



uniongas

P.O. Box 2001  
50 Keil Drive North  
Chatham, Ontario  
N7M 5M1

May 1, 2006

Ontario Energy Board  
P.O. Box 2319  
27th Floor,  
2300 Yonge Street  
Toronto, Ontario  
M4P 1E4

Attention: Mr. John Zych, Board Secretary

**RE: EB-2005-0551 – Natural Gas Electricity Interface Review & Storage Regulation**

Dear Mr. Zych,

Enclosed please find ten (10) copies of Union's written submission evidence pertaining to:

- Procedural Order No. 2: Appendix C, Issue I, Rates for gas-fired generators (addendum to evidence filed by Union on March 20, 2006).

An electronic copy will be provided via email in PDF format.

Yours truly,

A handwritten signature in blue ink, appearing to read 'Connie Burns'.

Connie Burns, CMA, PMP  
Manager, Regulatory Initiatives  
Union Gas Limited  
[cburns@uniongas.com](mailto:cburns@uniongas.com)  
Fax: (519)436-4641

cc: Glenn Leslie, Blakes  
All EB-2005-0551 Intervenors

1                                   **SUPPLEMENTAL PREFILED EVIDENCE OF**  
2   **UNION GAS LIMITED**  
3                                   **NATURAL GAS ELECTRICITY INTERFACE REVIEW**  
4   **POWER SERVICES EVIDENCE**

5  
6   The following supplemental evidence is related to the in-franchise services section found  
7   under Tab 3 of Union’s EB-2005-0551 Power Services evidence filed on March 20,  
8   2006.

9  
10   **Overview**

11   Union Gas has worked with existing and prospective natural gas power generators and  
12   affected stakeholders through the rapidly evolving natural gas power generation  
13   marketplace in Ontario. These generators include the first open market participants  
14   (“early movers”) that located plants in the Sarnia and Windsor areas. These were  
15   followed by generators involved in the Clean Energy Supply (“CES”) Request for  
16   Proposal (“RFP”)/contracting process of 2004 and 2005, and then with the next wave of  
17   market participants awaiting the West Greater Toronto Area (“West GTA”) RFP.

18  
19   Throughout this period, and in preparation for this proceeding, Union has adhered to a  
20   number of underlying principles that support the service offerings to these customers.

21   These guiding principles include:

1       1) Services continue to be evolved or are developed with an adherence to the  
2           principles of postage stamp rate-making. This approach is consistent with the  
3           Board’s expectation as set out in its RP-2005-0022 / EB-2005-0411 Decision  
4           where the Board stated that it;

5                   “...continues to support the principle of postage stamp rates...”

6       2) New services will not negatively impact the service to existing customers, where  
7           negative impact is defined as either additional significant financial burden to other  
8           customers or a reduction in the overall system capability and reliability.

9       3) Where possible, to respond to a customer’s request for flexibility in the terms and  
10          conditions of service in order to best serve their natural gas needs.

11

12       Immediately following the conclusion of the NGEIR Technical Conference on April 6,  
13       2006, Union received a written request from a potential power generation customer who  
14       is planning to respond to the anticipated West GTA RFP. The request centered around  
15       Union’s existing T1 service, including concern about the daily delivery obligations  
16       associated with the existing T1 service.

17

18       These potential new, large T1 power generation customers who are expressing a renewed  
19       interest in being located at the extreme eastern end of Union’s Dawn-Parkway  
20       transmission system are significantly larger than any of the existing in-franchise T1 loads  
21       Union has served by the Dawn-Parkway transmission system. In addition, their firm load  
22       factors of approximately 50% are materially different than the existing T1 rate class

1 average of approximately 80%. Also, the absolute size of the peak day demand (100,000  
2 to 120,000 GJ/d) is unparalleled by any single large industrial customer currently served  
3 by the Dawn-Parkway transmission system. The largest contract customer currently  
4 served by the Dawn-Parkway transmission system has a peak day demand (also known as  
5 the firm Contract Demand or CD) of approximately 50,000 GJ/d, about half the  
6 magnitude of that required by a 500 MW power generation plant.

7

8 The recent customer request, in combination with the potential for a concentration of  
9 new large T1 power generation customers requesting service very near the east end of the  
10 Dawn-Parkway transmission system, has caused Union to undertake a review of the  
11 terms and conditions of the T1 service. This review has encompassed daily delivery  
12 obligations, Dawn-Parkway transmission requirements, storage allocation methodology  
13 and deliverability requirements.

14

15 **T-1 Customers currently served by the Dawn-Parkway transmission system**

16 A new T1 customer served by the Dawn-Parkway transmission system, under existing  
17 contracting practices, is required to deliver to Union's system a daily obligated volume  
18 equal to 1/365<sup>th</sup> of their total annual forecasted demand. This daily obligated volume is  
19 delivered at the east end of Union's transmission system (i.e., at Parkway). The  
20 difference between this daily obligated volume (Daily Contract Quantity or DCQ) and  
21 firm daily peak demand (firm Contract Demand or CD) is incorporated into Union's  
22 system design. Union either constructs incremental Dawn to Parkway transmission

1 capacity, or makes alternate arrangements, to serve this peak day firm requirement.  
2 These costs are then rolled in with existing system costs and allocated to the appropriate  
3 rate classes. Union has been able to utilize this practice in the past as a result of the wide  
4 diversity in size and location of the moderate, predictable demand growth on its  
5 integrated system.

6

### 7 **Changed Environment**

8 As mentioned above, the sheer size of the potential new T1 demands, in combination  
9 with their relatively low load factors, is not reflected or considered in Union's current  
10 contracting practices or system operation for customers east of Dawn.

11

12 For example:

13 A 500 MW power generation plant, with a peak hourly demand of 4,000 - 5,000 GJ/hr,  
14 would create a peak day demand (CD) of approximately 100,000 GJ/d.

15 Assuming an annual load factor of approximately 50%, the customer's obligated DCQ at  
16 Parkway would be 50,000 GJ/d. The difference between the obligated DCQ at Parkway  
17 (average daily delivery) and the CD (peak day firm requirement) creates a substantial  
18 requirement (50,000 GJ/d) for either incremental Dawn to Parkway transmission capacity  
19 or for alternate arrangements to serve the peak day requirements that are not met by the  
20 obligated DCQ at Parkway. Absent any change to the existing terms and conditions, the  
21 impact of rolling these incremental costs in with the existing system costs could create a  
22 significant cost burden for all existing customers. In this example, a 50,000 GJ/d demand

1 represents a significant amount of Dawn-Parkway capacity expansion which has a value  
2 of \$1.5 to \$2.0 million per year at posted M12 tolls. In the absence of any changes, this  
3 amount would be recovered from other existing customers.

4

#### 5 **Customers Alternatives**

6 Union is amending the terms and conditions of T1 service for new, large firm T1  
7 customers, and for existing customers with new firm incremental loads, of greater than  
8 1,126,964 m<sup>3</sup> per day served by the Dawn-Parkway transmission system. This threshold  
9 aligns with the proposed new T1 rate class structure which was described at Tab 3, pages  
10 17 – 28.

11

12 Specifically, Union is offering the following alternatives and options for customers:

- 13 1) Customers could deliver a daily obligated supply at Parkway, equal to 100% of  
14 their firm CD, which avoids the need for Union to construct incremental Dawn-  
15 Parkway transmission capacity (or make alternate delivery arrangements), or
- 16 2) Customers could commit to M12 Dawn-Parkway transmission capacity sufficient  
17 to meet 100% of their firm CD. This allows the customer to purchase all their gas  
18 supply at Dawn, on a non-obligated basis, yet operate with the no-notice benefits  
19 of the T-1 service, or
- 20 3) Customers could elect to deliver their DCQ at Parkway on the days/hours their  
21 plant is consuming. This election would require the customer to match the hourly  
22 (or in increments of 15 minutes) deliveries from TCPL at Parkway to the same

1 hourly or 15 minute increment consumption at the plant (this option would be  
2 contingent on TCPL being able to confirm physical supply to Union at Parkway  
3 on hourly or 15 minute increments). Union would only redeliver to the customer  
4 what had been delivered to Union by the customer, or

5 4) Any combination of the above that meets the requirements. In the above example,  
6 the customer could choose to obligate daily deliveries at Parkway (DCQ) for  
7 40,000 GJ/d, and commit to incremental Dawn-Parkway transmission capacity of  
8 60,000 GJ/d, to meet their firm CD.

9

10 Under alternatives 2 and 4, the customer would be required to assign the right to use the  
11 M12 Dawn-Parkway transmission capacity to Union to allow Union to manage the firm  
12 redeliveries to the plant on a no-notice basis. The customer would continue to pay for  
13 M12 demand charges as well as the required M12 fuel (based on actual daily usage up to  
14 the total contracted volume of M12 capacity).

15

16 These alternatives allow new large customers east of Dawn to use T1 service without  
17 imposing a significant cost burden on other customers. They also provide the service  
18 flexibility being requested by the new Power Customers for a non-obligated DCQ.

19

#### 20 **Allocation of Storage to new large Power Customers**

21 To determine the capacity used by customers for Union's storage services, Union  
22 allocates storage space in accordance with the Board approved aggregate excess

1 methodology. This methodology is described at page 7 of Union’s storage regulation pre-  
2 filed evidence. The aggregate excess methodology applies to customers who commit to a  
3 daily delivery obligation. For traditional “semi unbundled” T-1 customers, with an  
4 obligated DCQ, Union allocates cost-based storage using the aggregate excess  
5 calculation. This methodology recognizes the differences between seasonal load profiles,  
6 annual supply requirements and subsequent daily delivery obligations.

7

8 For customers who do not want to commit to daily deliveries (i.e. no obligated DCQ), the  
9 aggregate excess allocation methodology will not apply. These customers would have no  
10 seasonal or annual balancing requirement. Accordingly, these customers will not receive  
11 a traditional allocation of storage space as there are no differences in seasonal load  
12 profiles, annual supply requirements and daily delivery obligations.

13

14 Power Customers have expressly told Union that their storage and balancing needs are  
15 driven by their daily deliverability requirements and not by the amount of allocated  
16 storage space. Union is currently evaluating options to provide a storage service to  
17 power generators who wish to avoid daily delivery obligations, and will bring these  
18 forward in due course for Board approval.

19

20 **Conclusion**

21 By incorporating these proposed changes, large in-franchise power generation customers  
22 will continue to have access to the no notice T-1 service, while ensuring that the existing



- 1 customer base is not exposed to significant additional costs and preserving the concept of
- 2 postage stamp rates for all T-1 customers.