



**uniongas**  
A Spectra Energy Company

September 12, 2011

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

**Re: EB-2011-0038 - Union Gas Limited - 2010 Earnings Sharing & Disposition of  
Deferral Account and Other Balances – Responses to Interrogatories on  
Reply Evidence**

Dear Ms. Walli:

Please find attached Union's responses to the EB-2011-0038 interrogatories on Union's Reply Evidence.

If you have any questions, please contact me at (519) 436-5476.

Yours truly,

*[original signed by]*

Chris Ripley  
Manager, Regulatory Applications

cc Crawford Smith (Torys)  
EB-2011-0038 Intervenors

UNION GAS LIMITED

Answer to Interrogatory from  
Board Staff

**Issue: Allocation of Storage Operation Costs based on Compression Horsepower**

**Interrogatory #1**

**Ref: John Rosencrantz Evidence – Page 1 & 8  
Union Reply Evidence – Page 10 – 11  
Black and Veatch Report – Section 3**

**Preamble:**

The Rosencrantz Evidence stated that Union should consider whether factors such as compression horsepower would result in a better allocation of direct operating costs. Rosencrantz noted that non-utility storage additions have been heavily weighted towards compression in order to provide new high deliverability storage services. Since compression facilities tend to have relatively high maintenance costs compared to other storage plant, an allocation factor other than storage plant, such as compressor horsepower, would be a better allocator of compression O&M costs.

Union replied that it does consider compression horsepower when allocating costs between the regulated and unregulated businesses. In the Black and Veatch Report, it is noted that the compression horsepower required to bring the pressure up to 4,926 kPa on a design day is deemed to be storage-related.

Board staff questions the logic of basing allocations between regulated and unregulated businesses on compression horsepower at a design day forecast when non-utility storage additions are largely related to new high deliverability storage services. Board staff notes that high deliverability services are mainly for generators who are more likely to use high deliverability services in the summer (and not on a design day).

**Question / Request:**

- a) Is Board staff correct that the compression horsepower allocation factor is based on a design-day forecast?
  - b) If so, please explain how a design day based horsepower allocation factor adequately accounts for high deliverability storage services.
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**Response:**

- a) Yes.
- b) High deliverability storage services are included in Union's design day forecast and the resulting horsepower allocation.

UNION GAS LIMITED

Answer to Interrogatory from  
Board Staff

**Issue: O&M Expenses and Margin Calculation for Union's Storage Service  
Deferral Accounts**

**Ref: John Rosencrantz Evidence – Page 8 – 9 & 12 – 13  
Union Reply Evidence**

**Preamble:**

The Rosencrantz Evidence makes a number of comments in Section 1C that seem to be unaddressed in Union's Reply Evidence including: O&M Allocation based on Labour Time Estimates and No Comparison of Non-Utility Storage O&M and Utility Storage O&M Costs. In addition, the Rosencrantz Evidence makes comments in Section 2B/C regarding the use of Union's internal hurdle rate in the calculation of storage service margins to be shared with ratepayers that also seems to be unaddressed in Union's Reply Evidence.

**Question / Request:**

- a) Please provide your reply to the above noted comments found in the Rosencrantz Evidence.

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**Response:**

Labour Estimates

Union disagrees with the Rosecrantz Report's comments on the use of labour time estimates. In EB-2010-0039, Union provided a description of the O&M allocation in its prefiled evidence at Exhibit A, Tab 4, pp. 14 - 18. In addition, Union provided additional O&M information requested through the interrogatory process including the study completed by KPMG that describes the O&M allocation process in Exhibit B2.05.

Further information was provided during the Technical Conference including a breakdown of Business Development department costs at Exhibit JT1.6.

In this proceeding, Union filed the report prepared by Black & Veatch (Exhibit A, Tab 4) reviewing Union's methodology to allocate costs including O&M to unregulated storage. As noted in this report, there is an opportunity to improve the documentation of the process for additional transparency, however, the methodology used is appropriate.

Departments at Union involved in storage activities are required as part of the annual budget process to estimate the effort associated with unregulated storage activity to set the allocation factors. During the year, the departments are required to identify any significant changes in actual activity to review the appropriateness of the allocation process. Evidence of this is the additional costs allocated to unregulated storage for the Dawn Gateway project in 2009.

The use of management judgment to determine the appropriate allocation of costs is an appropriate approach.

#### Comparison of Non-Utility Storage

The Rosencrantz Report also states that it is difficult to assess the reasonableness of Union's cost estimates because Union does not provide a way to compare non-utility storage O&M costs to the O&M costs assigned to utility storage. A complete cost allocation study will need to be done for the 2013 rate case.

Union disagrees with this submission. The allocation of unregulated storage costs was based on the Board-approved 2007 cost allocation study where the utility / unregulated storage costs were comparable. Since the NGEIR decision the costs associated with incremental storage activity have been allocated to the unregulated storage business. There has been no increase in utility storage activity.

In Union's 2013 rate case, the cost of utility storage will be available in the cost study. These costs can be compared to the storage costs currently included in utility rates. A comparison of utility storage to unregulated storage is not required and would not assist in assessing the forecast utility costs.

#### Hurdle Rate

The Board recognized in its NGEIR decision that new storage is substantially more expensive (p. 40) and that there are high risks associated with developing new storage assets (p. 41 & p. 51). The Board concluded that with forbearance from rate regulation the utilities would have an incentive to develop assets and services (p. 50). Utility shareholders would be expected to bear the risk of any storage development for the competitive market (p. 51).

While recognizing the concept that the shareholder should benefit from all incremental investment in storage in the NGEIR decision the Board adopted a phase-out approach to margin sharing for existing storage assets, to avoid the complexity of an ongoing review of how storage contracts were to be treated.

Union's position in the NGEIR filing was that the shareholder was prepared to make additional investments and commitment to storage taking on additional risk in return for a change in regulation. Underlying its position was that a change in regulation would provide to the shareholder the opportunity to earn their threshold return on investment which is above the allowed utility return on investment. Without this opportunity, incremental investments would not be made.

Since the NGEIR decision, Union has added 15.5 Bcf of additional capacity through additional capital investments or long-term contracts entirely for sale to the ex-franchise market. Union's in-franchise customers have not borne any of the cost of this additional storage, nor have they accepted any of the long-term risks associated with those decisions. In fact, in-franchise customers have benefited through continuing to receive a share of the sale of long-term storage.

UNION GAS LIMITED

Answer to Interrogatory from  
Federation of Rental-housing Providers of Ontario ("FRPO")

Official Storage Working Capacity

On page 2, Union states that at the time of the 2007 rate case, Union's official storage working capacity was 154.0 PJ.

In Exhibit B3.36, Union states: "'Total Official Working Capacity' is the theoretical volume of gas calculated between the minimum and maximum operating pressures for all of Union's storage pools. 'Base' storage is the total available working capacity used for supply planning purposes to determine storage utilization. It may include minor adjustments to account for unavailable space due to non-permanent operating constraints."

In Exhibit B3.25, Union states: "'Space deemed unavailable' is working capacity which has been determined to be not available during a storage withdrawal cycle....It may include minor adjustments due to non-permanent operating constraints."

- a) Please explain why Union uses a measure of storage capacity for cost allocation purposes that is different from the measure of storage capacity used for supply planning.
- b) Please provide a table comparing the Total Official Working Capacity for each year from 2000 to 2010 with the Base storage shown on Exhibit B3.4, line 1, and explain the differences.
- c) Given Union's definitions of "Base" storage and "space deemed unavailable" cited above, is it correct to conclude that the Base storage capacity has already been adjusted for all, or at least a portion, of the space deemed unavailable? If this conclusion is not correct, please explain.

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**Response:**

- a) Union's Board-approved cost allocation methodology allocates storage space-related costs based on official storage working capacity, which includes space deemed unavailable. For gas supply planning purposes, Union forecasts its gas supply balancing needs based on available storage working capacity, which excludes space deemed unavailable.

The rationale for the different measure of storage working capacity is to recognize that Union's annual gas supply plan must balance to the available working storage capacity and cannot plan to fill space that is deemed unavailable for a particular storage cycle.

- b) Please see the Attachment. Union has provided information for 2006 to 2010. The information for 2000 to 2005 is not readily available.
- c) Base storage has been adjusted for all space deemed unavailable due to non-permanent operating constraints.



Union Gas Limited  
Available Storage Space

Line No.	Particulars (PJ)	Actual										
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	Total Official Working Capacity <sup>1</sup>							162.5	160.4	162.9	165.2	164.6
2	Space deemed unavailable due to non- permanent operating constraints <sup>1</sup>							-1.5	-0.5	-0.5	-0.5	-0.9
3	Base	<u>151.8</u>	<u>159.9</u>	<u>159.9</u>	<u>159.6</u>	<u>159.6</u>	<u>161.7</u>	<u>161.0</u>	<u>159.9</u>	<u>162.4</u>	<u>164.7</u>	<u>163.7</u>

Notes:

(1) Data not available for years 2000 to 2005.

UNION GAS LIMITED

Answer to Interrogatory from  
Federation of Rental-housing Providers of Ontario ("FRPO")

Annual Costs of Storage Deemed Unavailable

Preface: Union's evidence states: "The 1.5 PJ of space deemed unavailable is in excess of the 92.1 PJ required to serve in-franchise customers and is included in the 7.9 PJ of excess utility storage space. Accordingly, the annual costs associated with the 1.5 PJ of space deemed unavailable are borne by Union's unregulated storage operations."

- a) Please provide a clear description including associated rate orders that demonstrate that the cost of the 1.5 PJ's was moved out of in-franchise rates to the non-utility storage accounts.
- b) Please confirm that if Union were to get approval for the transfer of 7.9PJ to the Short-term Storage Account 179-70 that the majority of that 1.5PJ space cost would be visited on ratepayers through a reduction in margin credited to the deferral account.
- c) If Union sold the 7.9 PJ short-term (as stated in its Issue 3 Cross Charge), how did it sell the 1.5PJ of unavailable space?

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**Response:**

- a) In-franchise rates have not been reduced by the cost of the 1.5 PJ of space deemed unavailable through a Board rate order.
- b) All costs associated with the short-term sale of 7.9 PJ of excess utility storage space, are accounted for in the Short-term Storage Account 179-70 for the purposes of calculating margins to be shared with ratepayers.
- c) Union did not sell the 1.5 PJ of space deemed unavailable.

The 7.9 PJ of storage sold on a short-term basis is the difference between the 100 PJ reserved for in-franchise customers per the Board's NGEIR Decision and in-franchise storage requirements of 92.1 PJ.

Please refer to Exhibit B3.23.

UNION GAS LIMITED

Answer to Interrogatory from  
Federation of Rental-housing Providers of Ontario ("FRPO")

Storage Optimization

Beginning on page 4, Union states that "actual storage space" is sold to both utility and non-utility customers, while "optimization space" is sold to non-utility, ex-franchise customers.

- a) When natural gas storage service is provided to a utility customer from Union's integrated storage operation, can Union distinguish whether that storage service is physically provided using "actual storage space" that was earmarked for utility operations for cost allocation purposes, "actual storage space" that was earmarked for non-utility storage operations for cost allocation purposes, or additional storage space made available by Union's storage optimization activities? Please explain.
- b) Is "optimization space" sold as short-term storage service, long-term storage service, or both?
- c) Exhibit A, Tab 4, Attachment 1, Schedule 16, shows that nearly all of Union's non-utility short-term storage sales at October 31, 2009 were made using the portion of the 100 PJ of physical storage reserved for utility customers that was not required by utility customers at that time. Is it correct to conclude that the 14.8 PJ of Resource Optimization shown on page 2 of Schedule 16 was used almost entirely for long-term storage sales? If Union does not agree with this conclusion, please explain how the Resource Optimization space was sold at October 31, 2009.

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**Response:**

- a) No, Union cannot distinguish what asset is used for storage services. Union operates an integrated storage system and does not allocate any customer activity to specific storage pools.
- b) Optimization space is sold as long-term storage.
- c) Exhibit A, Tab 4, Attachment 1, Schedule 16 provides a breakdown of Union's 2009 long-term storage capacity. The schedule does not provide information regarding the portion of the 100 PJ not required by utility customers. The Resource Optimization space was sold long-term.

UNION GAS LIMITED

Answer to Interrogatory from  
Federation of Rental-housing Providers of Ontario ("FRPO")

On page 5, Union states: "At the time of the allocation in 2007, there was no optimization space."

- a) Please explain why Union did not engage in storage optimization "at the time of the allocation in 2007", but storage optimization became important after this date.
- b) Please reconcile this statement with Exhibit B3.40, which shows that 14.5 PJ of Resource Optimization space was available to Union in 2006-07.

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**Response:**

a) and b). Union did engage in storage optimization in 2007. Union's Reply Evidence indicates that at the time the 2007 cost allocation study was being prepared, Union did not forecast optimization space.

UNION GAS LIMITED

Answer to Interrogatory from  
Federation of Rental-housing Providers of Ontario ("FRPO")

On page 7, Union states: "In accordance with the NGEIR Decision, Union sells the excess utility storage space of 7.9 PJ on a short-term basis only."

- a) Please identify where in the NGEIR Decision the Board requires to sell excess utility storage space on a short-term basis only.
- b) Please explain why Union believes that this statement is consistent with the second paragraph on p. 83 of the NGEIR Decision, where the Board states that "Union will have the flexibility to market the difference between the total amount needed [by in-franchise customers] and the 95 Bcf [100 PJ] reserve amount".

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**Response:**

- a) The Board's findings on page 100 of the NGEIR decision states that "Union's short-term storage transactions and Enbridge's Transactional Services storage sales are sales of services derived from utility assets that are temporarily surplus to in-franchise needs." Further on page 101 the Board finds that "the entire margin on storage transactions that are underpinned by "utility asset" storage space, less an appropriate incentive payment to the utilities, should accrue to ratepayers".
- b) Please refer to a).

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Answer to Interrogatory from  
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Storage Cost Allocation

On pages 8 and 9, Union states that the Rosenkranz Report "relies on" the STAR storage index of customer's reports and concludes that "STAR reporting cannot be used for cost allocation purposes."

Please identify where information from the STAR reports is used on Schedule 2 of the Rosenkranz Report.

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**Response:**

The information from the STAR reports was used in the Rosenkranz Report to support proposed changes to Union's calculation of storage margins and non-utility allocator. The Rosenkranz Report states on page 4 that "the storage numbers Union uses for ratemaking purposes significantly understate the amount of long-term non-utility storage service that Union is actually able to sell".

To support this statement The Rosenkranz Report includes Table 2 to demonstrate that the actual contract quantities for the long-term storage services sold by Union are greater than the reported storage utilization amount. The Rosenkranz Report concludes that resource optimization should be included in total available storage used to calculate Union's non-utility storage allocator in Schedule 2. The index of customers was not used explicitly in the calculation of the Non-Utility Storage Allocator.

The purpose of Union's reply evidence for STAR reporting was to demonstrate that the Rosenkranz Report's reliance on the STAR reports to support his findings is misguided and the proposals suggested in Schedule 2 are incorrect.

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Answer to Interrogatory from  
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On pages 10 and 11, Union states that the estimate of the Utility Deliverability Requirement for the 2006-07 winter season shown on Schedule 2, line 18 is incorrect.

Please provide the actual Utility Deliverability Requirement for the 2006-07 winter season.

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**Response:**

Union does not calculate its actual Utility Deliverability Requirement. Deliverability requirements are based on forecasted in-franchise customer demands.

UNION GAS LIMITED

Answer to Interrogatory from  
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Cross Charge

Please provide the level of Short-term and Long-term space contracted and the revenue generated in 2004 through 2008 by completing the following table:

YEAR	Total Working Capacity	In-franchise Requirements	Short-term Space Sold	Short-term Total Gross Revenue	Long-term Space Sold	Long-term Total Gross Revenue
2004						
2005						
2006						
2007						
2008						
2009						
2010						

**Response:**

YEAR	Total Working Capacity (PJ) <sup>1</sup>	In-franchise Requirements (PJ)	Short-term Space Sold (PJ) <sup>1</sup>	Short-term Total Gross Revenue (\$000's) <sup>1</sup>	Long-term Space Sold (PJ) <sup>1</sup>	Long-term Total Gross Revenue (\$000's) <sup>1</sup>
2004		88.2				
2005		90.4				
2006	162.5	90.5				
2007	160.4	87.0	13.0	24,261	76.2	65,001
2008	162.9	91.4	8.7	23,327	84.6	87,093
2009	165.2	90.5	9.5	28,915	91.1	106,373
2010	164.6	89.9	10.1	20,887	102.3	111,941

Notes:

(1) Data not available for years 2004 and 2005.