
| 4           |   | 135,866   |  |  |
|             | 11.11.  |           |  |  |
| _           | Utility timing differences                                | (101.722) |  |  |
| 5           | Capital Cost Allowance                                    | (181,732) |  |  |
| 6           | Depreciation (2)  | 204,145   |  |  |
| 7           | Depreciation through clearing (2)                         | 1,945     |  |  |
| 8           | Other   | (34,799)  |  |  |
| 9           | Gas Cost Deferral and Other (current)                     | (24,040)  |  |  |
| 10          |   | (34,481)  |  |  |
| 11          | Taxable income  | 101,385   |  |  |
|             | Calculation of Utility Income Taxes                       |           |  |  |
| 12          | Income taxes (line 11 * line 18)                          | 26,614    |  |  |
| 13          | Deferred tax on Cost Deferrals                            | 6,311     |  |  |
| 14          | Deferred tax drawdown                                     | (14,835)  |  |  |
|             | 2 1201110 0011 0120 1120 1121                             | (1.,000)  |  |  |
| 15          | Total taxes   | 18,090    |  |  |
|             | Tax Rates   |           |  |  |
| 16          | Federal tax   | 15.00%    |  |  |
| 17          | Provincial tax  | 11.25%    |  |  |
| 18          | Total tax rate  | 26.25%    |  |  |
|             |   |           |  |  |
| Note:       |   |           |  |  |
| (1)         | Exhibit F4, Tab 2, Schedule 1.                            |           |  |  |
| (2)         | Exhibit D4, Tab 4, Schedule 1.                            |           |  |  |

## <u>UNION GAS LIMITED</u> Calculation of Capital Cost Allowance (CCA) <u>Calendar Year Ending December 31, 2012</u>

| Line | ne                    |   | Average   | Rate   |           |
|------|-----------------------|---|-----------|--------|-----------|
| No.  | Particulars (\$000's) |   |           | (%)    | Provision |
|      |                       |   | (a)       | (b)    | (c)       |
|      |                       |   |           |        |           |
|      | Class                 |   |           |        |           |
| 1    | 1                     | Buildings, structures and improvements, services, meters, mains           | 1,311,506 | 4.0%   | 52,460    |
| 2    | 1                     | Non-residential building acquired after March 19, 2007                    | 65,112    | 6.0%   | 3,907     |
| 3    | 2                     | Mains acquired before 1988  | 156,910   | 6.0%   | 9,415     |
| 4    | 3                     | Buildings acquired before 1988  | 4,504     | 5.0%   | 225       |
| 5    | 6                     | Other buildings   | 192       | 10.0%  | 19        |
| 6    | 8                     | Compression assets, office furniture, equipment                           | 72,292    | 20.0%  | 14,458    |
| 7    | 7                     | Compression equipment acquired after February 22, 2005                    | 186,496   | 15.0%  | 27,974    |
| 8    | 10                    | Transportation, computer equipment  | 18,544    | 30.0%  | 5,563     |
| 9    | 12                    | Computer software, small tools  | 11,758    | 100.0% | 11,758    |
| 10   | 13                    | Leasehold improvements  | 446       | N/A    | (1) 113   |
| 11   | 17                    | Roads, sidewalk, parking lot or storage areas                             | 1,028     | 8.0%   | 82        |
| 12   | 38                    | Heavy work equipment  | 6,946     | 30.0%  | 2,084     |
| 13   | 41                    | Storage assets  | 8,769     | 25.0%  | 2,192     |
| 14   | 45                    | Computer hardware acquired after March 22, 2004 and before March 19, 200  | 448       | 45.0%  | 202       |
| 15   | 49                    | Transmission pipelines acquired after February 22, 2005                   | 195,066   | 8.0%   | 15,605    |
| 16   | 50                    | Computer hardware acquired after March 18, 2007                           | 14,977    | 55.0%  | 8,237     |
| 17   | 51                    | Distribution pipelines acquired after March 18, 2007                      | 457,271   | 6.0%   | 27,436    |
| 18   | 52                    | Computer hardware acquired after January 27, 2009 and before February 201 | 0         | 100.0% | 0         |
| 19   | Total                 |   | 2,512,265 |        | 181,732   |
| 1)   | 1 Ottal               | =   | 2,312,203 |        | 101,732   |

#### Note:

(1) The CCA rate depends on the type of the leasehold and the terms of the lease.

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# <u>UNION GAS LIMITED</u> Salaries, Variable Pay, and Employee Benefits Calendar Year Ended December 31, 2012

|      |               |                                   | (\$000's)                 |                                   |                              |
|------|---------------|-----------------------------------|---------------------------|-----------------------------------|------------------------------|
| Line |               |                                   | Total                     | Total                             | Total                        |
| No.  | Particulars   | FTE                               | Salaries (1)              | Variable Pay (2)                  | Benefit (3)                  |
|      |               | (a)                               | (b)                       | (c)                               | (d)                          |
| 1    | Management    | 1,037                             | 95,543                    | 15,451                            | 32,474                       |
| 2    | Analyst       | 277                               | 17,306                    | 971                               | 7,693                        |
| 3    | Unionized     | 914                               | 65,134                    | 1,604                             | 25,054                       |
| 4    | Non-Unionized | 91                                | 4,456                     | 302                               | 2,380                        |
| 5    | Total         | 2,319                             | 182,439                   | 18,328                            | 67,601                       |
|      | \$/FTE        | Average<br>Yearly<br>Compensation | Average<br>Yearly<br>Wage | Average<br>Yearly<br>Variable Pay | Average<br>Yearly<br>Benefit |
| 6    | Management    | 138,296                           | 92,099                    | 14,894                            | 31,303                       |
| 7    | Analyst       | 93,887                            | 62,566                    | 3,510                             | 27,811                       |
| 8    | Unionized     | 100,419                           | 71,255                    | 1,755                             | 27,409                       |
| 9    | Non-Unionized | 78,515                            | 49,013                    | 3,321                             | 26,181                       |
| 10   | Average       | 115,725                           | 78,671                    | 7,903                             | 29,151                       |

#### Note:

- (1) "Total Salaries" include both O&M and Capital related salaries.
- (2) "Total Variable Pay" includes both short term and long term incentive plans.
- (3) "Total Benefit" includes Pension reported on a US GAAP basis.

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# UNION GAS LIMITED Comparison of Cost of Service Year Ending December 31

| Line<br>No. | Particulars (\$000's)            | Outlook<br>2011 | Actual<br>2010 | Difference |
|-------------|----------------------------------|-----------------|----------------|------------|
|             | · · · · · ·                      | (a)             | (b)            | (c)        |
| 1           | Cost of gas                      | 759,739         | 795,549        | (35,810)   |
| 2           | Operating and maintenance        | 364,337         | 351,634        | 12,703     |
| 3           | Depreciation                     | 196,962         | 190,176        | 6,786      |
| 4           | Other financing                  | 351             | 621            | (270)      |
| 5           | Property and capital taxes       | 61,681          | 65,131         | (3,450)    |
| 6           | Other expense                    | -               | 500            | (500)      |
| 7           | Income taxes                     | 26,685          | 30,214         | (3,529)    |
| 8           | Cost of service excluding return | 1,409,755       | 1,433,825      | (24,070)   |

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### UNION GAS LIMITED

## Gas Purchase Expense Year Ending December 31, 2011

| Line      | D 2 1                       | Volume      | Cost      | % of Total |
|-----------|-----------------------------|-------------|-----------|------------|
| No.       | Particulars                 | (TJ)        | (\$000's) | Volume     |
| Section A |                             | (a)         | (b)       | (c)        |
| Section A | Supply Transportation       |             |           |            |
| 1         | Western Canadian Firm       | 97,984      | 189,320   |            |
| 2         | U.S. Firm                   | 53,440      | 24,714    |            |
| 3         | Adjustments                 | 33,440      | 354       |            |
| 4         | Total Supply Transport      | 151,424     | 214,387   |            |
| 4         | Total Supply Transport      | 131,424     | 214,367   |            |
|           | Supply Commodity            |             |           |            |
| 5         | Western Canadian Firm       | 79,362      | 297,800   | 48%        |
| 6         | U.S. Firm                   | 53,440      | 211,628   | 33%        |
| 7         | Ontario Delivered Supplies  | 12,900      | 58,283    | 8%         |
| 8         | Northern Bundled T-Service  | 18,622      | -         | 11%        |
| 9         | Adjustments                 | -           | -         | 0%         |
| 10        | Other                       | <u></u> _   |           | 0%         |
| 11        | Total Supply Commodity      | 164,324     | 567,711   | 100%       |
|           | Storage                     |             |           |            |
| 12        | STS and Related Services    |             | 18,137    |            |
| 13        | Total Supply at Cost        |             | 800,235   |            |
| Section B |                             |             |           |            |
|           | Storage Inventory Change    |             |           |            |
| 14        | LNG                         | -           | -         |            |
| 15        | Other Company Owned         | (5,775)     | (31,010)  |            |
| 16        | 3rd Party                   | <del></del> |           |            |
| 17        | Total Gas (to) from Storage | (5,775)     | (31,010)  |            |
| Section C |                             |             |           |            |
| 18        | Total Third Party Storage   |             | 319       |            |
| 19        | Total Section A, B, & C     |             | 769,545   |            |

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### UNION GAS LIMITED

## Gas Purchase Expense Year Ending December 31, 2011

| Line<br>No. | Particulars                                      | Volume (TJ) (a) | Cost<br>(\$000's)<br>(b) | % of Total Volume (c) |
|-------------|--|-----------------|--------------------------|-----------------------|
|             | Gas Supply                                       |                 |                          |                       |
| 1           | Total Supply at Cost                             | 164,324         | 800,554                  |                       |
| 2           | Deferred Costs                                   |                 | 21,994                   |                       |
| 3           | Total Gas Supply                                 | 164,324         | 822,549                  |                       |
|             |  |                 |                          |                       |
| 4           | Gas (to) from Storage                            | (5,775)         | (31,010)                 |                       |
| 5           | Winter Peaking Service                           |                 | 4,381                    |                       |
| 6           | Other Transportation                             |                 | 972                      |                       |
| 7           | Company Use Adj.                                 |                 | 317                      |                       |
| 8           | Linepack   |                 | -                        |                       |
| 9           | Deferral Adjustment                              |                 | (46,078)                 |                       |
| 10          | UFG Adjustment                                   |                 | 9,961                    |                       |
| 11          | Accounting Adjustment                            |                 | (342)                    |                       |
| 12          | Total Cost of Gas                                | 158,550         | 760,751                  |                       |
| 13          | Less: Unregulated costs                          |                 | (3,100)                  |                       |
| 14          |  |                 | 757,651                  |                       |
| 15          | Add: Costs related to short-term storage revenue |                 | 2,088                    |                       |
| 16          | Total Utility Cost of Gas                        |                 | 759,739                  |                       |
|             | - · · · · · · · · · · · · · · · · · · ·          | ·               | : ,                      |                       |

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Exhibit D5 Tab 2 Schedule 2

## UNION GAS LIMITED Unaccounted for Gas Volume

| For the Year Ending | December 31, 2011 |
|---------------------|-------------------|
|                     |                   |

|            |  | X 7 1         | <b>TT</b> | Volume   |
|------------|--|---------------|-----------|----------|
| Line       |  | <u>Volume</u> | Weighting | Weighted |
| <u>No.</u> | <u>Particulars</u>   | (a)           | (b)       | (c)      |
|            | Determination of Forecast UFG volume for 2011                          |               |           |          |
|            | 3 year average of actual UFG (10 <sup>3</sup> m <sup>3</sup> ):        |               |           |          |
| 1          | 2009   | 201,845       | 50%       | 100,923  |
| 2          | 2008   | 143,880       | 33%       | 47,480   |
| 3          | 2007   | 203,713       | 17%       | 34,631   |
| 4          | Average actual UFG volume  | ,             |           | 183,034  |
|            | 3 year average of actual throughput (10 <sup>6</sup> m <sup>3</sup> ): |               |           |          |
| 5          | 2009   | 31,677        | 50%       | 15,839   |
| 6          | 2008   | 34,978        | 33%       | 11,543   |
| 7          | 2007   | 33,446        | 17%       | 5,686    |
| 8          | Average actual UFG throughput  |               |           | 33,068   |
| 9          | UFG ratio for 2011 (Line 4 / Line 8 / 1,000)                           |               |           | 0.554%   |
| 10         | 2011 total forecast throughput (10 <sup>6</sup> m <sup>3</sup> )       |               |           | 33,185   |
| 11         | Estimated UFG volume for 2011 (10 <sup>3</sup> m <sup>3</sup> ) (1)    |               |           | 183,684  |
| 12         | Estimated UFG for 2011 (\$000's) (2)                                   |               |           | 37,216   |

### Note:

- (1) Line 9 \* line 10 \* 1,000.
- (2) Calculated using EB-2010-0359 reference price of  $$202.61/10^3 \text{m}^3$ .

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### UNION GAS LIMITED

## Operating and Maintenance Expense by Administrator Calender Year Ending December 31

| Line | D ( 1 (0000)  | Outlook  |
|------|---|----------|
| No.  | Particulars (\$000's)                               | 2011     |
|      |   |          |
| 1    | Affiliate Services (Inbound & Outbound)             | (1,726)  |
| 2    | Audit Services                                      | 462      |
| 3    | Bad Debt Expense                                    | 7,200    |
| 4    | Business Development, Storage & Transmission        | 16,093   |
| 5    | Corporate Adjustments                               | 29       |
| 6    | Distribution Operations                             | 118,678  |
| 7    | Employee & Labour Relations                         | 106,014  |
| 8    | Energy Conservation                                 | 24,890   |
| 9    | Engineering, Construction & STO                     | 42,590   |
| 10   | Environment, Health & Governance                    | 853      |
| 11   | Executive   | 3,151    |
| 12   | Finance   | 10,094   |
| 13   | Government Affairs / Relations                      | 637      |
| 14   | Insurance   | 9,214    |
| 15   | IT - Information Systems                            | 10,996   |
| 16   | IT - Information Technology Infrastructure          | 15,845   |
| 17   | IT - Other  | 2,409    |
| 18   | Legal   | 1,450    |
| 19   | Marketing & Customer Care                           | 56,719   |
| 20   | Procurement / Supply Chain                          | 1,671    |
| 21   | Project Systems & Controls                          | 203      |
| 22   | Regulatory, Municipal Relations and Public Affairs  | 14,043   |
| 23   | Tax   | 1,065    |
| 24   | Total   | 442,580  |
| 25   | Capitalization                                      | (66,460) |
| 26   | Non-Utility Allocation                              | (11,783) |
| 27   | Total Net Utility Operating and Maintenance Expense | 364,337  |
| 28   | Excess Utility Cross-Charge                         | (2,261)  |
| 29   | Total Net Utility O&M Less Cross-Charge             | 362,076  |

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## UNION GAS LIMITED Operating and Maintenance Expense by Cost Type 2011 Outlook vs. 2010 Actual

| Line | Denti-culous (\$000ks)   | Outlook<br>2011 | Actual   | D:ff           | 0/       |
|------|--|-----------------|----------|----------------|----------|
| No.  | Particulars (\$000's)  | (a)             | (b)      | Difference (c) | (d)      |
|      |  | (a)             | (0)      | (6)            | (u)      |
| 1    | Salaries/Wages   | 180,753         | 183,249  | (2,496)        | (1.36%)  |
| 2    | Benefits   | 78,657          | 70,861   | 7,796          | 11.00%   |
| 3    | Materials  | 9,244           | 9,631    | (387)          | (4.01%)  |
| 4    | Employee Expenses/Training   | 13,073          | 11,783   | 1,290          | 10.95%   |
| 5    | Contract Services  | 60,809          | 57,335   | 3,474          | 6.06%    |
| 6    | Consulting   | 8,791           | 7,506    | 1,285          | 17.12%   |
| 7    | General  | 21,583          | 21,211   | 372            | 1.75%    |
| 8    | Transportation and Maintenance   | 6,446           | 7,892    | (1,446)        | (18.33%) |
| 9    | Company Used Gas   | 2,957           | 2,451    | 506            | 20.63%   |
| 10   | Utility Costs  | 4,546           | 3,704    | 842            | 22.74%   |
| 11   | Communications   | 7,247           | 6,780    | 467            | 6.89%    |
| 12   | Demand Side Management Programs  | 17,874          | 16,438   | 1,436          | 8.74%    |
| 13   | Advertising  | 2,228           | 1,860    | 368            | 19.78%   |
| 14   | Insurance  | 8,815           | 8,507    | 308            | 3.62%    |
| 15   | Donations  | 747             | 749      | (2)            | (0.25%)  |
| 16   | Financial  | 2,191           | 2,077    | 114            | 5.51%    |
| 17   | Lease  | 3,728           | 3,632    | 96             | 2.64%    |
| 18   | Cost Recovery from Third Parties   | (2,421)         | (4,641)  | 2,220          | (47.84%) |
| 19   | Computers  | 5,651           | 4,922    | 729            | 14.82%   |
| 20   | Regulatory Hearing & OEB Cost Assessment   | 3,616           | 3,126    | 490            | 15.67%   |
| 21   | Outbound Affiliate Services  | (11,401)        | (10,182) | (1,219)        | 11.97%   |
| 22   | Inbound Affiliate Services   | 9,675           | 9,462    | 213            | 2.25%    |
| 23   | Bad Debt   | 7,200           | 5,075    | 2,125          | 41.86%   |
| 24   | Other  | 571             | 249      | 322            | 129.35%  |
| 25   | Total Gross Operating and Maintenance Expense  | 442,580         | 423,677  | 18,903         | 4.46%    |
|      |  |                 |          |                |          |
| 26   | Indirect Capitalization  | (48,301)        | (46,289) | (2,012)        | 4.35%    |
| 27   | Direct Capitalization  | (18,159)        | (13,978) | (4,181)        | 29.91%   |
| 21   | Direct Capitanzation   | (10,137)        | (13,770) | (4,101)        | 27.7170  |
| 28   | Total Utility Operating and Maintenance Expense  | 376,120         | 363,410  | 12,710         | 3.50%    |
|      |  |                 |          |                |          |
| 29   | Non-Utility Allocations  | (11,783)        | (11,776) | (7)            | 0.06%    |
| 30   | Total Net Utility Operating and Maintenance Expense  | 364,337         | 351,634  | 12,703         | 3.61%    |
|      |  |                 |          |                |          |
| 31   | Excess Utility Cross-Charge Surcharge  | (2,261)         | (2,261)  |                | 0.00%    |
| 22   | The Law Average Country of the Count | 260.076         | 240.272  | 10.700         | 0.5404   |
| 32   | Total Net Utility O&M Less Cross-Charge Surcharge  | 362,076         | 349,373  | 12,703         | 3.64%    |

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### **UNION GAS LIMITED**

| Line |  |                      |
|------|--|----------------------|
| No.  | Particulars                                    | (\$000's)            |
|      |  |                      |
|      | Salaries / Wages                               |                      |
| 1    | 2011 Outlook                                   | 180,753              |
| 2    | 2010 Actual                                    | 183,249              |
| 3    | Difference                                     | (2,496)              |
|      | Reasons:                                       |                      |
| 4    | Incentive accrual/payout                       | (4,600)              |
| 5    | Merit increase                                 | 5,600                |
| 6    | Increased direct capital charges               | (2,500)              |
| 7    | Other  | (996)                |
| 8    | Total difference: 2011 Outlook vs. 2010 Actual | (2,496)              |
|      | Benefits                                       |                      |
| 9    | 2011 Outlook                                   | 78,657               |
| 10   | 2010 Actual                                    | 70,861               |
| 11   | Difference                                     | 7,796                |
|      |  |                      |
|      | Reasons:                                       |                      |
| 12   | Decreased non pension benefit costs            | (800)                |
| 13   | Increased pension benefit costs                | 8,596                |
| 14   | Total difference: 2011 Outlook vs. 2010 Actual | 7,796                |
|      | Materials                                      |                      |
| 15   | 2011 Outlook                                   | 9,244                |
| 16   | 2010 Actual                                    | 9,631                |
| 17   | Difference                                     | (387)                |
|      | Reasons:                                       |                      |
| 18   | Forecasted HST savings (2010 1/2 year only)    | (358)                |
| 19   | Other  | (29)                 |
| 20   | Total difference: 2011 Outlook vs. 2010 Actual | $\frac{(29)}{(387)}$ |
| 20   | Total California. Bott Galdook 15. 2010 Heldal | (301)                |

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### **UNION GAS LIMITED**

| Line |  |           |
|------|--|-----------|
| No.  | Particulars  | (\$000's) |
|      | Employee Expenses / Training                                 |           |
| 1    | 2011 Outlook   | 13,073    |
| 2    | 2010 Actual  | 11,783    |
| 3    | Difference   | 1,290     |
|      |  |           |
|      | Reasons:   |           |
| 4    | Travel   | 237       |
| 5    | Training   | 1,021     |
| 6    | Other  | 32        |
| 7    | Total difference: 2011 Outlook vs. 2010 Actual               | 1,290     |
|      |  |           |
|      | Contract Services  |           |
| 8    | 2011 Outlook   | 60,809    |
| 9    | 2010 Actual  | 57,335    |
| 10   | Difference   | 3,474     |
|      |  |           |
|      | Reasons:   |           |
| 11   | Integrity work   | 1,300     |
| 12   | Distribution integrity - cross bore                          | 800       |
| 13   | Line locates   | 814       |
| 14   | Other  | 560       |
| 15   | Total difference: 2011 Outlook vs. 2010 Actual               | 3,474     |
|      |  |           |
|      | Consulting   |           |
| 16   | 2011 Outlook   | 8,791     |
| 17   | 2010 Actual  | 7,506     |
| 18   | Difference   | 1,285     |
|      |  |           |
|      | Reasons:   |           |
| 19   | Outside legal counsel  | 571       |
| 20   | Market Development - Energy Technology and Innovation Canada | 600       |
| 21   | Other  | 114       |
| 22   | Total difference: 2011 Outlook vs. 2010 Actual               | 1,285     |

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### **UNION GAS LIMITED**

| Line |   |           |
|------|---|-----------|
| No.  | Particulars                                     | (\$000's) |
|      | General   |           |
| 1    | 2011 Outlook                                    | 21,583    |
| 2    | 2010 Actual                                     | 21,211    |
| 3    | Difference                                      | 372       |
|      |   |           |
| 4    | Reasons:  | 100       |
| 4    | Permits / Cerifications                         | 123       |
| 5    | Postage   | 159       |
| 6    | Other   | 90        |
| 7    | Total difference: 2011 Outlook vs. 2010 Actual  | 372       |
|      |   |           |
|      | Transportation and Maintenance                  |           |
| 8    | 2011 Outlook                                    | 6,446     |
| 9    | 2010 Actual                                     | 7,892     |
| 10   | Difference                                      | (1,446)   |
|      |   |           |
|      | Reasons:  |           |
| 11   | Volume and price                                | (1,446)   |
| 12   | Total difference: 2011 Outlook vs. 2010 Actual  | (1,446)   |
|      | Company Used Gas                                |           |
| 13   | 2011 Outlook                                    | 2,957     |
| 14   | 2010 Actual                                     | 2,451     |
| 15   | Difference                                      | 506       |
|      | Reasons:  |           |
| 16   | Volume and price                                | 506       |
| 17   | Total difference: 2011 Outlook vs. 2010 Actual  | 506       |
| 1 /  | Total difference. 2011 Outlook vs. 2010 fictual |           |

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### **UNION GAS LIMITED**

| Line |  |           |
|------|--|-----------|
| No.  | Particulars                                    | (\$000's) |
|      | <u>Utility Costs</u>                           |           |
| 1    | 2011 Outlook                                   | 4,546     |
| 2    | 2010 Actual                                    | 3,704     |
| 3    | Difference                                     | 842       |
|      | Reasons:                                       |           |
| 4    | Increased utility costs                        | 842       |
| 5    | Total difference: 2011 Outlook vs. 2010 Actual | 842       |
| 3    | Total difference. 2011 Outlook vs. 2010 Netual |           |
|      | Communications                                 |           |
| 6    | 2011 Outlook                                   | 7,247     |
| 7    | 2010 Actual                                    | 6,780     |
| 8    | Difference                                     | 467       |
|      | Reasons:                                       |           |
| 9    | SCADA transition costs                         | 200       |
| 10   | Software maintenance                           | 100       |
| 11   | Other  | 167       |
| 12   | Total difference: 2011 Outlook vs. 2010 Actual | 467       |
|      | Demand Cide Management Programme               |           |
| 12   | Demand Side Management Programs                | 17 074    |
| 13   | 2011 Outlook                                   | 17,874    |
| 14   | 2010 Actual                                    | 16,438    |
| 15   | Difference                                     | 1,436     |
|      | Reasons:                                       |           |
| 16   | DSM program costs                              | 1,436     |
| 17   | Total difference: 2011 Outlook vs. 2010 Actual | 1,436     |
|      | Advertising                                    |           |
| 18   | 2011 Outlook                                   | 2,228     |
| 19   | 2010 Actual                                    | 1,860     |
| 20   | Difference                                     | 368       |
|      |  |           |
|      | Reasons:                                       |           |
| 21   | Other  | 368       |
| 22   | Total difference: 2011 Outlook vs. 2010 Actual | 368       |

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### **UNION GAS LIMITED**

| Line |  |             |
|------|--|-------------|
| No.  | Particulars                                    | (\$000's)   |
|      |  |             |
|      | <u>Insurance</u>                               |             |
| 1    | 2011 Outlook                                   | 8,815       |
| 2    | 2010 Actual                                    | 8,507       |
| 3    | Difference                                     | 308         |
|      | D.   |             |
|      | Reasons:                                       | 200         |
| 4    | Higher insurance premiums                      | 308         |
| 5    | Total difference: 2011 Outlook vs. 2010 Actual | 308         |
|      | <u>Donations</u>                               |             |
| 6    | 2011 Outlook                                   | 747         |
| 7    | 2010 Actual                                    | 749         |
| 8    | Difference                                     | (2)         |
|      |  | <del></del> |
|      | Reasons:                                       |             |
| 9    | Other  | (2)         |
| 10   | Total difference: 2011 Outlook vs. 2010 Actual | (2)         |
|      | F:   |             |
|      | Financial                                      | 2 101       |
| 11   | 2011 Outlook                                   | 2,191       |
| 12   | 2010 Actual                                    | 2,077       |
| 13   | Difference                                     | 114         |
|      | Reasons:                                       |             |
| 14   | Miscellaneous financial fees                   | 125         |
| 15   | Other  | (11)        |
| 16   | Total difference: 2011 Outlook vs. 2010 Actual | 114         |
|      |  |             |
|      | Lease  |             |
| 17   | 2011 Outlook                                   | 3,728       |
| 18   | 2010 Actual                                    | 3,632       |
| 19   | Difference                                     | 96          |
|      | Reasons:                                       |             |
| 20   | Other  | 96          |
| 21   | Total difference: 2011 Outlook vs. 2010 Actual | 96          |
|      |  |             |

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### **UNION GAS LIMITED**

| Line     | Dom' oulous                                    | (\$000°s)         |
|----------|--|-------------------|
| No.      | Particulars                                    | (\$000's)         |
|          |  |                   |
|          | Cost Recovery from Third Parties               |                   |
| 1        | 2011 Outlook                                   | (2,421)           |
| 2        | 2010 Actual                                    | (4,641)           |
| 3        | Difference                                     | 2,220             |
| 3        | Difference                                     | 2,220             |
|          | Reasons:                                       |                   |
| 4        | Injury / Damage recovery                       | 523               |
| 5        | Cost recovery                                  | 1,697             |
| 6        | Total difference: 2011 Outlook vs. 2010 Actual | 2,220             |
|          |  |                   |
|          | <u>Computers</u>                               |                   |
| 7        | 2011 Outlook                                   | 5,651             |
| 8        | 2010 Actual                                    | 4,922             |
| 9        | Difference                                     | 729               |
|          |  |                   |
|          | Reasons:                                       |                   |
| 10       | Software maintenance                           | 632               |
| 11       | Other  | 97                |
| 12       | Total difference: 2011 Outlook vs. 2010 Actual | 729               |
|          |  |                   |
|          | Regulatory Hearing & OEB Cost Assessment       |                   |
| 13       | 2011 Outlook                                   | 3,616             |
| 14       | 2010 Actual                                    | 3,126             |
| 15       | Difference                                     | 490               |
|          |  |                   |
|          | Reasons:                                       |                   |
| 16       | Other  | 490               |
| 17       | Total difference: 2011 Outlook vs. 2010 Actual | 490               |
|          | O 4 1 4 671' 4 6 '                             |                   |
| 10       | Outbound Affiliate Services                    | (11.401)          |
| 18       | 2011 Outlook                                   | (11,401)          |
| 19<br>20 | 2010 Actual                                    | (10,182)          |
| 20       | Difference                                     | (1,219)           |
|          | Reasons:                                       |                   |
| 21       | Other  | (1,219)           |
| 22       | Total difference: 2011 Outlook vs. 2010 Actual | (1,219) $(1,219)$ |
| 22       | Total difference. 2011 Outlook vs. 2010 Actual | (1,419)           |

Filed: 2011-11-10 EB-2011-0210 Exhibit D5 Tab 3 Schedule 2 Page 8 of 8

### **UNION GAS LIMITED**

| Line |  |           |
|------|--|-----------|
| No.  | Particulars                                    | (\$000's) |
|      |  |           |
|      | Inbound Affiliate Services                     |           |
| 1    | 2011 Outlook                                   | 9,675     |
| 2    | 2010 Actual                                    | 9,462     |
| 3    | Difference                                     | 213       |
|      | Reasons:                                       |           |
| 4    | Other  | 213       |
| 5    | Total difference: 2011 Outlook vs. 2010 Actual | 213       |
|      |  | <u></u>   |
|      | Bad Debt                                       |           |
| 6    | 2011 Outlook                                   | 7,200     |
| 7    | 2010 Actual                                    | 5,075     |
| 8    | Difference                                     | 2,125     |
|      |  |           |
|      | Reasons:                                       |           |
| 9    | WACOG and bad debt experience                  | 2,125     |
| 10   | Total difference: 2011 Outlook vs. 2010 Actual | 2,125     |
|      | <u>Other</u>                                   |           |
| 11   | 2011 Outlook                                   | 571       |
| 12   | 2010 Actual                                    | 249       |
| 13   | Difference                                     | 322       |
| 13   | Difference                                     |           |
|      | Reasons:                                       |           |
| 14   | Other  | 322       |
| 15   | Total difference: 2011 Outlook vs. 2010 Actual | 322       |

Filed: 2011-11-10 EB-2011-0210 Exhibit D5 Tab 4 Schedule 1 Page 1 of 3

#### UNION GAS LIMITED

Provision for Depreciation, Amortization and Depletion Calendar Year Ending December 31, 2011

| Line |   |         |
|------|---|---------|
| No.  | Particulars (\$000's)                                 |         |
|      |   | (a)     |
|      | Total provision for depreciation and                  |         |
| 1    | amortization before adjustments (per page 3)          | 199,091 |
| 2    | Adjustments: vehicle depreciation through clearing    | 2,130   |
| 3    | Provision for depreciation amortization and depletion | 196,961 |

Filed: 2011-11-10 EB-2011-0210 Exhibit D5 Tab 4 Schedule 1 Page 2 of 3

#### UNION GAS LIMITED

#### Provision for Depreciation, Amortization and Depletion

#### Calendar Year Ending December 31, 2011

| Line |                                     | Average   | Rate   |           |
|------|-------------------------------------|-----------|--------|-----------|
| No.  | Particulars (\$000's)               | Plant (1) | (%)    | Provision |
|      |                                     | (a)       | (b)    | (c)       |
|      | Intangible plant:                   |           |        |           |
| 1    | Franchises and consents             | 1,321     |        | 63        |
| 2    | Intangible plant - Other            | 6,370     |        | 118       |
|      |                                     |           |        |           |
| 3    |                                     | 7,691     |        | 181       |
|      | Local Storage Plant                 |           |        |           |
| 4    | Structures and improvements         | 2,732     | 3.30%  | 90        |
| 5    | Gas holders - storage               | 4,574     | 2.68%  | 123       |
| 6    | Gas holders - equipment             | 10,473    | 3.68%  | 385       |
| 7    | Regulatory Overheads                | 457       | 30     | 15        |
| 8    |                                     | 18,236    |        | 613       |
|      | Storage:                            |           |        |           |
| 9    | Land rights                         | 32,062    | 2.23%  | 715       |
| 10   | Structures and improvements         | 55,762    | 2.34%  | 1,305     |
| 11   | Wells and lines                     | 88,148    | 2.66%  | 2,345     |
| 12   | Compressor equipment                | 227,896   | 3.19%  | 7,270     |
| 13   | Measuring & regulating equipment    | 51,752    | 4.30%  | 2,225     |
| 14   | Other Storage Equipment             | 1,972     | 20.00% | 394       |
| 15   | Regulatory Overheads                | 6,812     | 35     | 195       |
| 16   |                                     | 464,404   |        | 14,449    |
|      | Transmission:                       |           |        |           |
| 17   | Land rights                         | 37,665    | 2.00%  | 753       |
| 18   | Structures and improvements         | 54,242    | 2.66%  | 1,442     |
| 19   | Mains                               | 1,045,645 | 2.37%  | 24,785    |
| 20   | Compressor equipment                | 320,636   | 3.52%  | 11,286    |
| 21   | Measuring & regulating equipment    | 144,498   | 3.61%  | 5,216     |
| 22   | Regulatory Overheads                | 14,493    | 40     | 362       |
| 23   |                                     | 1,617,179 |        | 43,844    |
|      | Distribution - Southern Operations: |           |        |           |
| 24   | Land rights                         | 6,383     | 1.67%  | 107       |
| 25   | Structures and improvements         | 105,099   | 2.91%  | 3,058     |
| 26   | Services - metallic                 | 109,932   | 3.69%  | 4,056     |
| 27   | Services - plastic                  | 748,387   | 3.18%  | 23,800    |
| 28   | Regulators                          | 72,151    | 3.30%  | 2,384     |
| 29   | Regulator and meter installations   | 68,437    | 3.51%  | 2,398     |
| 30   | Mains - metallic                    | 403,858   | 2.54%  | 10,258    |
| 31   | Mains - plastic                     | 506,820   | 2.34%  | 11,860    |
| 32   | Measuring & regulating equipment    | 30,667    | 4.64%  | 1,423     |
| 33   | Meters                              | 198,929   | 3.70%  | 7,360     |
| 34   | Regulatory Overheads                | 34,136    | 35     | 975       |
| 35   |                                     | 2,284,799 |        | 67,679    |
|      |                                     |           |        |           |

#### UNION GAS LIMITED

#### Provision for Depreciation, Amortization and Depletion

#### Calendar Year Ending December 31, 2011

| Line |   | Average     | Rate   |           |
|------|---|-------------|--------|-----------|
| No.  | Particulars (\$000's)                               | Plant (1)   | (%)    | Provision |
|      |   | (a)         | (b)    | (c)       |
|      | Distribution plant - Northern & Eastern Operations: |             |        |           |
| 1    | Land rights   | 9,129       | 1.68%  | 153       |
| 2    | Structures & improvements                           | 61,853      | 3.13%  | 1,936     |
| 3    | Services - metallic                                 | 93,428      | 3.58%  | 3,344     |
| 4    | Services - plastic                                  | 356,291     | 3.19%  | 11,366    |
| 5    | Regulators  | 28,018      | 3.34%  | 936       |
| 6    | Regulator and meter installations                   | 29,333      | 3.50%  | 1,027     |
| 7    | Mains - metallic                                    | 353,618     | 2.52%  | 8,911     |
| 8    | Mains - plastic                                     | 201,928     | 2.35%  | 4,745     |
| 9    | Compressor equipment                                | -           | 3.34%  | -         |
| 10   | Measuring & regulating equipment                    | 105,021     | 4.63%  | 4,863     |
| 11   | Meters  | 55,381      | 3.67%  | 2,032     |
| 12   | Regulatory Overheads                                | 14,349      | 35     | 410       |
| 13   |   | 1,308,349   |        | 39,723    |
|      | General:  | <del></del> |        |           |
| 14   | Structures and improvements                         | 42,327      | 2.13%  | 901       |
| 15   | Office furniture and equipment                      | 8,999       | 6.67%  | 601       |
| 16   | Office equipment - computers                        | 89,949      | 25.00% | 22,487    |
| 17   | Transportation equipment                            | 42,036      | 10.07% | 4,232     |
| 18   | Heavy work equipment                                | 16,181      | 4.55%  | 736       |
| 19   | Tools and other equipment                           | 29,950      | 6.67%  | 1,997     |
| 20   | Communications equipment                            | 13,414      | 6.67%  | 895       |
| 21   | Communications structures                           | 2,589       | 4.88%  | 126       |
| 22   | Regulatory Overheads                                | 6,265       | 10     | 627       |
| 23   |   | 251,710     |        | 32,602    |
| 24   | Contributions in aid of construction                | -           |        | -         |
| 25   | Sub-total   | 5,952,368   |        | 199,091   |
| 26   | Total provision for depreciation and amortization   | 5,952,368   |        | 199,091   |
| 27   | Depreciation through clearing                       | -           |        | 2,130     |
| 28   |   | 5,952,368   |        | 196,961   |
|      |   | -,,- 30     |        |           |

#### Note:

<sup>(1)</sup> A simple average of the opening and closing plant balances was used to calculate the annual depreciation provision.

Filed: 2011-11-10 EB-2011-0210 Exhibit D5 Tab 5 Schedule 1

# <u>UNION GAS LIMITED</u> Calculation of Utility Income Taxes <u>Year Ended December 31</u>

| Line<br>No. | Particulars (\$000's)                                     | Outlook<br>2011    |
|-------------|---|--------------------|
|             | Determination of Taxable Income                           |                    |
| 1           | Utility income before interest and income taxes (1)       | 300,722            |
| 2           | Adjustments required to arrive at taxable utility income: | (142.906)          |
| 2 3         | Interest expense Utility permanent differences            | (143,896)<br>4,571 |
| 4           |   | 161,397            |
|             | Utility timing differences                                |                    |
| 5           | Capital Cost Allowance                                    | (172,269)          |
| 6           | Depreciation (2)  | 196,962            |
| 7           | Depreciation through clearing (2)                         | 2,130              |
| 8           | Other   | (39,571)           |
| 9           | Gas Cost Deferral and Other (current)                     | (27,685)           |
| 10          |   | (40,433)           |
| 11          | Taxable income  | 120,964            |
|             | Calculation of Utility Income Taxes                       |                    |
| 12          | Income taxes (line 11 * line 18)                          | 34,173             |
| 13          | Deferred tax on Cost Deferrals                            | 8,302              |
| 14          | Deferred tax drawdown                                     | (15,789)           |
| 15          | Total taxes   | 26,685             |
|             | Tax Rates   |                    |
| 16          | Federal tax   | 16.50%             |
| 17          | Provincial tax  | 11.75%             |
| 18          | Total tax rate  | 28.25%             |
| Note:       |   | <u></u>            |
| (1)         | Exhibit F5, Tab 2, Schedule 1.                            |                    |
| (2)         | Exhibit D5, Tab 4, Schedule 1.                            |                    |
|             |   |                    |

#### UNION GAS LIMITED

### Calculation of Capital Cost Allowance (CCA) <u>Calendar Year Ending December</u> 31, 2011

| Line |         |  | Average     | Rate   |           |
|------|---------|--|-------------|--------|-----------|
| No.  | Particu | lars (\$000's)   | CCA Balance | (%)    | Provision |
|      |         |  | (a)         | (b)    | (c)       |
|      | Class   |  |             |        |           |
| 1    | 1       | Buildings, structures and improvements, services, meters, mains            | 1,365,026   | 4.0%   | 54,601    |
| 2    | 1       | Non-residential building acquired after March 19, 2007                     | 57,982      | 6.0%   | 3,479     |
| 3    | 2       | Mains acquired before 1988   | 166,925     | 6.0%   | 10,016    |
| 4    | 3       | Buildings acquired before 1988   | 4,741       | 5.0%   | 237       |
| 5    | 6       | Other buildings  | 213         | 10.0%  | 21        |
| 6    | 7       | Compression equipment acquired after February 22, 2005                     | 169,636     | 15.0%  | 25,445    |
| 7    | 8       | Compression assets, office furniture, equipment                            | 66,569      | 20.0%  | 13,314    |
| 8    | 10      | Transportation, computer equipment   | 18,951      | 30.0%  | 5,685     |
| 9    | 12      | Computer software, small tools   | 11,719      | 100.0% | 11,719    |
| 10   | 13      | Leasehold improvements   | 559         | N/A (1 | 113       |
| 11   | 17      | Roads, sidewalk, parking lot or storage areas                              | 1,118       | 8.0%   | 89        |
| 12   | 38      | Heavy work equipment   | 6,487       | 30.0%  | 1,946     |
| 13   | 41      | Storage assets   | 9,695       | 25.0%  | 2,424     |
| 14   | 45      | Computer hardware acquired after March 22, 2004 and before March 19, 2007  | 815         | 45.0%  | 367       |
| 15   | 49      | Transmission pipelines acquired after February 22, 2005                    | 197,731     | 8.0%   | 15,818    |
| 16   | 50      | Computer hardware acquired after March 18, 2007                            | 6,837       | 55.0%  | 3,760     |
| 17   | 51      | Distribution pipelines acquired after March 18, 2007                       | 370,082     | 6.0%   | 22,205    |
| 18   | 52      | Computer hardware acquired after January 27, 2009 and before February 2011 | 1,029       | 100.0% | 1,029     |
| 19   | Total   |  | 2,456,115   |        | 172,269   |

#### Note

<sup>(1)</sup> The CCA rate depends on the type of the leasehold and the terms of the lease.

Filed: 2011-11-10 EB-2011-0210 Exhibit D5 Tab 6 Schedule 1

# <u>UNION GAS LIMITED</u> Salaries, Variable Pay, and Employee Benefits Calendar Year Ended December 31, 2011

|      |               |                                   |                           | (\$000's)                         |                              |
|------|---------------|-----------------------------------|---------------------------|-----------------------------------|------------------------------|
| Line |               |                                   | Total                     | Total                             | Total                        |
| No.  | Particulars   | FTE                               | Salaries (1)              | Variable Pay (2)                  | Benefit                      |
|      |               | (a)                               | (b)                       | (c)                               | (d)                          |
| 1    | Management    | 974                               | 86,635                    | 14,709                            | 35,416                       |
| 2    | Analyst       | 312                               | 19,395                    | 1,133                             | 10,237                       |
| 3    | Unionized     | 913                               | 64,961                    | 1,579                             | 29,745                       |
| 4    | Non-Unionized | 99                                | 4,608                     | 296                               | 3,116                        |
| 5    | Total         | 2,298                             | 175,599                   | 17,717                            | 78,514                       |
|      | \$/FTE        | Average<br>Yearly<br>Compensation | Average<br>Yearly<br>Wage | Average<br>Yearly<br>Variable Pay | Average<br>Yearly<br>Benefit |
| 6    | Management    | 140,374                           | 88,925                    | 15,097                            | 36,352                       |
| 7    | Analyst       | 98,732                            | 62,242                    | 3,637                             | 32,853                       |
| 8    | Unionized     | 105,518                           | 71,190                    | 1,731                             | 32,597                       |
| 9    | Non-Unionized | 80,855                            | 46,455                    | 2,984                             | 31,416                       |
| 10   | Average       | 118,313                           | 76,429                    | 7,711                             | 34,173                       |

#### Note:

- (1) "Total Salaries" include both O&M and Capital related salaries.
- (2) "Total Variable Pay" includes both short term and long term incentive plans.

Filed: 2011-11-10 EB-2011-0210 Exhibit D6 Tab 1 Schedule 1

# UNION GAS LIMITED Comparison of Cost of Service Year Ending December 31

| Line |                                  | Actual    | Board-Approved |            |
|------|----------------------------------|-----------|----------------|------------|
| No.  | Particulars (\$000's)            | 2010      | 2007           | Difference |
|      |                                  | (a)       | (b)            | (c)        |
| 1    | Cost of gas                      | 795,549   | 1,135,825      | (340,276)  |
| 2    | Operating and maintenance        | 351,634   | 326,222        | 25,412     |
| 3    | Depreciation                     | 190,176   | 173,780        | 16,396     |
| 4    | Other financing                  | 621       | 315            | 306        |
| 5    | Property and capital taxes       | 65,131    | 67,709         | (2,578)    |
| 6    | Other expense                    | 500       | -              | 500        |
| 7    | Income taxes                     | 30,214    | 14,589         | 15,625     |
| 8    | Cost of service excluding return | 1,433,825 | 1,718,440      | (284,615)  |

Filed: 2011-11-10 EB-2011-0210 Exhibit D6 Tab 2 Schedule 1 Page 1 of 2

### UNION GAS LIMITED

#### Actual Gas Purchase Expense Year Ending December 31, 2010

| Line<br>No. | Particulars                 | Volume<br>(TJ) | Cost (\$000's) | % of Total<br>Volume |
|-------------|-----------------------------|----------------|----------------|----------------------|
| 110.        | Tarticulars                 | (a)            | (b)            | (c)                  |
| Section A   |                             | (4)            | (6)            | (0)                  |
| 2001101111  | Supply Transportation       |                |                |                      |
| 1           | Western Canadian Firm       | 97,681         | 157,720        |                      |
| 2           | U.S. Firm                   | 28,996         | 21,125         |                      |
| 3           | Adjustments                 | ,<br>-         | (30)           |                      |
| 4           | Total Supply Transport      | 126,677        | 178,815        |                      |
|             | Supply Commodity            |                |                |                      |
| 5           | Western Canadian Firm       | 77,153         | 300,454        | 55%                  |
| 6           | U.S. Firm                   | 28,996         | 119,682        | 21%                  |
| 7           | Ontario Delivered Supplies  | 14,595         | 64,642         | 10%                  |
| 8           | Northern Bundled T-Service  | 20,529         | -              | 15%                  |
| 9           | Adjustments                 | -              | -              | 0%                   |
| 10          | Other                       | <u></u>        | <u>-</u> _     | 0%                   |
| 11          | Total Supply Commodity      | 141,272        | 484,778        | 100%                 |
|             | Storage                     |                |                |                      |
| 12          | STS and Related Services    |                | 14,586         |                      |
| 13          | Total Supply at Cost        |                | 678,178        |                      |
| Section B   |                             |                |                |                      |
|             | Storage Inventory Change    |                |                |                      |
| 14          | LNG                         | -              | -              |                      |
| 15          | Other Company Owned         | 3,067          | 15,777         |                      |
| 16          | 3rd Party                   |                |                |                      |
| 17          | Total Gas (to) from Storage | 3,067          | 15,777         |                      |
| Section C   |                             |                |                |                      |
| 18          | Total 3rd Party Storage     |                | 263            |                      |
| 19          | Total Section A, B, & C     |                | 694,218        |                      |

Filed: 2011-11-10 EB-2011-0210 Exhibit D6 Tab 2 Schedule 1 Page 2 of 2

#### UNION GAS LIMITED

#### Actual Gas Purchase Expense Year Ending December 31, 2010

| Line |  | Volume  | Cost      | % of Total |
|------|--|---------|-----------|------------|
| No.  | Particulars                                      | (TJ)    | (\$000's) | Volume     |
|      |  | (a)     | (b)       | (c)        |
|      |  |         |           |            |
|      | Gas Supply                                       |         |           |            |
| 1    | Total Supply at Cost                             | 141,272 | 678,441   |            |
| 2    | Deferred Costs                                   |         | 123,882   |            |
| 3    | Total Gas Supply                                 | 141,272 | 802,323   |            |
| 4    | Gas (to) from Storage                            | 3,067   | 15,777    |            |
| 5    | Winter Peaking Service                           | 2,000   | 3,856     |            |
| 6    | Other Transportation                             |         | 972       |            |
| 7    | Company Use Adj.                                 |         | (13,301)  |            |
| 8    | Linepack   |         | -         |            |
| 9    | Deferral Adjustment                              |         | (33,116)  |            |
| 10   | UFG Adjustment                                   |         | 17,264    |            |
| 11   | Accounting Adjustment                            |         | 570       |            |
| 12   | Total Cost of Gas                                | 144,339 | 794,345   |            |
| 13   | Less: Unregulated costs                          |         | (669)     |            |
| 14   |  |         | 793,676   |            |
| 15   | Add: Costs related to short-term storage revenue |         | 1,873     |            |
| 16   | Total Utility Cost of Gas                        |         | 795,549   |            |

Filed: 2011-11-10 EB-2011-0210 Exhibit D6 Tab 2 Schedule 2 Page 1 of 2

# UNION GAS LIMITED Unaccounted for Gas Volume For the Year Ending December 31, 2010

| Line       |  | <u>Volume</u> | Weighting | Volume<br><u>Weighted</u> |
|------------|--|---------------|-----------|---------------------------|
| <u>No.</u> | <u>Particulars</u>   | (a)           | (b)       | (c)                       |
|            | Determination of Forecast UFG volume for 2010                          |               |           |                           |
|            | 3 year average of actual UFG (10 <sup>3</sup> m <sup>3</sup> ):        |               |           |                           |
| 1          | 2008   | 143,880       | 50%       | 71,940                    |
| 2          | 2007   | 203,713       | 33%       | 67,225                    |
| 3          | 2006   | 154,015       | 17%       | 26,183                    |
| 4          | Average actual UFG volume  |               | -         | 165,348                   |
|            | 3 year average of actual throughput (10 <sup>6</sup> m <sup>3</sup> ): |               |           |                           |
| 5          | 2008   | 34,978        | 50%       | 17,489                    |
| 6          | 2007   | 33,446        | 33%       | 11,037                    |
| 7          | 2006   | 29,843        | 17%       | 5,073                     |
| 8          | Average actual UFG throughput  |               | -         | 33,599                    |
| 9          | UFG ratio for 2010 (line 4 / line 8 / 1,000)                           |               |           | 0.492%                    |
| 10         | 2010 total forecast throughput (10 <sup>6</sup> m <sup>3</sup> )       |               |           | 30,896                    |
| 11         | Estimated UFG volume for 2010 $(10^3 \mathrm{m}^3)^{(1)}$              |               |           | 152,047                   |
| 12         | Actual UFG volume for 2010 (10 <sup>3</sup> m <sup>3</sup> )           |               |           | 67,283                    |
| 13         | Actual UFG (\$000's) (2)   |               | =         | 13,686                    |

#### Note:

- (1) Line 9 \* line 10 \* 1,000.
- (2) Calculated using EB-2009-0410 reference price of \$257.161/10<sup>3</sup> m<sup>3</sup> for January to March; EB-2010-0040 reference price of \$267.657/10<sup>3</sup> m<sup>3</sup> for April to June; EB-2010-0201 reference price of \$230.945/10<sup>3</sup> m<sup>3</sup> for July to September; and EB-2010-0265 reference price of \$213.930/10<sup>3</sup> m<sup>3</sup> for October to December.

Filed; 2011-11-10 EB-2011-0210 Exhibit D6 Tab 2 Schedule 2 Page 2 of 2

# <u>UNION GAS LIMITED</u> Actual Unaccounted for Gas Volumes Years Ending December 31, 2006-2010

| Line No. | Particulars (10 <sup>3</sup> m <sup>3</sup> ) | Board-Approved | Actual  |
|----------|---|----------------|---------|
| 1        | 2006  | 142,322        | 154,015 |
| 2        | 2007  | 147,478        | 203,713 |
| 3        | 2008  | 147,478        | 143,880 |
| 4        | 2009  | 147,478        | 201,845 |
| 5        | 2010  | 147,478        | 67,283  |

Filed: 2011-11-10 EB-2011-0210 Exhibit D6 Tab 3 Schedule 1

#### **UNION GAS LIMITED**

## Operating and Maintenance Expense by Administrator Calender Year Ending December 31, 2010

| Line<br>No. | Particulars (\$000's)                               | Actual 2010 |
|-------------|---|-------------|
|             |   |             |
| 1           | Affiliate Services (Inbound & Outbound)             | (720)       |
| 2           | Audit Services                                      | 323         |
| 3           | Bad Debt Expense                                    | 5,075       |
| 4           | Business Development, Storage & Transmission        | 14,593      |
| 5           | Corporate Adjustments                               | 2,784       |
| 6           | Distribution Operations                             | 114,565     |
| 7           | Employee & Labour Relations                         | 101,853     |
| 8           | Energy Conservation                                 | 22,627      |
| 9           | Engineering, Construction & STO                     | 42,472      |
| 10          | Environment, Health & Governance                    | 830         |
| 11          | Executive   | 2,962       |
| 12          | Finance   | 7,778       |
| 13          | Government Affairs / Relations                      | 1,303       |
| 14          | Insurance   | 8,780       |
| 15          | IT - Information Systems                            | 10,956      |
| 16          | IT - Information Technology Infrastructure          | 15,218      |
| 17          | IT - Other  | 1,630       |
| 18          | Legal   | 1,269       |
| 19          | Marketing & Customer Care                           | 54,864      |
| 20          | Procurement / Supply Chain                          | 2,226       |
| 21          | Project Systems & Controls                          | 187         |
| 22          | Regulatory  | 10,990      |
| 23          | Tax   | 1,112       |
| 24          | Total   | 423,677     |
| 25          | Capitalization                                      | (60,267)    |
| 26          | Non-Utility Allocation                              | (11,776)    |
| 27          | Total Net Utility Operating and Maintenance Expense | 351,634     |
| 28          | Excess Utility Cross-Charge                         | (2,261)     |
| 29          | Total Net Utility O&M Less Cross-Charge             | 349,373     |

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# UNION GAS LIMITED Operating and Maintenance Expense by Cost Type 2010 Actual vs. 2007 Board-Approved

| Line |   | Actual   | Board-<br>Approved                      | D:00       |          |
|------|---|----------|---|------------|----------|
| No.  | Particulars (\$000's)                               | 2010     | 2007                                    | Difference | %        |
|      |   | (a)      | (b)                                     | (c)        | (d)      |
| 1    | Salaries/Wages                                      | 183,249  | 159,896                                 | 23,353     | 14.61%   |
| 2    | Benefits  | 70,861   | 55,621                                  | 15,240     | 27.40%   |
| 3    | Materials   | 9,631    | 9,132                                   | 499        | 5.47%    |
| 4    | Employee Expenses/Training                          | 11,783   | 12,798                                  | (1,015)    | (7.93%)  |
| 5    | Contract Services                                   | 57,335   | 50,061                                  | 7,274      | 14.53%   |
| 6    | Consulting  | 7,506    | 6,447                                   | 1,059      | 16.42%   |
| 7    | General   | 21,211   | 20,645                                  | 566        | 2.74%    |
| 8    | Transportation and Maintenance                      | 7,892    | 7,523                                   | 369        | 4.90%    |
| 9    | Company Used Gas                                    | 2,451    | 4,911                                   | (2,460)    | (50.09%) |
| 10   | Utility Costs                                       | 3,704    | 3,269                                   | 435        | 13.31%   |
| 11   | Communications                                      | 6,780    | 7,969                                   | (1,189)    | (14.92%) |
| 12   | Demand Side Management Programs                     | 16,438   | 11,874                                  | 4,564      | 38.43%   |
| 13   | Advertising   | 1,860    | 2,255                                   | (395)      | (17.50%) |
| 14   | Insurance   | 8,507    | 7,004                                   | 1,503      | 21.46%   |
| 15   | Donations   | 749      | 404                                     | 345        | 85.42%   |
| 16   | Financial   | 2,077    | 2,884                                   | (807)      | (27.98%) |
| 17   | Lease   | 3,632    | 3,202                                   | 430        | 13.44%   |
| 18   | Cost Recovery from Third Parties                    | (4,641)  | (2,106)                                 | (2,535)    | 120.38%  |
| 19   | Computers   | 4,922    | 4,226                                   | 696        | 16.47%   |
| 20   | Regulatory Hearing & OEB Cost Assessment            | 3,126    | 6,000                                   | (2,874)    | (47.90%) |
| 21   | Outbound Affiliate Services                         | (10,182) | (5,741)                                 | (4,441)    | 77.36%   |
| 22   | Inbound Affiliate Services                          | 9,462    | 11,933                                  | (2,471)    | (20.71%) |
| 23   | Bad Debt  | 5,075    | 11,600                                  | (6,525)    | (56.25%) |
| 24   | Other   | 249      | 100                                     | 149        | 149.18%  |
| 25   | Total Gross Operating and Maintenance Expense       | 423,677  | 391,907                                 | 31,770     | 8.11%    |
|      |   |          |   |            |          |
| 26   | Indirect Capitalization                             | (46,289) | (51,528)                                | 5,239      | (10.17%) |
| 27   | Direct Capitalization                               | (13,978) | (7,350)                                 | (6,628)    | 90.18%   |
|      |   | (,,,     | (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | (0,020)    |          |
| 28   | Total Utility Operating and Maintenance Expense     | 363,410  | 333,029                                 | 30,381     | 9.12%    |
| 29   | Non-Utility Allocations                             | (11,776) | (6,807)                                 | (4,969)    | 73.00%   |
| 30   | Total Net Utility Operating and Maintenance Expense | 351,634  | 326,222                                 | 25,412     | 7.79%    |
| 31   | Excess Utility Cross-Charge                         | (2,261)  | (599)                                   | (1,662)    | 277.46%  |
| 32   | Total Net Utility O&M Less Cross-Charge             | 349,373  | 325,623                                 | 23,750     | 7.29%    |

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### **UNION GAS LIMITED**

| Line |   |           |
|------|---|-----------|
| No.  | Particulars   | (\$000's) |
|      |   | _         |
|      | Salaries / Wages                                      |           |
| 1    | 2010 Actual   | 183,249   |
| 2    | 2007 Board-Approved                                   | 159,896   |
| 3    | Difference  | 23,353    |
|      |   |           |
|      | Reasons:  |           |
| 4    | Incentive accrual/payout                              | 9,542     |
| 5    | Merit increase  | 14,569    |
| 6    | Severances (2010 variance)                            | (809)     |
| 7    | Other   | 51        |
| 8    | Total difference: 2010 Actual vs. 2007 Board-Approved | 23,353    |
|      |   |           |
|      | <u>Benefits</u>                                       |           |
| 9    | 2010 Actual   | 70,861    |
| 10   | 2007 Board-Approved                                   | 55,621    |
| 11   | Difference  | 15,240    |
|      |   |           |
|      | Reasons:  |           |
| 12   | Increased non pension benefit costs                   | 5,470     |
| 13   | Increased pension benefit costs                       | 9,170     |
| 14   | WSIB Neer charge (2010)                               | 600       |
| 15   | Total difference: 2010 Actual vs. 2007 Board-Approved | 15,240    |
|      |   |           |
|      | Materials   |           |
| 16   | 2010 Actual   | 9,631     |
| 17   | 2007 Board-Approved                                   | 9,132     |
| 18   | Difference  | 499       |
|      | D   |           |
| 10   | Reasons:  | 202       |
| 19   | Odourant  | 303       |
| 20   | Other   | 196       |
| 21   | Total difference: 2010 Actual vs. 2007 Board-Approved | 499       |

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### **UNION GAS LIMITED**

| Line |   |           |
|------|---|-----------|
| No.  | Particulars   | (\$000's) |
|      |   |           |
|      | Employee Expenses / Training                          |           |
| 1    | 2010 Actual   | 11,783    |
| 2    | 2007 Board-Approved                                   | 12,798    |
| 3    | Difference  | (1,015)   |
|      | Reasons:  |           |
| 4    | Relocation costs                                      | (361)     |
| 5    | Meals and accommodation expense                       | 517       |
| 6    | Travel  | (405)     |
| 7    | Training  | (1,263)   |
| 8    | Safety  | 517       |
| 9    | Other   | (20)      |
| 10   | Total difference: 2010 Actual vs. 2007 Board-Approved | (1,015)   |
|      | Contract Services                                     |           |
| 11   | 2010 Actual   | 57,335    |
| 12   | 2007 Board-Approved                                   | 50,061    |
| 13   | Difference  | 7,274     |
|      | Reasons:  |           |
| 14   | Integrity work  | 760       |
| 15   | Line locates  | 1,567     |
| 16   | Maintenance   | 3,657     |
| 17   | Other   | 1,290     |
| 18   | Total difference: 2010 Actual vs. 2007 Board-Approved | 7,274     |

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### **UNION GAS LIMITED**

| Line |   |           |
|------|---|-----------|
| No.  | Particulars   | (\$000's) |
|      |   |           |
|      | Consulting  |           |
| 1    | 2010 Actual   | 7,506     |
| 2    | 2007 Board-Approved                                   | 6,447     |
| 3    | Difference  | 1,059     |
|      | Reasons:  |           |
| 4    | IFRS costs  | 2,179     |
| 5    | Other   | (1,120)   |
| 6    | Total difference: 2010 Actual vs. 2007 Board-Approved | 1,059     |
|      | General   |           |
| 7    | 2010 Actual   | 21,211    |
| 8    | 2007 Board-Approved                                   | 20,645    |
| 9    | Difference  | 566       |
|      | Zimerenee   |           |
|      | Reasons:  |           |
| 10   | Cushion gas sale                                      | (3,253)   |
| 11   | Postage   | 473       |
| 12   | Janitorial  | 589       |
| 13   | Freight   | 77        |
| 14   | Recycling / Waste                                     | 163       |
| 15   | Permits / Cerifications                               | 64        |
| 16   | Security  | 744       |
| 17   | Other   | 1,709     |
| 18   | Total difference: 2010 Actual vs. 2007 Board-Approved | 566       |

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### **UNION GAS LIMITED**

| Line |   |           |
|------|---|-----------|
| No.  | Particulars   | (\$000's) |
|      |   |           |
|      | <u>Transportation and Maintenance</u>                 |           |
| 1    | 2010 Actual   | 7,892     |
| 2    | 2007 Board-Approved                                   | 7,523     |
| 3    | Difference  | 369       |
|      | Reasons:  |           |
| 4    | Volume and price                                      | 369       |
| 5    | Total difference: 2010 Actual vs. 2007 Board-Approved | 369       |
|      | Company Used Gas                                      |           |
| 6    | 2010 Actual   | 2,451     |
| 7    | 2007 Board-Approved                                   | 4,911     |
| 8    | Difference  |           |
| o    | Difference  | (2,460)   |
|      | Reasons:  |           |
| 9    | Volume and price                                      | (2,460)   |
| 10   | Total difference: 2010 Actual vs. 2007 Board-Approved | (2,460)   |
|      | Utility Costs   |           |
| 11   | 2010 Actual   | 3,704     |
| 12   | 2007 Board-Approved                                   | 3,269     |
| 13   | Difference  | 435       |
| 10   | 2   |           |
|      | Reasons:  |           |
| 14   | Increased utility costs                               | 435       |
| 15   | Total difference: 2010 Actual vs. 2007 Board-Approved | 435       |

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### **UNION GAS LIMITED**

| Line |   |                       |
|------|---|-----------------------|
| No.  | Particulars   | (\$000's)             |
|      |   |                       |
|      | Communications  |                       |
| 1    | 2010 Actual   | 6,780                 |
| 2    | 2007 Board-Approved                                   | 7,969                 |
| 3    | Difference  | (1,189)               |
|      |   |                       |
|      | Reasons:  |                       |
| 4    | Telemetry cost reduction                              | (693)                 |
| 5    | Bell credits  | (200)                 |
| 6    | Radio removal   | (200)                 |
| 7    | Other   | (96)                  |
| 8    | Total difference: 2010 Actual vs. 2007 Board-Approved | (1,189)               |
|      | Demand Side Management Programs                       |                       |
| 9    | 2010 Actual   | 16,438                |
| 10   | 2007 Board-Approved                                   | 11,874                |
| 11   | Difference  | 4,564                 |
|      |   |                       |
|      | Reasons:  |                       |
| 12   | DSM program costs                                     | 4,564                 |
| 13   | Total difference: 2010 Actual vs. 2007 Board-Approved | 4,564                 |
|      | Advertising   |                       |
| 14   | 2010 Actual   | 1,860                 |
| 15   | 2007 Board-Approved                                   | 2,255                 |
| 16   | Difference  | $\frac{2,233}{(395)}$ |
| 10   | 2   | (656)                 |
|      | Reasons:  |                       |
| 17   | Promotional items                                     | (220)                 |
| 18   | Radio advertising                                     | (163)                 |
| 19   | Other   | (12)                  |
| 20   | Total difference: 2010 Actual vs. 2007 Board-Approved | (395)                 |

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### **UNION GAS LIMITED**

| Line |   |           |
|------|---|-----------|
| No.  | Particulars   | (\$000's) |
|      |   |           |
|      | Insurance   |           |
| 1    | 2010 Actual   | 8,507     |
| 2    | 2007 Board-Approved                                   | 7,004     |
| 3    | Difference  | 1,503     |
|      |   |           |
|      | Reasons:  |           |
| 4    | Higher insurance premiums                             | 1,503     |
| 5    | Total difference: 2010 Actual vs. 2007 Board-Approved | 1,503     |
|      |   |           |
|      | <u>Donations</u>                                      |           |
| 6    | 2010 Actual   | 749       |
| 7    | 2007 Board-Approved                                   | 404       |
| 8    | Difference  | 345       |
| Ü    | 2   |           |
|      | Reasons:  |           |
| 9    | Other   | 345       |
| 10   | Total difference: 2010 Actual vs. 2007 Board-Approved | 345       |
| 10   | 10001 021101000 2010 110000 100                       |           |
|      | Financial   |           |
| 11   | 2010 Actual   | 2,077     |
| 12   | 2007 Board-Approved                                   | 2,884     |
| 13   | Difference  | (807)     |
|      |   |           |
|      | Reasons:  |           |
| 14   | Audit fees  | (305)     |
| 15   | Bad debt commission                                   | (371)     |
| 16   | Other   | (131)     |
| 17   | Total difference: 2010 Actual vs. 2007 Board-Approved | (807)     |
|      |   | (537)     |

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### **UNION GAS LIMITED**

| Line |   |           |
|------|---|-----------|
| No.  | Particulars   | (\$000's) |
|      |   | _         |
|      | <u>Lease</u>  |           |
| 1    | 2010 Actual   | 3,632     |
| 2    | 2007 Board-Approved                                   | 3,202     |
| 3    | Difference  | 430       |
|      |   |           |
|      | Reasons:  |           |
| 4    | Storage leases  | 356       |
| 5    | Other   | 74        |
| 6    | Total difference: 2010 Actual vs. 2007 Board-Approved | 430       |
|      |   |           |
|      | Cost Recovery from Third Parties                      |           |
| 7    | 2010 Actual   | (4,641)   |
| 8    | 2007 Board-Approved                                   | (2,106)   |
| 9    | Difference  | (2,535)   |
|      |   |           |
|      | Reasons:  |           |
| 10   | Injury / Damage recovery                              | (269)     |
| 11   | Cost recovery   | (2,266)   |
| 12   | Total difference: 2010 Actual vs. 2007 Board-Approved | (2,535)   |
|      |   |           |
|      | <u>Computers</u>                                      |           |
| 13   | 2010 Actual   | 4,922     |
| 14   | 2007 Board-Approved                                   | 4,226     |
| 15   | Difference  | 696       |
|      |   |           |
|      | Reasons:  |           |
| 16   | Software maintenance                                  | 556       |
| 17   | Other   | 140       |
| 18   | Total difference: 2010 Actual vs. 2007 Board-Approved | 696       |

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### **UNION GAS LIMITED**

| Line |   |             |
|------|---|-------------|
| No.  | Particulars   | (\$000's)   |
|      |   |             |
|      | Regulatory Hearing & OEB Cost Assessment              |             |
| 1    | 2010 Actual   | 3,126       |
| 2    | 2007 Board-Approved                                   | 6,000       |
| 3    | Difference  | (2,874)     |
|      |   |             |
|      | Reasons:  |             |
| 4    | Other   | (2,874)     |
| 5    | Total difference: 2010 Actual vs. 2007 Board-Approved | (2,874)     |
|      |   |             |
|      | Outbound Affiliate Services                           |             |
| 6    | 2010 Actual   | (10,182)    |
| 7    | 2007 Board-Approved                                   | (5,741)     |
| 8    | Difference  | (4,441)     |
|      |   | <del></del> |
|      | Reasons:  |             |
| 9    | Other   | (4,441)     |
| 10   | Total difference: 2010 Actual vs. 2007 Board-Approved | (4,441)     |
|      |   |             |
|      | Inbound Affiliate Services                            |             |
| 11   | 2010 Actual   | 9,462       |
| 12   | 2007 Board-Approved                                   | 11,933      |
| 13   | Difference  | (2,471)     |
|      |   |             |
|      | Reasons:  |             |
| 14   | Other   | (2,471)     |
| 15   | Total difference: 2010 Actual vs. 2007 Board-Approved | (2,471)     |

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### **UNION GAS LIMITED**

| Line |   |           |
|------|---|-----------|
| No.  | Particulars   | (\$000's) |
|      |   | _         |
|      | Bad Debt  |           |
| 1    | 2010 Actual   | 5,075     |
| 2    | 2007 Board-Approved                                   | 11,600    |
| 3    | Difference  | (6,525)   |
|      |   |           |
|      | Reasons:  |           |
| 4    | WACOG and bad debt experience                         | (6,525)   |
| 5    | Total difference: 2010 Actual vs. 2007 Board-Approved | (6,525)   |
|      |   |           |
|      | Other   |           |
| 6    | 2010 Actual   | 249       |
| 7    | 2007 Board-Approved                                   | 100       |
| 8    | Difference  | 149       |
|      |   |           |
|      | Reasons:  |           |
| 9    | Other   | 149       |
| 10   | Total difference: 2010 Actual vs. 2007 Board-Approved | 149       |

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#### **UNION GAS LIMITED**

#### Provision for Depreciation, Amortization and Depletion Calendar Year Ending December 31, 2010

| Line |   |         |
|------|---|---------|
| No.  | Particulars (\$000's)                                 |         |
|      |   |         |
|      |   |         |
|      | Total provision for depreciation and                  |         |
| 1    | amortization before adjustments (per page 3)          | 191,720 |
| 2    | Adjustments: vehicle depreciation through clearing    | 1,543   |
| 3    | Provision for depreciation amortization and depletion | 190,177 |

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#### **UNION GAS LIMITED**

#### Provision for Depreciation, Amortization and Depletion

#### Calendar Year Ending December 31, 2010

| Line |                                     | Average   | Rate   |           |
|------|-------------------------------------|-----------|--------|-----------|
| No.  | Particulars (\$000's)               | Plant (1) | (%)    | Provision |
|      |                                     | (a)       | (b)    | (c)       |
|      | Intangible plant:                   |           |        |           |
| 1    | Franchises and consents             | 1,321     |        | 63        |
| 2    | Intangible plant - Other            | 6,370     |        | 118       |
| 3    |                                     | 7,691     |        | 181       |
|      | Local Storage Plant                 |           |        |           |
| 4    | Structures and improvements         | 2,593     | 3.30%  | 87        |
| 5    | Gas holders - storage               | 4,574     | 2.68%  | (35)      |
| 6    | Gas holders - equipment             | 9,225     | 3.68%  | 339       |
| 7    | Regulatory Overheads                | 114       | 30     | 4         |
| 8    |                                     | 16,506    |        | 395       |
|      | Storage:                            |           |        |           |
| 9    | Land rights                         | 32,062    | 2.23%  | 715       |
| 10   | Structures and improvements         | 55,077    | 2.34%  | 1,289     |
| 11   | Wells and lines                     | 87,383    | 2.66%  | 2,324     |
| 12   | Compressor equipment                | 218,629   | 3.19%  | 6,974     |
| 13   | Measuring & regulating equipment    | 50,288    | 4.30%  | 2,163     |
| 14   | Other Storage Equipment             | 821       | 20.00% | 27        |
| 15   | Regulatory Overheads                | 1,498     | 35     | 43        |
| 16   |                                     | 445,758   |        | 13,535    |
|      | Transmission:                       |           |        |           |
| 17   | Land rights                         | 37,673    | 2.00%  | 754       |
| 18   | Structures and improvements         | 53,401    | 2.66%  | 1,421     |
| 19   | Mains                               | 1,038,740 | 2.37%  | 24,618    |
| 20   | Compressor equipment                | 298,410   | 3.52%  | 10,504    |
| 21   | Measuring & regulating equipment    | 141,533   | 3.61%  | 5,109     |
| 22   | Regulatory Overheads                | 3,758     | 40     | 94        |
| 23   |                                     | 1,573,515 |        | 42,500    |
|      | Distribution - Southern Operations: |           |        |           |
| 24   | Land rights                         | 5,414     | 1.67%  | 90        |
| 25   | Structures and improvements         | 101,031   | 2.91%  | 2,956     |
| 26   | Services - metallic                 | 109,884   | 3.69%  | 4,055     |
| 27   | Services - plastic                  | 734,964   | 3.18%  | 23,372    |
| 28   | Regulators                          | 70,793    | 3.30%  | 2,336     |
| 29   | Regulator and meter installations   | 66,954    | 3.51%  | 2,350     |
| 30   | Mains - metallic                    | 397,468   | 2.54%  | 10,096    |
| 31   | Mains - plastic                     | 497,000   | 2.34%  | 11,629    |
| 32   | Measuring & regulating equipment    | 28,951    | 4.64%  | 1,343     |
| 33   | Meters                              | 184,525   | 3.70%  | 6,828     |
| 34   | Regulatory Overheads                | 12,685    | 35     | 362       |
| 35   |                                     | 2,209,669 |        | 65,417    |

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191,720

1,543

190,177

#### UNION GAS LIMITED

Average

5,771,484

5,771,484

Rate

#### Provision for Depreciation, Amortization and Depletion Calendar Year Ending December 31, 2010

#### Plant (1) No. (%) Particulars (\$000's) Provision (a) (b) (c) Distribution plant - Northern & Eastern Operations: 1 Land rights 8,951 1.68% 150 2 Structures & improvements 60,516 3.13% 1,917 3 92,411 3,308 Services - metallic 3.58% 349,438 4 Services - plastic 3.19% 11,147 5 26,302 878 Regulators 3.34% 6 Regulator and meter installations 28,975 3.50% 1,014 7 Mains - metallic 348,326 2.52% 8,778 8 Mains - plastic 198,719 2.35% 4,670 9 Compressor equipment 10 4,761 Measuring & regulating equipment 102,821 4.63% 11 52,213 3.67% 1,916 Meters 12 Regulatory Overheads 5,798 35 166 13 38,705 1,274,470 General: 14 933 Structures and improvements 41,261 2.13% 15 Office furniture and equipment 12,886 6.67% 859 16 Office equipment - computers 84,007 25.00% 21,002 17 Transportation equipment 40,898 10.07% 4,118 18 Heavy work equipment 641 14,071 4.55% 19 Tools and other equipment 31,858 2,124 6.67% 20 883 Communications equipment 13,252 6.67% 21 Communications structures 2,685 4.88% 131 22 296 Regulatory Overheads 2,957 10 23 30,987 243,875 24 Contributions in aid of construction 25 Sub-total 5,771,484 191,720

#### Note:

26

27

28

Total provision for depreciation and amortization

Depreciation through clearing

Line

(1) A simple average of the opening and closing plant balances was used to calculate the annual depreciation pro

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# <u>UNION GAS LIMITED</u> Calculation of Utility Income Taxes <u>Year Ended December 31</u>

| Line<br>No. | Particulars (\$000's)                                     | Actual 2010 |
|-------------|---|-------------|
|             | Determination of Taxable Income                           |             |
| 1           | Utility income before interest and income taxes (1)       | 321,562     |
|             | Adjustments required to arrive at taxable utility income: |             |
| 2           | Interest expense  | (148,403)   |
| 3           | Utility permanent differences                             | 4,589       |
| 4           |   | 177,747     |
|             | Utility timing differences                                |             |
| 5           | Capital Cost Allowance                                    | (171,709)   |
| 6           | Depreciation (2)  | 190,177     |
| 7           | Depreciation through clearing (2)                         | 1,543       |
| 8           | Other   | (49,911)    |
| 9           | Gas Cost Deferral and Other (current)                     | (152,680)   |
| 10          |   | (182,581)   |
| 11          | Taxable income  | (4,834)     |
|             | Calculation of Utility Income Taxes                       |             |
| 12          | Income taxes (line 11 * line 18)                          | (1,498)     |
| 13          | Deferred tax on Cost Deferrals                            | 48,753      |
| 14          | Deferred tax drawdown                                     | (17,041)    |
| 15          | Total taxes   | 30,214      |
|             | Tax Rates   |             |
| 16          | Federal tax   | 18.00%      |
| 17          | Provincial tax  | 13.00%      |
| 18          | Total tax rate  | 31.00%      |
|             |   |             |
| Note:       |   |             |
| (1)         | Exhibit F6, Tab 2, Schedule 1.                            |             |
| (2)         | Exhibit D6, Tab 4, Schedule 1.                            |             |

#### UNION GAS LIMITED

### Calculation of Capital Cost Allowance (CCA) <u>Calendar Year Ending December</u> 31, 2010

| Line |         |  | Average     | Rate    |           |
|------|---------|--|-------------|---------|-----------|
| No.  | Particu | lars (\$000's)   | CCA Balance | (%)     | Provision |
|      |         |  | (a)         | (b)     | (c)       |
|      | Class   |  |             |         |           |
| 1    | 1       | Buildings, structures and improvements, services, meters, mains            | 1,420,545   | 4.0%    | 56,822    |
| 2    | 1       | Non-residential building acquired after March 19, 2007                     | 51,543      | 6.0%    | 3,093     |
| 3    | 2       | Mains acquired before 1988   | 177,580     | 6.0%    | 10,655    |
| 4    | 3       | Buildings acquired before 1988   | 4,991       | 5.0%    | 250       |
| 5    | 6       | Other buildings  | 237         | 10.0%   | 24        |
| 6    | 7       | Compression equipment acquired after February 22, 2005                     | 149,067     | 15.0%   | 22,360    |
| 7    | 8       | Compression assets, office furniture, equipment                            | 68,651      | 20.0%   | 13,730    |
| 8    | 10      | Transportation, computer equipment   | 19,506      | 30.0%   | 5,852     |
| 9    | 12      | Computer software, small tools   | 7,727       | 100.0%  | 7,727     |
| 10   | 13      | Leasehold improvements   | 651         | N/A (1) | 113       |
| 11   | 17      | Roads, sidewalk, parking lot or storage areas                              | 1,215       | 8.0%    | 97        |
| 12   | 38      | Heavy work equipment   | 4,726       | 30.0%   | 1,418     |
| 13   | 41      | Storage assets   | 8,631       | 25.0%   | 2,158     |
| 14   | 45      | Computer hardware acquired after March 22, 2004 and before March 19, 2007  | 1,481       | 45.0%   | 666       |
| 15   | 49      | Transmission pipelines acquired after February 22, 2005                    | 204,565     | 8.0%    | 16,365    |
| 16   | 50      | Computer hardware acquired after March 18, 2007                            | 2,859       | 55.0%   | 1,572     |
| 17   | 51      | Distribution pipelines acquired after March 18, 2007                       | 294,137     | 6.0%    | 17,648    |
| 18   | 52      | Computer hardware acquired after January 27, 2009 and before February 2011 | 11,159      | 100.0%  | 11,159    |
| 19   | Total   |  | 2,429,271   |         | 171,709   |

#### Note

(1) The CCA rate depends on the type of the leasehold and the terms of the lease.

Filed: 2011-11-10 EB-2011-0210 Exhibit D6 Tab 6 Schedule 1

# <u>UNION GAS LIMITED</u> Salaries, Variable Pay, and Employee Benefits Calendar Year Ended December 31, 2010

|      |               |                                   |                           | (\$000's)                         |                              |
|------|---------------|-----------------------------------|---------------------------|-----------------------------------|------------------------------|
| Line |               |                                   | Total                     | Total                             | Total                        |
| No.  | Particulars   | FTE                               | Salaries (1)              | Variable Pay (2)                  | Benefit                      |
|      |               | (a)                               | (b)                       | (c)                               | (d)                          |
| 1    | Management    | 963                               | 85,880                    | 19,724                            | 32,922                       |
| 2    | Analyst       | 276                               | 18,269                    | 1,697                             | 8,437                        |
| 3    | Unionized     | 884                               | 63,203                    | 1,946                             | 26,769                       |
| 4    | Non-Unionized | 88                                | 4,480                     | 441                               | 2,549                        |
| 5    | Total         | 2,211                             | 171,832                   | 23,808                            | 70,677                       |
|      | \$/FTE        | Average<br>Yearly<br>Compensation | Average<br>Yearly<br>Wage | Average<br>Yearly<br>Variable Pay | Average<br>Yearly<br>Benefit |
|      |               |                                   |                           |                                   |                              |
| 6    | Management    | 143,878                           | 89,198                    | 20,486                            | 34,194                       |
| 7    | Analyst       | 102,835                           | 66,143                    | 6,144                             | 30,547                       |
| 8    | Unionized     | 103,979                           | 71,496                    | 2,201                             | 30,282                       |
| 9    | Non-Unionized | 85,160                            | 51,071                    | 5,032                             | 29,056                       |
| 10   | Average       | 120,466                           | 77,727                    | 10,769                            | 31,970                       |

#### Note:

- (1) "Total Salaries" include both O&M and Capital related salaries.
- (2) "Total Variable Pay" includes both short term and long term incentive plans.

Filed: 2011-11-10 EB-2011-0210 Exhibit D7 Tab 1 Schedule 1 Page 1 of 3

#### UNION GAS LIMITED

Provision for Depreciation, Amortization and Depletion Calendar Year Ending December 31, 2009

| Line |   |         |
|------|---|---------|
| No.  | Particulars (\$000's)                                 |         |
|      | Total provision for depreciation and                  |         |
| 1    | amortization before adjustments (per page 3)          | 188,323 |
| 2    | Adjustments: vehicle depreciation through clearing    | 1,150   |
| 3    | Provision for depreciation amortization and depletion | 187,173 |

Filed: 2011-11-10 EB-2011-0210 Exhibit D7 Tab 1 Schedule 1 Page 2 of 3

#### UNION GAS LIMITED

#### Provision for Depreciation, Amortization and Depletion

#### Calendar Year Ending December 31, 2009

| Line |                                     | Average                               | Rate   |           |
|------|-------------------------------------|---------------------------------------|--------|-----------|
| No.  | Particulars (\$000's)               | Plant (1)                             | (%)    | Provision |
|      |                                     | (a)                                   | (b)    | (c)       |
|      | Intangible plant:                   |                                       |        |           |
| 1    | Franchises and consents             | 1,321                                 |        | 83        |
| 2    | Intangible plant - Other            | 6,370                                 |        | 123       |
| 3    |                                     | 7,691                                 |        | 206       |
|      | Local Storage Plant                 |                                       |        |           |
| 4    | Structures and improvements         | 2,557                                 | 3.30%  | 84        |
| 5    | Gas holders - storage               | 4,523                                 | 2.68%  | 121       |
| 6    | Gas holders - equipment             | 8,170                                 | 3.68%  | 301       |
| 7    | Regulatory Overheads                |                                       | 30     |           |
| 8    |                                     | 15,250                                |        | 506       |
|      | Storage:                            | · · · · · · · · · · · · · · · · · · · |        | ·         |
| 9    | Land rights                         | 32,037                                | 2.23%  | 714       |
| 10   | Structures and improvements         | 54,419                                | 2.34%  | 1,274     |
| 11   | Wells and lines                     | 87,032                                | 2.66%  | 2,315     |
| 12   | Compressor equipment                | 222,272                               | 3.19%  | 7,090     |
| 13   | Measuring & regulating equipment    | 48,293                                | 4.30%  | 2,077     |
| 14   | Other Storage Equipment             |                                       | 20.00% | -         |
| 15   | Regulatory Overheads                |                                       | 35     |           |
| 16   |                                     | 444,053                               |        | 13,470    |
|      | Transmission:                       |                                       |        |           |
| 17   | Land rights                         | 35,960                                | 2.00%  | 719       |
| 18   | Structures and improvements         | 52,662                                | 2.66%  | 1,401     |
| 19   | Mains                               | 1,017,253                             | 2.37%  | 24,109    |
| 20   | Compressor equipment                | 297,445                               | 3.52%  | 10,470    |
| 21   | Measuring & regulating equipment    | 138,453                               | 3.61%  | 4,998     |
| 22   | Regulatory Overheads                |                                       | 40     |           |
| 23   |                                     | 1,541,773                             |        | 41,697    |
|      | Distribution - Southern Operations: |                                       |        |           |
| 24   | Land rights                         | 5,191                                 | 1.67%  | 86        |
| 25   | Structures and improvements         | 88,639                                | 2.91%  | 2,594     |
| 26   | Services - metallic                 | 110,497                               | 3.69%  | 4,077     |
| 27   | Services - plastic                  | 719,739                               | 3.18%  | 22,888    |
| 28   | Regulators                          | 69,754                                | 3.30%  | 2,301     |
| 29   | Regulator and meter installations   | 62,269                                | 3.51%  | 2,186     |
| 30   | Mains - metallic                    | 390,954                               | 2.54%  | 9,930     |
| 31   | Mains - plastic                     | 481,293                               | 2.34%  | 11,263    |
| 32   | Measuring & regulating equipment    | 28,270                                | 4.64%  | 1,312     |
| 33   | Meters                              | 174,333                               | 3.70%  | 6,450     |
| 34   | Regulatory Overheads                |                                       | 35     |           |
| 35   |                                     | 2,130,939                             |        | 63,087    |

Filed: 2011-11-10 EB-2011-0210 Exhibit D7 Tab 1 Schedule 1 Page 3 of 3

#### **UNION GAS LIMITED**

#### Provision for Depreciation, Amortization and Depletion

#### Calendar Year Ending December 31, 2009

| Line | _   | Average                  | Rate   |           |
|------|---|--------------------------|--------|-----------|
| No.  | Particulars (\$000's)                               | Plant (1)                | (%)    | Provision |
|      |   | (a)                      | (b)    | (c)       |
|      | Distribution plant - Northern & Eastern Operations: |                          |        |           |
| 1    | Land rights   | 8,841                    | 1.68%  | 149       |
| 2    | Structures & improvements                           | 50,377                   | 3.13%  | 1,595     |
| 3    | Services - metallic                                 | 92,008                   | 3.58%  | 3,294     |
| 4    | Services - plastic                                  | 340,599                  | 3.19%  | 10,865    |
| 5    | Regulators  | 24,896                   | 3.34%  | 832       |
| 6    | Regulator and meter installations                   | 28,582                   | 3.50%  | 1,000     |
| 7    | Mains - metallic                                    | 342,165                  | 2.52%  | 8,623     |
| 8    | Mains - plastic                                     | 192,097                  | 2.35%  | 4,514     |
| 9    | Compressor equipment                                | 670                      | 3.34%  | 20        |
| 10   | Measuring & regulating equipment                    | 98,128                   | 4.63%  | 4,543     |
| 11   | Meters  | 50,719                   | 3.67%  | 1,861     |
| 12   | Regulatory Overheads                                |                          | 35     | -         |
| 13   |   | 1,229,082                |        | 37,296    |
|      | General:  |                          |        |           |
| 14   | Structures and improvements                         | 41,369                   | 2.13%  | 933       |
| 15   | Office furniture and equipment                      | 15,550                   | 6.67%  | 1,037     |
| 16   | Office equipment - computers                        | 87,708                   | 25.00% | 21,927    |
| 17   | Transportation equipment                            | 42,574                   | 10.07% | 4,287     |
| 18   | Heavy work equipment                                | 13,103                   | 4.55%  | 595       |
| 19   | Tools and other equipment                           | 33,128                   | 6.67%  | 2,209     |
| 20   | Communications equipment                            | 13,908                   | 6.67%  | 926       |
| 21   | Communications structures                           | 2,975                    | 4.88%  | 147       |
| 22   | Regulatory Overheads                                |                          | 10     | -         |
| 23   |   | 250,315                  |        | 32,061    |
|      |   |                          |        |           |
|      |   |                          |        |           |
| 24   | Contributions in aid of construction                | -                        |        | -         |
| 2.5  |   | <b>7</b> (10 10 <b>2</b> |        | 100.000   |
| 25   | Sub-total   | 5,619,103                |        | 188,323   |
| 26   | Total association for demonstration and association | 5 (10 102                |        | 100 222   |
| 26   | Total provision for depreciation and amortization   | 5,619,103                |        | 188,323   |
| 27   | Depreciation through clearing                       |                          |        | 1,150     |
| 41   | Depreciation unough eleaning                        |                          |        | 1,130     |
| 28   |   | 5,619,103                |        | 187,173   |
| 20   |   | 5,017,103                |        | 107,173   |

#### Note:

<sup>(1)</sup> A simple average of the opening and closing plant balances was used to calculate the annual depreciation provision.

Filed: 2011-11-10 EB-2011-0210 Exhibit D8 Tab 1 Schedule 1 Page 1 of 3

#### **UNION GAS LIMITED**

Provision for Depreciation, Amortization and Depletion Calendar Year Ending December 31, 2008

| Line |   |   |         |
|------|---|---|---------|
| No.  | Particulars (\$000's)                                 |   |         |
|      |   |   |         |
|      | Total provision for depreciation and                  |   |         |
| 1    | amortization before adjustments (per page 3)          |   | 181,403 |
| 2    | Adjustments: vehicle depreciation through clearing    |   | 1,150   |
| 3    | Provision for depreciation amortization and depletion | - | 180,253 |

Filed: 2011-11-10 EB-2011-0210 Exhibit D8 Tab 1 Schedule 1 Page 2 of 3

#### **UNION GAS LIMITED**

#### Provision for Depreciation, Amortization and Depletion

#### Calendar Year Ending December 31, 2008

| Line |                                     | Average   | Rate   |           |
|------|-------------------------------------|-----------|--------|-----------|
| No.  | Particulars (\$000's)               | Plant (1) | (%)    | Provision |
|      |                                     | (a)       | (b)    | (c)       |
|      | Intangible plant:                   |           |        |           |
| 1    | Franchises and consents             | 2,102     |        | 101       |
| 2    | Intangible plant - Other            | 9,370     |        | 123       |
| 3    |                                     | 11,472    |        | 224       |
|      | Local Storage Plant                 |           |        |           |
| 4    | Structures and improvements         | 2,591     | 3.30%  | 85        |
| 5    | Gas holders - storage               | 4,473     | 2.68%  | 120       |
| 6    | Gas holders - equipment             | 7,663     | 3.68%  | 282       |
| 7    | Regulatory Overheads                |           | 30     | _         |
| 8    |                                     | 14,727    |        | 487       |
|      | Storage:                            |           |        |           |
| 9    | Land rights                         | 31,998    | 2.23%  | 714       |
| 10   | Structures and improvements         | 52,743    | 2.34%  | 1,234     |
| 11   | Wells and lines                     | 86,371    | 2.66%  | 2,298     |
| 12   | Compressor equipment                | 220,946   | 3.19%  | 7,048     |
| 13   | Measuring & regulating equipment    | 47,427    | 4.30%  | 2,039     |
| 14   | Other Storage Equipment             |           | 20.00% | -         |
| 15   | Regulatory Overheads                |           | 35     | -         |
| 16   |                                     | 439,485   |        | 13,333    |
|      | Transmission:                       |           |        |           |
| 17   | Land rights                         | 34,245    | 2.00%  | 685       |
| 18   | Structures and improvements         | 48,252    | 2.66%  | 1,283     |
| 19   | Mains                               | 991,689   | 2.37%  | 23,503    |
| 20   | Compressor equipment                | 222,927   | 3.52%  | 7,847     |
| 21   | Measuring & regulating equipment    | 133,413   | 3.61%  | 4,817     |
| 22   | Regulatory Overheads                | -         | 40     | -         |
| 23   |                                     | 1,430,526 |        | 38,135    |
|      | Distribution - Southern Operations: |           |        |           |
| 24   | Land rights                         | 4,839     | 1.67%  | 81        |
| 25   | Structures and improvements         | 68,347    | 2.91%  | 2,021     |
| 26   | Services - metallic                 | 111,141   | 3.69%  | 4,102     |
| 27   | Services - plastic                  | 695,583   | 3.18%  | 22,120    |
| 28   | Regulators                          | 66,325    | 3.30%  | 2,189     |
| 29   | Regulator and meter installations   | 53,865    | 3.51%  | 1,890     |
| 30   | Mains - metallic                    | 381,042   | 2.54%  | 9,678     |
| 31   | Mains - plastic                     | 459,888   | 2.34%  | 10,760    |
| 32   | Measuring & regulating equipment    | 25,812    | 4.64%  | 1,198     |
| 33   | Meters                              | 169,612   | 3.70%  | 6,276     |
| 34   | Regulatory Overheads                |           | 35     |           |
| 35   |                                     | 2,036,454 |        | 60,315    |

Filed: 2011-11-10 EB-2011-0210 Exhibit D8 Tab 1 Schedule 1 Page 3 of 3

#### **UNION GAS LIMITED**

#### Provision for Depreciation, Amortization and Depletion

#### Calendar Year Ending December 31, 2008

| Line |   | Average   | Rate   |           |
|------|---|-----------|--------|-----------|
| No.  | Particulars (\$000's)                               | Plant (1) | (%)    | Provision |
|      |   | (a)       | (b)    | (c)       |
|      | Distribution plant - Northern & Eastern Operations: |           |        |           |
| 1    | Land rights   | 8,700     | 1.68%  | 146       |
| 2    | Structures & improvements                           | 41,069    | 3.13%  | 1,355     |
| 3    | Services - metallic                                 | 91,149    | 3.58%  | 3,263     |
| 4    | Services - plastic                                  | 330,989   | 3.19%  | 10,559    |
| 5    | Regulators  | 23,732    | 3.34%  | 793       |
| 6    | Regulator and meter installations                   | 27,105    | 3.50%  | 949       |
| 7    | Mains - metallic                                    | 334,249   | 2.52%  | 8,423     |
| 8    | Mains - plastic                                     | 185,638   | 2.35%  | 4,362     |
| 9    | Compressor equipment                                | 1,341     | 3.34%  | 44        |
| 10   | Measuring & regulating equipment                    | 91,335    | 4.63%  | 4,229     |
| 11   | Meters  | 49,256    | 3.67%  | 1,808     |
| 12   | Regulatory Overheads                                |           | 35     | -         |
| 13   |   | 1,184,563 |        | 35,931    |
|      | General:  |           |        |           |
| 14   | Structures and improvements                         | 40,461    | 2.13%  | 959       |
| 15   | Office furniture and equipment                      | 16,202    | 6.67%  | 1,119     |
| 16   | Office equipment - computers                        | 86,453    | 25.00% | 21,960    |
| 17   | Transportation equipment                            | 46,705    | 10.07% | 4,771     |
| 18   | Heavy work equipment                                | 13,763    | 4.55%  | 614       |
| 19   | Tools and other equipment                           | 32,864    | 6.67%  | 2,231     |
| 20   | Communications equipment                            | 16,062    | 6.67%  | 1,165     |
| 21   | Communications structures                           | 3,264     | 4.88%  | 159       |
| 22   | Regulatory Overheads                                |           | 10     | -         |
| 23   |   | 255,774   |        | 32,978    |
|      |   |           |        |           |
| 24   | Contributions in aid of construction                | -         |        | -         |
| 25   | Sub-total   | 5,373,001 |        | 181,403   |
| 26   | Total provision for depreciation and amortization   | 5,373,001 |        | 181,403   |
| 27   | Depreciation through clearing                       |           |        | 1,150     |
| 28   |   | 5,373,001 |        | 180,253   |
|      |   |           |        |           |

#### Note:

<sup>(1)</sup> A simple average of the opening and closing plant balances was used to calculate the annual depreciation provision.

Filed: 2011-11-10 EB-2011-0210 Exhibit D9 Tab 1 Schedule 1 Page 1 of 3

#### **UNION GAS LIMITED**

Provision for Depreciation, Amortization and Depletion Calendar Year Ending December 31, 2007

| Line |   |   |         |
|------|---|---|---------|
| No.  | Particulars (\$000's)                                 |   |         |
|      |   |   |         |
|      | Total provision for depreciation and                  |   |         |
| 1    | amortization before adjustments (per page 3)          |   | 169,614 |
| 2    | Adjustments: vehicle depreciation through clearing    |   | 1,150   |
| 3    | Provision for depreciation amortization and depletion | • | 168,464 |

Filed: 2011-11-10 EB-2011-0210 Exhibit D9 Tab 1 Schedule 1 Page 2 of 3

#### **UNION GAS LIMITED**

#### Provision for Depreciation, Amortization and Depletion

#### Calendar Year Ending December 31, 2007

| Line |                                     | Average   | Rate   |           |
|------|-------------------------------------|-----------|--------|-----------|
| No.  | Particulars (\$000's)               | Plant (1) | (%)    | Provision |
|      |                                     | (a)       | (b)    | (c)       |
|      | Intangible plant:                   |           |        |           |
| 1    | Franchises and consents             | 2,102     |        | 102       |
| 2    | Intangible plant - Other            | 9,370     |        | 123       |
| 3    |                                     | 11,472    |        | 225       |
|      | Local Storage Plant                 |           |        |           |
| 4    | Structures and improvements         | 2,514     | 3.30%  | 83        |
| 5    | Gas holders - storage               | 4,473     | 2.68%  | 120       |
| 6    | Gas holders - equipment             | 7,618     | 3.68%  | 280       |
| 7    | Regulatory Overheads                |           | 30     | -         |
| 8    |                                     | 14,605    |        | 483       |
|      | Storage:                            |           |        |           |
| 9    | Land rights                         | 31,977    | 2.23%  | 713       |
| 10   | Structures and improvements         | 50,981    | 2.34%  | 1,207     |
| 11   | Wells and lines                     | 85,420    | 2.66%  | 2,278     |
| 12   | Compressor equipment                | 220,592   | 3.19%  | 7,103     |
| 13   | Measuring & regulating equipment    | 47,149    | 4.30%  | 2,033     |
| 14   | Other Storage Equipment             |           | 20.00% | -         |
| 15   | Regulatory Overheads                |           | 35     | =         |
| 16   |                                     | 436,119   |        | 13,334    |
|      | Transmission:                       |           |        |           |
| 17   | Land rights                         | 33,067    | 2.00%  | 661       |
| 18   | Structures and improvements         | 44,390    | 2.66%  | 1,181     |
| 19   | Mains                               | 943,264   | 2.37%  | 22,355    |
| 20   | Compressor equipment                | 143,728   | 3.52%  | 5,059     |
| 21   | Measuring & regulating equipment    | 127,194   | 3.61%  | 4,592     |
| 22   | Regulatory Overheads                |           | 40     |           |
| 23   |                                     | 1,291,643 |        | 33,848    |
|      | Distribution - Southern Operations: |           |        |           |
| 24   | Land rights                         | 4,549     | 1.67%  | 76        |
| 25   | Structures and improvements         | 61,520    | 2.91%  | 1,809     |
| 26   | Services - metallic                 | 111,196   | 3.69%  | 4,103     |
| 27   | Services - plastic                  | 668,617   | 3.18%  | 21,262    |
| 28   | Regulators                          | 62,920    | 3.30%  | 2,077     |
| 29   | Regulator and meter installations   | 49,546    | 3.51%  | 1,739     |
| 30   | Mains - metallic                    | 371,264   | 2.54%  | 9,430     |
| 31   | Mains - plastic                     | 442,423   | 2.34%  | 10,353    |
| 32   | Measuring & regulating equipment    | 23,410    | 4.64%  | 1,085     |
| 33   | Meters                              | 166,196   | 3.70%  | 6,149     |
| 34   | Regulatory Overheads                |           | 35     |           |
| 35   |                                     | 1,961,641 |        | 58,083    |

Filed: 2011-11-10 EB-2011-0210 Exhibit D9 Tab 1 Schedule 1 Page 3 of 3

#### **UNION GAS LIMITED**

#### Provision for Depreciation, Amortization and Depletion Calendar Year Ending December 31, 2007

| Line | Cultivative Live Ending Described                   | Average   | Rate   |           |
|------|---|-----------|--------|-----------|
| No.  | Particulars (\$000's)                               | Plant (1) | (%)    | Provision |
|      |   | (a)       | (b)    | (c)       |
|      | Distribution plant - Northern & Eastern Operations: |           |        |           |
| 1    | Land rights   | 8,559     | 1.68%  | 144       |
| 2    | Structures & improvements                           | 42,493    | 3.13%  | 1,410     |
| 3    | Services - metallic                                 | 89,459    | 3.58%  | 3,203     |
| 4    | Services - plastic                                  | 320,028   | 3.19%  | 10,209    |
| 5    | Regulators  | 22,799    | 3.34%  | 761       |
| 6    | Regulator and meter installations                   | 25,237    | 3.50%  | 883       |
| 7    | Mains - metallic                                    | 322,582   | 2.52%  | 8,129     |
| 8    | Mains - plastic                                     | 181,132   | 2.35%  | 4,257     |
| 9    | Compressor equipment                                | 1,341     | 3.34%  | 45        |
| 10   | Measuring & regulating equipment                    | 85,943    | 4.63%  | 3,979     |
| 11   | Meters  | 48,777    | 3.67%  | 1,790     |
| 12   | Regulatory Overheads                                |           | 35     |           |
| 13   |   | 1,148,350 |        | 34,810    |
|      | General:  |           |        |           |
| 14   | Structures and improvements                         | 37,476    | 2.13%  | 926       |
| 15   | Office furniture and equipment                      | 17,600    | 6.67%  | 1,130     |
| 16   | Office equipment - computers                        | 61,893    | 25.00% | 17,978    |
| 17   | Transportation equipment                            | 45,300    | 10.07% | 4,669     |
| 18   | Heavy work equipment                                | 14,809    | 4.55%  | 647       |
| 19   | Tools and other equipment                           | 31,251    | 6.67%  | 2,121     |
| 20   | Communications equipment                            | 18,543    | 6.67%  | 1,201     |
| 21   | Communications structures                           | 3,263     | 4.88%  | 159       |
| 22   | Regulatory Overheads                                |           | 10     |           |
| 23   |   | 230,135   |        | 28,831    |
|      |   |           |        |           |
| 24   | Contributions in aid of construction                | _         |        | _         |
| 2.   | Contributions in the or construction                |           |        |           |
| 25   | Sub-total   | 5,093,965 |        | 169,614   |
| 26   | Total provision for depreciation and amortization   | 5,093,965 |        | 169,614   |
| 27   | Depreciation through clearing                       |           |        | 1,150     |
|      |   |           |        |           |
| 28   |   | 5,093,965 |        | 168,464   |

#### Note:

<sup>(1)</sup> A simple average of the opening and closing plant balances was used to calculate the annual depreciation provision.