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May 26, 2006

Ontario Energy Board  
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Attention: Mr. Peter H. O'Dell, Assistant Board Secretary

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

Dear Mr. O'Dell,

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

- Procedural Order No. 2: Appendix C, Issue I, Rates for gas-fired generators
- Procedural Order No. 2: Appendix C, Issue II, Storage regulation.
- Competition Study Reply Evidence – EEA Inc. & R. Schwindt.

Also included in this package is a revised Index for EB-2005-0551.

An electronic copy will be included in CD format and via email in PDF format.

Yours truly,

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

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All EB-2005-0551 Intervenors

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**PREFILED EVIDENCE OF**  
**UNION GAS LIMITED**  
**NATURAL GAS ELECTRICITY INTERFACE REVIEW**  
**REPLY EVIDENCE - ISSUE I – POWER SERVICES**

The purpose of this Reply Evidence is to respond to the evidence and proposals filed by APPrO and TCPL on May 1, 2006 in respect to Issue I – Power Services. In addition, Union committed to address the storage allocation methodology for Power Customer seeking a non-obligated Daily Contract Quantity (“DCQ”) supply option as outlined in Union’s Supplemental Evidence similarly filed on May 1, 2006.

In addressing the above, and consistent with the service proposals developed to date, Union continues to be guided by the following principles:

- New services should adhere to and respect postage stamp rate-making as per the RP-2005-0022/EB-2005-0411 Decision, where the Board stated that it “continues to support the principle of postage stamp rates”
- New services should not negatively impact service to existing customers from a financial or reduced system capability and reliability perspective
- Customer requests for flexibility will be accommodated where possible
- Alignment with downstream services (i.e. TCPL’s FT-SN) will be facilitated to the extent possible
- Under all operating conditions, system reliability and integrity will be maintained

1 Specifically, Union's Reply Evidence will address the following:

- 2 1. Storage allocation proposal for in-franchise customers with non-obligated DCQ.
- 3 2. Union's service alignment with TCPL's proposed FT-SN and SNB services.
- 4 3. Certain recommendations contained within the APPrO consensus proposal.

5

6 **1. Storage Allocation Proposal For Customers With Non-obligated Supply**

7 In its Supplemental Evidence filed May 1<sup>st</sup>, Union outlined a service option to allow for a non-  
8 obligated supply (or DCQ) but noted that the existing aggregate excess methodology for storage  
9 space allocation is inconsistent with non-obligated supply. The aggregate excess methodology  
10 allocates storage to meet annual or seasonal balancing requirements. Power Customers, in their  
11 request for non-obligated supply, are indicating no requirement for annual or seasonal balancing.

12

13 Union indicated it was currently evaluating options to provide a storage service to Power  
14 Customers who wish to avoid obligated daily supply obligations. At the May 16<sup>th</sup> Technical  
15 Conference, Union committed to developing a storage service proposal prior to the start of the  
16 NGEIR Settlement Conference.

17

18 On May 16<sup>th</sup>, APPrO presented a storage allocation proposal which was aimed at distinguishing  
19 the storage needs of Power Customers from other commercial and industrial customers. In their  
20 proposal, APPrO confirmed their view that the aggregate excess storage methodology used to  
21 date for all other in-franchise customers did not work for Power Customers (Technical  
22 Conference Transcript, 5/16/06, pg. 225, lines 2 – 4). Further APPrO confirmed the Power  
23 Customer need for high deliverability storage to manage the real time electricity market.

1 Under the APPrO proposal it was assumed that generators would have a typical 16 hour run time  
2 and would procure the required gas in the day-ahead market. If, for any reason, the generator  
3 was not dispatched, there would be a need to inject up to 16 hours of gas supply into storage. As  
4 such, under the APPrO proposal, storage deliverability would be required to inject this 16 hours  
5 of gas supply into storage.

6  
7 APPrO's proposal built upon the storage injection capability required to inject 16 hours of gas  
8 supply and assumed a 10% deliverability storage service in order to derive a storage space  
9 entitlement (Technical Conference Transcript, 5/16/06, pg. 200, line 15). In Union's view, the  
10 APPrO methodology results in an over allocation of storage space. Specifically, it is Union's  
11 view that the assumption of a base 10% deliverability storage service to derive or back into the  
12 storage space allocation is not supportable or appropriate.

13  
14 Union understands the generator requirement for deliverability and has used that deliverability as  
15 the primary driver underpinning the overall storage allocation approach.

16  
17 Union's proposed storage allocation methodology for in-franchise T1 customers seeking a non-  
18 obligated DCQ starts with and focuses on storage deliverability. After defining the storage  
19 deliverability, it is Union's view that storage space should then be determined as a multiple of  
20 the storage deliverability required by a Power Customer. Specifically, Union is proposing a  
21 storage space allocation equal to 3 days of the storage deliverability requirement. This would  
22 provide generators the flexibility to manage gas supply arranged for one day and a weekend,

1 where the plant in question is not ultimately dispatched over that period of time and natural gas  
2 supply arrangements could not be changed.

3

4 The APPrO proposal suggested the need for 16 hours of injection capability as an appropriate  
5 level given the anticipated operation of gas fired plants in Ontario. Union's proposed  
6 methodology would allow for up to a full 24 hours of deliverability (i.e. 100% of CD) if that is  
7 what the individual generator feels is required.

8

9 Firm deliverability up to 1.2% of storage space for in-franchise T1 customers would be priced at  
10 cost. Firm deliverability greater than 1.2% would be acquired at market based rates.

11

12 Union is targeting to conduct a firm storage deliverability Open Season in June, 2006. Union is  
13 targeting June in order to meet generator requirements for a high deliverability storage service as  
14 well as price and service certainty. Generator requirements for deliverability in excess of the  
15 base 1.2% cost based deliverability can be met through Union's open season process or by way  
16 of other open season or market options. In order to illustrate Union's storage allocation  
17 proposal, the following is an example of the storage allocation for an in-franchise T-1 customer  
18 with a non-obligated DCQ. Further, this example uses the APPrO suggested deliverability of 16  
19 hours.

20

21

22

23

1 **Assumptions**

2 Plant CD = 120,000 GJ/Day; Peak Hour = 5000 GJ/Hour; Expected Dispatch = 16 hours

<b>Service</b>	<b>Calculation</b>	<b>Amount</b>
Injection/Withdrawal Capability (Deliverability)	16 hours x Peak Hourly Plant Consumption	80,000 GJ/Day
Space Allocation (priced per T1 Rate Schedule)	3 days x Required Deliverability	240,000 GJ
Daily Deliverability as %	80,000 / 240,000	33%
Cost Based Deliverability (priced per T1 Rate Schedule)	1.2 % x 240,000 GJ	2,880 GJ/DAY
Market Based Deliverability to Inject/Withdraw up to 80,000 GJ/Day (priced via open season bid process)	(33% - 1.2%) x 240,000 GJ	77,120 GJ/Day

3

4 In Union's view, the storage allocation proposal outlined above recognizes the deliverability  
5 required and sought by generators and provides an allocation of space which is sufficient to  
6 allow generators to operate in the real time electricity market.

7

8 **2. TRANSCANADA PIPELINE'S FT-SN AND SNB SERVICES**

9 Subsequent to Union's filing of its original and supplemental power service evidence in the  
10 NGEIR proceeding, TCPL filed its FT-SN and SNB service proposals with the NEB on May 1,  
11 2006. In Union's view, some progress has been made in aligning Union's service proposals with  
12 FT-SN. However, a number of the service characteristics of FT-SN do create restrictions as to  
13 who can access the service. Further, the structure of the FT-SN service appears to limit a  
14 customer's accessibility to other Union and Enbridge services.

15



1 **Union and TCPL Service Alignment**

2 At a high level, there are a number of areas where TCPL and Union's proposals are very much  
3 aligned. Both companies have come forward with new products that provide a "firm all day"  
4 transportation service. As well, both companies have responded to generator requests to have  
5 more nomination windows available. The services brought forward are Union's F24-T service  
6 and TCPL's FT-SN service.

7

8 Further, the new proposed services are incremental services designed to meet the specific needs  
9 of some customers (but not limited to Power Customers only). Neither company is proposing to  
10 extend these new service characteristics across all existing services (Technical Conference  
11 Transcript, May 16, 2006, P163). To do so would in Union's view, have significant impacts on  
12 existing customers, services and system operations.

13

14 Union also developed the new "Downstream Pipeline Balancing Service" or "DPBS", partly out  
15 of the desire to provide an interface between Union's system and TCPL's FT-SN service.

16 Customers that contract for the DPBS would be able to nominate on the same 15 minute  
17 windows as provided for under TCPL's FT-SN service. This service also has the flexibility to  
18 allow generators downstream of Union to be able to source gas on short notice between  
19 nomination windows. This service is another example of alignment between pipelines.

20

21 Finally, both companies are very interested in maintaining system reliability and security of  
22 supply. It is a key business principle used by both Union and TCPL. Both companies are

1 striving to provide flexible services to a subset of customers, while maintaining system integrity  
2 and reliability, and without having impacted other customers.

3

4 **Union's Concerns Regarding FT-SN and SNB Services**

5 The FT-SN service has been under discussion and is essentially unchanged since it was  
6 introduced by TCPL last summer. In contrast, the SNB service, as filed, is relatively new. The  
7 following outlines areas where TCPL's proposed FT-SN and SNB services create concerns with  
8 respect to flexibility, accessibility and alignment with existing and proposed services.

9

10 **i) FT-SN Requirement for Customers to have an independent Delivery Point separate**  
11 **from an existing LDC Delivery Area.**

12

13 As part of the FT-SN service, the customer must have a dedicated service and meter.  
14 Further, the service can only be provided if the customer's new meter is deemed a new  
15 delivery area, separate from the existing LDC delivery areas that currently exist. This  
16 aspect of the design, makes it extremely difficult, and in some cases impossible for  
17 customers to access other load balancing services provided by LDC's or marketers. The  
18 following is an example which illustrates this point by comparing FT-SN relative to how  
19 services are currently provided.

20

21 Lennox is a very large dual fired generation plant near Kingston Ontario. Lennox has been  
22 served on gas since 1998. When fully fired on gas the 2000 MW plant can consume  
23 approximately 400,000 - 500,000 GJ/d. To put this in perspective, the consumption of

1 Lennox when fully fired on gas is greater than the consumption of the combined Sithe  
2 Goreway plant, Portland's plant and the proposed GTA West plant.

3  
4 On Page 23 of 31 in TCPL's Appendix IA, Figure A7, TCPL shows the average daily  
5 consumption of Lennox each month in 2005. Of particular importance is the significant  
6 peak that shows in July and August. A similar diagram is shown on page 25 of 31, Figure  
7 A8. In this figure, TCPL indicates that a full suite of services, including FT, FT diversions,  
8 STS, STS overrun and IT are all used to meet the load requirement of Lennox during this  
9 peak summer period. This was also confirmed by TCPL at the Technical Conference (May  
10 16, 2006 Transcript, Pg 150). Further, TCPL confirmed that that the flexibility available to  
11 an LDC to serve a power plant using FT-SN would be limited only to the FT-SN service  
12 and not any of the other 5 services currently available and used to serve Lennox. It is a  
13 condition of the FT-SN service that only FT-SN volumes can flow through the dedicated  
14 meter (May 16, 2006 Transcript, Pg 151). The ability to use multiple services on TCPL  
15 (and Union) has provided the service flexibility required by Union to successfully work  
16 with TCPL and OPG to meet the Lennox requirements. Under FT-SN this flexibility  
17 would not be available.

18  
19 Another feature of the current framework that has allowed Union to successfully serve the  
20 Lennox plant is the Delivery Area approach on TCPL. Lennox is located in Union's EDA  
21 on the TCPL system. The Union EDA encompasses a broad geographic region from a  
22 point just east of Toronto to the eastern end of Ontario near Cornwall. Union responds to a  
23 diversity of loads in this region and uses a diversity of services as noted above. TCPL

1 recognizes in their evidence the current “Delivery Area” approach in facilitating the  
2 optimization of transportation services to various market segments in the Union EDA  
3 (TCPL Evidence, Appendix IA, Pg 31, and Technical Conference Transcript May 16, 2006,  
4 Pg 152). However, at the Technical Conference (May 16, 2006 Transcript Pages 152-153),  
5 TCPL confirmed that this approach is also not available for LDC’s to provide balancing  
6 services to generators who have contracted for FT-SN service. Specifically, a condition of  
7 service under FT-SN is for the new meter location to be its own Delivery Area, separate  
8 and distinct from the LDC’s Delivery Area.

9  
10 Union agrees with TCPL that both the ability to use multiple TCPL services to load balance  
11 customers and the Delivery Area approach are both significant factors in providing options  
12 to help balance the needs of an existing Power Customer like Lennox. However, it is  
13 unclear to Union as to why FT-SN is designed to be less flexible as compared to the  
14 existing framework that has a proven track record, and allows all market participants  
15 (LDC’s and Marketers) to participate and offer services to help serve and meet Power  
16 Customer requirements.

17  
18 **ii) Applicability of FT-SN Service for Embedded Generation**

19 TCPL’s evidence (Page 9) outlines the requirement for FT-SN customers to contract to a  
20 specific location and meter separate from any existing Delivery Area. Union notes that  
21 while this may work for a power plant served through a dedicated lateral off the TCPL  
22 mainline, it does not appear to work for a power plant embedded within an LDC franchise.  
23 It is not clear to Union how FT-SN in its current design can serve an embedded generator.

1 TCPL addressed this issue during the Technical Conference by suggesting a separate meter  
2 at the LDC gate station that would be dedicated solely to the FT-SN customer (but not  
3 directly connected to the generator). In Union's view this is not a practical or workable  
4 solution (Please see Transcript from May 16<sup>th</sup> Technical Conference, Pages 140 to 146).

5  
6 Given the potential for generators to be embedded within the LDC (ie Portland's Energy  
7 Centre in the Enbridge franchise, GTA West generators in either Union or Enbridge  
8 franchise areas), FT-SN would not appear to be available or accessible by these customers.

9 Without FT-SN being available for embedded generators, the only firm service available to  
10 them would be FT (FT is not "firm all day" and only has the 4 NAESB Nomination  
11 windows). Consequently, in this circumstance, there would appear to be a gap between  
12 Unions services to Parkway, and the Enbridge city gate, where customers would not have  
13 access to the firm all day service and the associated enhanced nominations on TCPL. At  
14 this time, the only plant that could utilize the FT-SN service would be Sithe as it will be  
15 served by a dedicated lateral. It is unclear to Union why FT-SN is designed in a manner  
16 which would preclude access by generators embedded within the LDC and, in Union's  
17 view, this feature needs to be addressed to ensure alignment across all systems in order to  
18 provide service flexibility to all Power Customers.

19  
20 **Summary**

21 Union has designed the F24-T service to be available to all market participants and to be  
22 complementary to other services and service providers. The service is not contingent on separate  
23 metering, or separate "Delivery Area's" and to do so would create service exclusion and

1 accessibility issues. Union's view is that either a modified FT-SN or a new TCPL service is  
2 required that would allow all customers access to a firm all day service with an increased number  
3 of nomination windows. This is necessary to ensure that all Power Customers have access to a  
4 connecting service between Union Parkway and the Enbridge City Gate.

5

6 **3. APPrO CONSENSUS PROPOSAL**

7 In its evidence, APPrO presents a Consensus Proposal that includes 11 proposals for change.

8 For many of the proposals made by APPrO, Union's existing or proposed services address the  
9 APPrO requirements. Union has specifically chosen to address five of these proposals. These are  
10 proposals that challenge Union's adherence to postage stamp rate making and/or will have  
11 negative impacts on existing customers, where negative impact is defined as either additional  
12 financial burden or reduced system capability and reliability

13

14 Notably, APPrO has recommended that Union Gas:

- 15 i) Eliminate the Obligated DCQ for all new customers and phase out the Obligated  
16 DCQ for existing customers as early as possible (Proposal #8).
- 17 ii) Offer the option for "Firm-all-day" services to all Union's customers (Proposal #7).
- 18 iii) Give customers the ability to submit nominations each hour, prior to and during the  
19 applicable gas day (Proposal #4).
- 20 iv) Negotiate firm services based on the special characteristics of the service or  
21 customer's potential for bypass. (Proposal #1 and Proposal #2)

22

23

1    **i)    Proposal to Eliminate the Obligated DCQ**

2        History of Obligated DCQ on Union's System

3        Union Gas' physical ability to meet its winter peak day obligations has always been  
4        provided through a combination of physical output on the Dawn-Parkway transmission  
5        system and gas arriving at Parkway.  In the EB-2005-0550 pre-filed evidence Section 4,  
6        Schedule 2, Union filed its 2006 Winter Design Day Requirement.  In this schedule, the  
7        total Dawn-Parkway System capacity is reported as 5,959,062 GJ/day.  Of this capacity,  
8        645,793 GJ/d of capacity is provided through obligated deliveries at Parkway.  As such,  
9        over 10% of winter peak day requirements are being met through obligated deliveries at  
10       Parkway.

11  
12       Prior to Direct Purchase, Union contracted for firm transportation from TCPL with firm gas  
13       arriving daily at Parkway.  These firm gas deliveries contributed to Union's ability to meet  
14       winter peak day demands and avoided the requirement to construct pipeline and  
15       compression assets.

16  
17       Since 1986, when Direct Purchase was introduced in Ontario, customers who have elected  
18       to source their own gas, have been allocated the transportation capacity and the associated  
19       obligated delivery point that had underpinned their gas supply when they were still part of  
20       the system customer service.

21  
22       The obligated level of deliveries at Parkway for winter 2006/2007 is just over 645,000  
23       GJ/Day, obligated 365 days of the year.

1 Impact of Removing Delivery Obligations

2 Direct purchase deliveries obligated at a fixed delivery point, and particularly at Parkway,  
3 provide a system benefit in the form of avoided storage and transmission facilities costs. If  
4 the existing contractual requirement to obligate deliveries were removed, it would be  
5 necessary to replace that obligation with incremental physical storage and transmission  
6 facilities. These costs would be allocated to all customers consistent with Board approved  
7 cost allocation methodologies.

8  
9 A similar proposal was discussed in the RP-1999-0017 proceeding at Exhibit B, Tab 1,  
10 page 25.

11 *“Eliminating the reliance of all East End deliveries at Parkway would result in the*  
12 *need for additional looping and compression on the Dawn-Trafalgar system as well as*  
13 *incremental compression at Dawn at a projected capital cost of \$258 million. It*  
14 *would also eliminate the distance credit that in-franchise customers currently receive.*  
15 *The combined impact of removing the distance credit and additional facilities would*  
16 *be an increase to delivery rates, excluding the impacts on fuel, of up to 27% under the*  
17 *existing cost allocation methodology.”*

18  
19 Prior Option offered by Union to Customers to Minimize Parkway Delivery Obligations

20 In 2000, Union gave all Direct Purchase customers the choice to deliver 20% of their  
21 Parkway commitment at Dawn. Union facilitated this arrangement by seeking Board  
22 approval that 150 mmcf of M12 Dawn-Parkway capacity be temporarily assigned from  
23 TCPL for a three year term to be used to provide 20% system-wide delivery point



1 flexibility. This assignment was arranged for an initial 3 year term expiring October 31,  
2 2003. The costs associated with the return of capacity from TCPL were approximately \$5  
3 million per year. These costs were allocated across all rate classes of customers based on  
4 their usage of the Dawn Trafalgar system.

5  
6 Based on the RP-1999-0017 Settlement Agreement, Union had agreed to consult annually  
7 with parties to determine whether there was consensus agreement for Union to seek an  
8 extension to the three year temporary assignment or to increase the level of Dawn-Trafalgar  
9 capacity to support a higher percentage of system-wide delivery point flexibility solution.

10 In the absence of a commitment from TCPL to extend the temporary assignment of  
11 capacity, Union was prepared to consider a permanent solution (i.e. to build facilities).

12  
13 In the RP-2001-0029 Customer Review Process, Union proposed to extend the delivery  
14 point flexibility if consensus was reached amongst rate payers. There was no consensus  
15 amongst parties to continue this flexibility beyond the initial three year term.

16  
17 Union has since worked with individual customers with obligated deliveries at Parkway to  
18 enable them to source their gas at Dawn. These customers have contracted for M12  
19 capacity equal to the level of their obligated DCQ. This option allows customers to source  
20 their gas at Dawn and transport it to Parkway to meet their daily delivery obligation.

1        Conclusion

2        Eliminating all delivery obligations, particularly at Parkway, will significantly increase the  
3        rates charged to all customers. This would also result in a very significant impact on the  
4        terms and conditions of all existing contracts and on the operation of Union's transmission  
5        system.

6

7        **ii) Offer the option for "Firm-all-day" services to all Union's customers (Proposal #7)**

8        In APPRO's Proposal #7, it is suggested that all customers (in-franchise and ex-franchise)  
9        should have the reservation of their firm capacity all day.

10

11        To begin with, Unions' in-franchise firm transportation services (T1 and U7) already  
12        provide the firm capacity all day feature.

13

14        Union currently schedules its entire system on the day ahead timely window. Firm  
15        nominated ex-franchise services are only firm on this first window. Once Union knows the  
16        nominated volume of all these ex-franchise firm services it will then schedule, up to the full  
17        pipeline capacity, any nominated interruptible (IT) ex-franchise services. Once these IT  
18        services are confirmed, they are considered firm for the remainder of the day and will not  
19        get "bumped" or curtailed if additional firm volumes are nominated at a subsequent  
20        NAESB window.

21

22        Firm ex-franchise services are, therefore, firm on the first window only. This methodology  
23        is consistent with, and aligns with, how TCPL schedules its system.

1 In Union's view it is unnecessary and inappropriate to change this methodology. The  
2 impact of such a change would include the increased interruption of customers and same  
3 day bumping of interruptible services. Interruptible services would lose value in the  
4 marketplace, would negatively impact Union's ability to attract interruptible customers and  
5 would have a negative impact on secondary market transactions. This would reduce the  
6 level of transactional transportation revenues, and ultimately would reduce the liquidity at  
7 Dawn.

8  
9 Union Gas and TransCanada are aligned on this position. TCPL confirmed that this change  
10 is not something that they were likely to implement. (Technical Conference Transcript,  
11 5/16/06, pg. 163, lines 11-24).

12  
13 **iii) Give customers the ability to submit nominations each hour, prior to and during the**  
14 **applicable gas day (Proposal #4)**

15 To the best of Union's knowledge, there is no jurisdiction in North American that is  
16 offering 24 nomination windows to all customers for all services. Further, extending the  
17 additional nomination windows to all customers and for all services would effectively result  
18 in all services being "firm all day." As such, this proposal is linked to APPrO Proposal #7  
19 which is addressed in (ii) above.

20  
21 Union believes that its proposal to offer six additional intra-day nomination windows  
22 (beyond the four NAESB windows) for the four firm all-day ex-franchise services (F24-T,  
23 F24-S, UPBS and DPBS) is a North American industry leading proposal. Further, as noted

1 earlier in this evidence, the design and structure of the DPBS allows for additional  
2 nomination flexibility which aligns with TCPL's FT-SN service proposal.

3  
4 In its submission, APPrO quotes a number of US pipelines offering nomination service  
5 beyond the NAESB windows and implies that these offerings are more flexible as  
6 compared to Union's proposals. (APPrO Prefiled Evidence, pg 36 – 37)

7  
8 Union reviewed the tariffs reference by APPrO and spoke directly with Vector and Texas  
9 Eastern. Union's understanding of the flexibility of these services is much different than  
10 outlined by APPrO.

11  
12 Please see Appendix A for further information related to the services APPrO has referenced  
13 as examples of services which offer more flexibility than those proposed by Union.

14  
15 APPrO Nomination Examples

16 APPrO evidence indicates that the 10 windows proposed by Union Gas do not meet Power  
17 Customers' intra-day needs. (APPrO Prefiled Evidence, pg 58)

18  
19 Union has reviewed the examples provided under Exhibit B in the APPrO proposal, and  
20 when Union applies the Nomination Windows as proposed by Union, the Power Customer  
21 would incur no significant imbalance penalties whether located in the Union or Enbridge  
22 franchise. If the Power Customer is an in-franchise T1 customer any imbalance would be  
23 allocated to the Power Customer's storage account. If the Power Customer is an ex-

1 franchise customer the imbalance will reside in Enbridge's Rate 125 balancing account.

2 In Union's view the ability for the generator to avoid or minimize balancing costs on their  
3 Enbridge Rate 125 contract is to use the morning windows to nominate the morning ramp  
4 up.

5  
6 Union has revisited these examples in Appendix B in an effort to try and clarify the  
7 flexibility being provided by the 10 Nomination Windows.

8  
9 Union is open to considering the need for additional nomination windows in respect of the  
10 firm all day services proposed by Union if clearly supported by an operational need.

11 However, Union is concerned with the proposal of moving to 24 nomination windows as a  
12 fallback given that a consensus on specific additional nomination windows could not be  
13 reached by APPrO members.

14  
15 **iv) Negotiate firm services based on the special characteristics of the service or**  
16 **customer's potential for bypass. (i.e. incremental tolling)**

17 Under APPrO's Proposal #1 it is suggested that utilities should offer transmission-level  
18 services that exclude distribution costs. As part of this proposal APPrO requires that  
19 distribution services be offered on an unbundled basis. Under APPrO Proposal #2, it is  
20 suggested that utilities should be able to negotiate rates for firm services to compete against  
21 customer bypass opportunities.

22  
23 Union does offer a variety of services for Power Customers ranging from the fully bundled

1 M7 service, to the semi-unbundled T1 service to the fully unbundled U7 service. In both  
2 the T1 and U7 services, customers can choose which parts of the service they require. For  
3 example, a customer does not have to contract for storage under either service.

4  
5 Union has also responded to the Board directive in the RP-2005-0022/EB-2005-0411  
6 proceeding with a proposal to modify the T-1 tariff.

7  
8 In Union's 2007 Cost of Service proceeding (EB-2005-0520) Union has proposed that  
9 customers connected to and served directly from a 3<sup>rd</sup> party pipeline (TCPL or Vector for  
10 example) would not be required to pay fuel under the T-1 tariff. Further, as part of this  
11 proceeding, Union is proposing to expand the existing 2 block T1 rate structure to a 4 block  
12 structure. The top block, which would apply to large customers only (including generators)  
13 has very little distribution related costs included in the rate. As such, in Union's view, the  
14 proposal does attempt to address the APPrO Proposal #1 which seeks a transmission level  
15 service which excludes or limits distribution costs and is consistent with the principle of  
16 postage stamp rate making.

17  
18 The T1 tariff is based on postage stamp rate making principles. The Board continues to  
19 support the principles of postage stamp rate making as confirmed most recently in the RP-  
20 2005-0022/EB-2005-0411 Decision where the Board stated that it; "...continues to support  
21 *the principle of postage stamp rates,*"

22  
23 Union has been able to design the 4 block structure of the proposed T1 tariff to partially

1 meet APPrO's stated objective, while still maintaining the principle of postage stamp rate  
2 making.

3  
4 In Union's view, APPrO Proposal #2 is not consistent with postage stamp rate making.  
5 While Union certainly understands the APPrO proposal for LDC's to have negotiating  
6 flexibility, it is not apparent how this can be accomplished while still adhering to the  
7 Board's view which continues to support postage stamp rates. Under the APPrO proposal,  
8 a customer located 100m from the transmission line would have a different rate than the  
9 customer located 1000m from the transmission line. Union is unable to consider such an  
10 approach without further guidance and direction from the Board.

11  
12 Union has responded to the Board's directives and made two proposals to enhance the T1  
13 tariff. In both cases, the changes, in Union's view, make the T1 tariff more robust while  
14 remaining consistent with postage stamp rate making.

15

16

**In - Franchise Example**

	Hour Ending	Day	Expected Consumption	Gas Supply Scheduled	Actual Consumption	Imbalance
Timely Nom	13:00	Tues				
	14:00	Tues				
	15:00	Tues				
	16:00	Tues				
	17:00	Tues				
	18:00	Tues				
Evening Nom	19:00	Tues				
	20:00	Tues				
	21:00	Tues				
	22:00	Tues				
	23:00	Tues				
	0:00	Tues				
	1:00	Wed				
	2:00	Wed				
	3:00	Wed				
	4:00	Wed				
	5:00	Wed				
	6:00	Wed				
	7:00	Wed				
	8:00	Wed				
9:00	Wed					
Intra-Day 1	10:00	Wed				
	11:00	Wed	4,000	2,667	4,000	
	12:00	Wed	4,000	2,667	4,000	
	13:00	Wed	4,000	2,667	4,000	
	14:00	Wed	4,000	2,667	4,000	
	15:00	Wed	4,000	2,667	4,000	
Intra-Day 2	16:00	Wed	4,000	2,667	4,000	
	17:00	Wed	4,000	2,667	4,000	
	18:00	Wed	4,000	2,667	4,000	
	19:00	Wed	4,000	2,667	4,000	
	20:00	Wed	4,000	2,667	4,000	
	21:00	Wed	4,000	2,667	4,000	
	22:00	Wed	4,000	2,667	4,000	
	23:00	Wed	4,000	2,667	4,000	
	0:00	Wed		2,667		
	1:00	Thurs		2,667		
2:00	Thurs		2,667			
3:00	Thurs		2,667			
4:00	Thurs		2,667			
5:00	Thurs		2,667			
6:00	Thurs		2,667			
7:00	Thurs		2,667			
8:00	Thurs	4,000	2,667	0		
9:00	Thurs	4,000	2,667	0		
10:00	Thurs	4,000	2,667	0		
			64,000	64,000	52,000	12,000

**Assumption**  
**The Generator is located in the Union Franchise area and has contracted for T1**

Generator found out at 4:15 that they were not going to ramp up at 07:00.

The generator would have to take no actions. The 12,000 imbalance would be allocated to their storage account.



**Ex-Franchise Example**

	Hour Ending	Day	Expected Consumption	Gas Supply Scheduled	Actual Consumption	Imbalance
Timely Nom	13:00	Tues				
	14:00	Tues				
	15:00	Tues				
	16:00	Tues				
	17:00	Tues				
Evening Nom	18:00	Tues				
	19:00	Tues				
	20:00	Tues				
	21:00	Tues				
	22:00	Tues				
	23:00	Tues				
	0:00	Tues				
	1:00	Wed				
	2:00	Wed				
	3:00	Wed				
	4:00	Wed				
	5:00	Wed				
	6:00	Wed				
7:00	Wed					
Intra-Day 1	8:00	Wed				
	9:00	Wed				
	10:00	Wed				
	11:00	Wed	4,000	2,167	4,000	
	12:00	Wed	4,000	2,167	4,000	
	13:00	Wed	4,000	2,167	4,000	
	14:00	Wed	4,000	2,167	4,000	
	15:00	Wed	4,000	2,167	4,000	
	16:00	Wed	4,000	2,167	4,000	
	17:00	Wed	4,000	2,167	4,000	
Intra-Day2	18:00	Wed	4,000	2,167	4,000	
	19:00	Wed	4,000	2,167	4,000	
	20:00	Wed	4,000	2,167	4,000	
	21:00	Wed	4,000	2,167	4,000	
	22:00	Wed	4,000	2,167	4,000	
	23:00	Wed	4,000	2,167	4,000	
	0:00	Wed		2,167		
	1:00	Thurs		2,167		
	2:00	Thurs		2,167		
	3:00	Thurs		2,167		
<b>Nomination Window 4:00 for 6:00</b>						
	4:00	Thurs		2,167		
	5:00	Thurs		2,167		
<b>Nomination Window 6:00 for 8:00</b>						
	6:00	Thurs		2,167		
	7:00	Thurs		4,800		
	8:00	Thurs	4,000	4,800		
	9:00	Thurs	4,000			
	10:00	Thurs	4,000			
			<b>64,000</b>	<b>52,933</b>	<b>52,000</b>	<b>933</b>

**Assumption**  
 The Generator is located in the Enbridge Franchise area and has contracted for F24-T and UPBS with Union. CD is 94,000 (peak hr x 24)

Generator found out at 4:15 that they were not going to ramp up at 07:00

The best option for the generator is Option 2 below, which is to use the morning nomination windows for the ramp up not the timely window.

Under this scenario the Generator would have nominated 52,000 on the timely window and waited until the 4:00 effective 6:00 intra-day window to nominate the ramp up. At 4:15 when it was known that the plant would not run the next intra-day window is 06:00 effective 08:00. The generator could lower the nomination to match the amount of gas that would have deemed to have flowed which would be 53,667.

This option would have minimized the out of balance to 933.

Nomination      Actual Consumption      Imbalance

<b>Option 1 - Reduce Nomination at first available window</b>				
Original Timely Nom			64,000	
Nomination Window 6:00 for 8:00	Lowest Nom Available Due to Elapse Pro-Rata	58,674	52,000	6,674

<b>Option 2 - Change Nom so that ramp up is named in the morning</b>				
Original Timely Nom			52,000	
Nomination Window 4:00 for 6:00	Highest Nomination Possible at 04:00	62,533		
Nomination Window 6:00 for 8:00	Lowest Nom Available Due to Elapse Pro-Rata	52,993	52,000	993



1 In other words, Texas Eastern is not going to bump previously scheduled services (both firm and  
2 interruptible) for any nominations received outside the NAESB windows.

3

4 While Texas Eastern is flexible and works with customers to schedule service requests whenever  
5 possible, they have agreed to schedule nominations outside the NAESB windows on a “best  
6 efforts basis.”

7

8 **Panhandle Eastern**

9 APPrO referenced Panhandle Eastern as a pipeline that provides nomination flexibility in  
10 waiving nomination deadlines when operating conditions permit (APPrO Prefiled Evidence,  
11 page 36). There is no firm commitment to schedule nominations outside the NAESB windows.

12

13 **Vector**

14 APPrO cites Vector as an example of a pipeline offering a firm hourly nomination service  
15 embedded in its Hourly Firm Transportation Service (FT-H). Within the FT-H tariff, the  
16 availability and service characteristics are further defined. The service will be made available  
17 provided that:

18

19 *“Section 1.6 - Shipper receives Gas from Transporter at a physical Delivery point, which is*  
20 *directly connected to Transporter’s system, equipped with a flow control device and*  
21 *electronic gas measurement equipment capable of verifying changes in gas flow on a real-*  
22 *time basis.”*

23

24 *“Section 1.7 - Transporter has not entered into a FT-H Hourly Firm Transportation*  
25 *Agreement with any other shipper at the Delivery Point.”*

26

1 Section 1.6 highlights, as with TransCanada’s FT-SN, the Vector FT-H service and the  
2 corresponding MBA (balancing) service, have been designed for customers directly connected to  
3 the transmission system. Section 1.7 states that only one customer can be served through one  
4 delivery point. Therefore, if the Dawn Hub is the delivery point, the FT-H tariff would suggest  
5 that only one customer can access the service.

6  
7 APPrO also cites the FT-H and MBA service as examples of services that could be used to  
8 balance hourly receipts and deliveries between Michigan storage and the Dawn Hub.

9  
10 Within the FT-H tariff, Section 2.6

11 *“Shipper shall elect to receive the hourly Delivery Quantity of its Contracted Capacity*  
12 *during a specified hourly period within the Day as set forth in the executed Firm*  
13 *Transportation Agreement. ...Shipper shall provide and take the gas uniformly during the*  
14 *selected Hourly Delivery Period”*  
15

16 Section 2.7

17 *“...Shipper may nominate to Transporter...at least one (1) hour prior to actual gas flow*  
18 *at the Point of Delivery.”*  
19

20 Section 2.8

21 *“To the extent Transporter provides service hereunder by displacement of gas received*  
22 *downstream of the Delivery Point(s), Transporters obligation shall be limited to the*  
23 *displacement capability of Transporter’s system during the specified hourly period.”*  
24

25 In summary, the hours of flow are a firm contract parameter with associated uniform hourly  
26 deliveries. The one hour nomination timeline is a provision of the service to enable one time  
27 start up or shut down. The service is not intended for hourly nominations throughout the day. If

1 Vector is using displacement capacity on a gas day to provide the service, Vector can limit the  
2 shipper's Hourly Delivery Quantity to displacement capacity.

3

4 **ANR**

5 As a final example of flexible nominations, APPrO cites ANR Pipeline's FTS-3 Firm  
6 Transportation service with its optional Short Notice Start-Up and Shut-Down service. Under  
7 this service, subject to confirmation of gas supply, the customer may start up with two hours  
8 notice to ANR and is required to provide a nomination consistent with ANR's GT&C. ANR's  
9 GT&C offers an additional 3 nomination windows outside the NAESB windows as compared to  
10 Union's offering of 6 additional nomination windows outside the NAESB windows.

11

12 **NAESB**

13 Under Proposal #7 APPrO sites that the NAESB Gas-Electric Interdependency Committee  
14 recently considered the possibility of adding an additional nomination cycle with bumping rights;

15 *"to provide more flexibility to shippers, including power generators, with firm*  
16 *transportation rights such that they can nominate for natural gas supporting their market*  
17 *clearing times."*

18

19 Although the NAESB committee was unable to develop a specific proposal, the committee's  
20 report to the Federal Energy Regularity Commission noted that;

21 *"technological advances make additional nomination cycles and changing the 'no bump'*  
22 *cycle to later in the day potentially feasible solutions"*<sup>1</sup>

23

---

<sup>1</sup> NAESB Final Report on the Efforts of the Gas-Electric Interdependency Committee, FERC Docket No RM05-28, February 24, 2006

1 Though the NAESB Gas-Electric Interdependency Committee was unable to come to a  
2 consensus on altering nomination windows to address this concern Union has addressed this  
3 same issue by allowing shippers to contract for firm all day transportation (F24-T) and storage  
4 (F24-S) services. To Union's knowledge the NAESB Gas-Electric Interdependency Committee  
5 was not working on any other potential nomination window changes.

6

7 **Summary**

8 Both Texas Eastern and Panhandle Eastern offer to schedule nominations outside the NAESB  
9 windows on a "best efforts" or interruptible basis. These service proposals align with Union's  
10 long standing practice of offering flexibility beyond the NAESB windows.

11

12 Contract language supports this long-standing flexibility. Schedule B of Union's existing Rate  
13 M12 GT&C, under Nominations sec a) ii) "*operation conditions permit, a change in Shipper's*  
14 *Nomination may be accepted after 1230 hours in the Eastern time zone.*" The same language  
15 appears in Union's existing Rate C1 GT&C, Nomination sec a) iii.

16

17 Many of the US experiences quoted are for Power Generators directly connected to the pipeline.  
18 This would be equivalent to Union's in-franchise customers. Union's in-franchise service is  
19 already a no-notice service with storage taking any swings. Union is unclear as to how the US  
20 experience is superior to this.

21

22 In conversations with the Power Generators it was Union's understanding that the need of the  
23 Power Generator was for firm access to their service on nomination windows, not "best efforts,

1 no matter how good that may be.” Union has presented a proposal with 6 additional firm intra-  
2 day windows that far exceeds the flexibility of any North America storage or transmission  
3 operator researched by Union or cited by APPrO.  
4

1                                   **PREFILED EVIDENCE OF**  
2                                   **UNION GAS LIMITED**

3                                   **NATURAL GAS ELECTRICITY INTERFACE REVIEW**  
4                                   **REPLY EVIDENCE - ISSUE II – STORAGE REGULATION**

5  
6                   **INTRODUCTION**

7           This reply evidence is intended to provide clarification to the statements and questions that were  
8           contained within the evidence submitted by participants in the Natural Gas Forum or that were  
9           highlighted during the Technical Conference. The key issues that will be addressed in this  
10          evidence are:

- 11                   A) Connecting Michigan Storage to Dawn – a case study  
12                   B) Description of the Alternatives to Union Storage  
13                   C) Comparison of Michigan Storage to Union Storage  
14                   D) The Process of Selling Union Storage  
15                   E) The Historical Value of Storage

16  
17          The impact and importance of the secondary markets in the natural gas industry and specifically,  
18          the impact of secondary trading at locations in and around Dawn is also discussed.

19  
20          A)       **CONNECTING MICHIGAN STORAGE TO DAWN**

21                  i)       **Introduction**

22          In the evidence submitted by Ms. McConihe (Economic Regulation of Natural Gas Storage in  
23          Ontario, Study Prepared for the Ontario Energy Board, dated May 1, 2006) and Mr. Stauff

May 26, 2006



1 (Natural Gas Electricity Interface Review, EB-2005-0551, Direct Evidence of Mark P. Stauff,  
2 dated May 1, 2006, supported by the Industrial Gas Users Association, the Association of Major  
3 Power Consumers in Ontario, Consumers Council of Canada, the Vulnerable Energy Consumers  
4 Coalition, the Schools Energy Coalition, the City of Kitchener, and the Canadian Manufacturers  
5 and Exporters Inc.), both authors indicated that there were limitations in both the storage  
6 available outside of Ontario, and the transportation available between those jurisdictions and  
7 Ontario. Due to the perceived limitations, both authors concluded that for Ontario gas  
8 consumers, the geographic market for Dawn storage was limited to Ontario. While there are  
9 many options available to contract for storage and facilitating transportation outside of Ontario,  
10 this section of reply evidence will focus only on opportunities in Michigan, and specifically  
11 illustrating how Washington 10 Storage and Vector Pipelines can work in tandem to provide a  
12 Dawn storage service. This is a case study of one pool and one path used to exemplify the fact  
13 that alternatives to Dawn storage service have and do exist.

14

15 **ii) Description of Transportation and Storage Service Providers**

16 Washington 10 Storage Corporation is a 65 Bcf storage facility located just west of Detroit,  
17 Michigan operated by DTE Gas Storage Company. This storage facility commenced operations  
18 in 1999 and has interconnections with both Vector Pipelines and Michigan Consolidated Gas  
19 Company (“MichCon”). Washington 10 is regulated by both the Michigan Public Service  
20 Commission (“MPSC”) and the Federal Energy Regulatory Commission (“FERC”). The MPSC  
21 regulates the provision of intra-state storage services, while FERC regulates the provision of  
22 inter-state storage services.

23

1 Vector Pipelines is a nominal 1,000 MMcfd (1 Bcfd) pipeline commencing near Chicago, Illinois  
2 and terminating at Dawn, Ontario. This pipeline commenced operations in 2000, has receipt  
3 points with Northern Border, Guardian and Alliance pipelines and terminates at Dawn. Along its  
4 length, it also has ties into the storage operations of Washington 10 and Bluewater Gas Storage,  
5 the local distribution companies of Northern Indiana Public Service Company (“NIPSCO”),  
6 MichCon and Consumers Energy, and the interstate pipeline of ANR. In addition, two power  
7 plants are directly connected to the Vector Pipeline: Crete Energy Ventures and Kinder Morgan -  
8 Jackson. The US portion of Vector is regulated by FERC and the Canadian portion of Vector is  
9 regulated by the National Energy Board.

10

11 **iii) Recent Transportation Activities**

12 a) *Increase in Presidential Permit – November 22, 2003*

13 Vector Pipelines has a nominal capacity across its length of 1,000 MMcfd. When put  
14 into service, Vector requested and received a Presidential Permit to export up to 1,000  
15 MMcfd. On November 22, 2003, Vector applied for and received permission to increase  
16 its Presidential Permit to 1,330 MMcfd. Vector did not, at this time, increase its physical  
17 ability to flow from Chicago to Dawn. Instead, this increase in capacity reflects Vector’s  
18 capability to flow gas from Michigan storage to Dawn under certain conditions.

19

20 b) *Increase in Transportation Capacity*

21

22 On page 50 of Mr. Stauff’s evidence, he indicates that;

23

24 “... the existing transportation infrastructure has not been designed and built for the  
25 purpose of transporting gas into and out of U.S. storage facilities from, or for ultimate  
26 use in, Ontario, or for that matter anywhere in Canada. In particular, the pipeline

1 *infrastructure that delivers gas to Ontario, i.e. primarily the TransCanada and Vector*  
2 *systems, has been designed and installed for the primary purpose of delivering required*  
3 *annual quantities of gas to Ontario, not quantities of gas storage in U.S. storage facilities*  
4 *and transported to Ontario to meet peak demand during the winter.”*  
5

6 In April 2005, Vector initiated an open season to support a facility expansion (Appendix  
7 A). In contrast to Mr. Stauff’s statement above, in the press release announcing the open  
8 season, Vector indicates:

9 *“Recent favourable changes in market conditions – including increasing demand*  
10 *downstream of Dawn, the ongoing conversion coal-fired power plants to natural gas in*  
11 *Ontario and continued East Coast interest in natural gas sourced from the Midwest –*  
12 *clearly support the need for the diversified supply that this expansion will offer.*

13  
14 *We believe that bringing this additional capacity on line by November 2007 will offer an*  
15 *economical direct route for delivery of natural gas sourced from the Chicago Hub to*  
16 *storage and markets in the Midwest, southwest Ontario and to the East Coast via*  
17 *interconnecting pipelines....”*  
18

19 Vector has applied for and expects to receive FERC approval during the fall of 2006 for  
20 this expansion and anticipates an in-service date of November 1, 2007.

21  
22 Of particular interest is “Table 1 – Precedent Agreements” found on pages 8 & 9 of  
23 Vector’s Expansion Application to FERC dated November 30, 2005 (found in Appendix  
24 B). In this table, Vector differentiates the type of services they sold during their recent  
25 expansion open season. The first type is the traditional Chicago to Dawn service (called  
26 “Annual Capacity”) of which Vector contracted an additional 215,000 Dth/d of service.  
27 Also listed is the 235,200 Dth/d of capacity sold as “Winter East End Capacity”, and the  
28 25,000 Dth/d of capacity sold as “Winter Backhaul Capacity”.

29  
30 For Winter East End Capacity, the following parties and quantities are noted in Table 1:

**Table 1**  
**Vector Pipelines – Winter East End Capacity**  
**Commencing November 1, 2007**

Party	Quantity (Dth/d)
Connecticut Natural Gas Corporation	9,700
Southern Connecticut Natural Gas Corporation	18,300
BP Canada Energy Marketing	100,000
Yankee Gas Service Company	37,200
DTE Energy Trading, Inc.	70,000
Total	235,200

Vector describes this service as being a firm Washington 10 to Dawn service. Clearly, Vector is building incremental capacity between Washington 10 and Dawn, contrary to the evidence of Mr. Stauff. If one were to assume these parties have a traditional 1.2% deliverability service at Washington 10, the 235,200 Dth/d of deliveries from Washington 10 to Dawn would correspond to approximately 19.6 Bcf of Washington 10 storage space connected directly to Dawn through this expansion alone. In addition, using Vector's index of customers (Appendix C), it is evident that Vector is currently providing 155,000 Dth/d of Winter East End Capacity with firm service from Washington 10 to Dawn. Assuming that these parties have the same traditional 1.2% deliverability service at Washington 10 as discussed above, 12.9 Bcf of Washington 10 storage space is already connected to Dawn.

Of the parties listed in Table 1, Connecticut Natural, Southern Connecticut and Yankee are all part of the Alberta North East ("ANE") group that also contracted on Union for Dawn to Parkway M12 Transportation service for both the 2006 and 2007 expansions

1 (the list of 2006 and 2007 M12 Transportation expansion shippers are attached as  
2 Appendix D). All are LDC's in the US North East. As an alternative to contracting for  
3 Ontario storage, they found competitive storage services in Michigan, connecting to  
4 Dawn through Vector as outlined above.

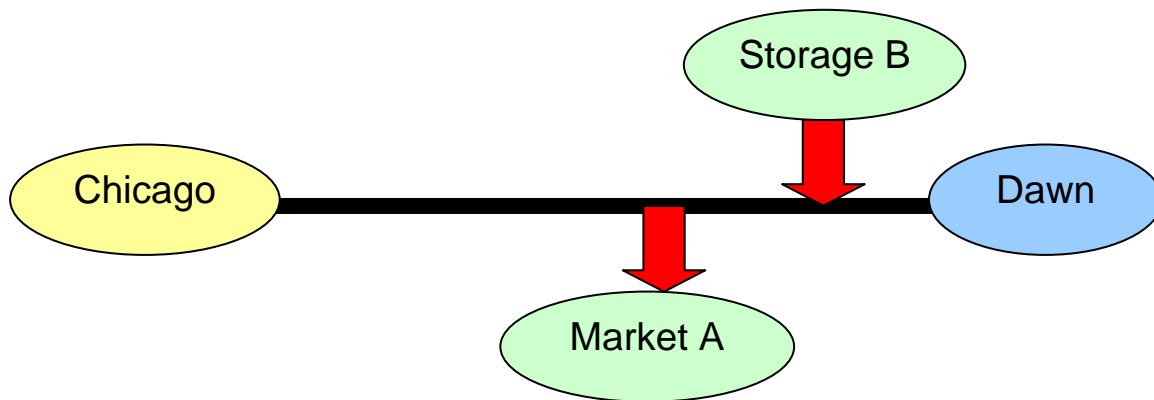
5  
6 In Appendix B, pages 8 & 9, Table 1, BP Canada and DTE Energy Trading are also listed  
7 as contracting for additional Winter East End Capacity as a result of Vector's open  
8 season. BP Canada and DTE Energy Trading are both marketers that have established or  
9 expanded their capacity linking Washington 10 to Dawn. BP Canada has also purchased  
10 Dawn to Parkway M12 Transportation as part of the 2006 Open Season. Given that both  
11 contracting parties are marketers; their capacity will be re-sold in the secondary market.

12  
13 Peoples Energy Wholesale Marketing is also listed in Table 1 of Appendix B. This  
14 company is an affiliate of People's Energy which is the LDC in the Chicago area.  
15 People's Energy has contracted with Vector for a firm backhaul contract from Dawn to  
16 Chicago. They will have the ability to withdraw gas from storage at Dawn or purchase  
17 gas supplies at Dawn and transport that gas to Chicago. People's Energy will also be  
18 able to make storage withdrawals from storage facilities along the Vector pipeline and  
19 transport those withdrawals to Chicago.

20  
21 It is also important to note the importance of the Annual Capacity and how it can impact  
22 Dawn. On US inter-state pipelines, capacity can be segmented along the path. If a  
23 Shipper contracts for capacity from Chicago to Dawn on Vector, the Shipper can

1 concurrently use multiple segments along the pipelines, provided they do not overlap. As  
2 illustrated in Figure 1, the Shipper may use the segment Chicago to Market A and also  
3 the Segment Storage B to Dawn, while not using the middle segment between Market A  
4 to Storage B. They would still pay the full forward haul rate, but have flexibility in how  
5 they use the capacity.

6 **Figure 1**  
7 **Example of Segmenting Capacity**  
8



9  
10  
11 In the winter period, some long haul shippers deliver their gas supplies into the Michigan  
12 markets to meet winter demands. This provides a segmentation opportunity for the  
13 unutilized portion of the Vector pipeline. Specifically, unutilized capacity is available  
14 between Washington 10 and Dawn during the winter months when LDC (MichCon and  
15 Consumer's Energy) customer consumption is increasing upstream of Washington 10.  
16 This results in firm segmented transportation between Washington 10 and Dawn and/or  
17 highly reliable interruptible transportation service between Washington 10 and Dawn for  
18 delivery of Washington 10 withdrawals to Dawn. These services are readily available on  
19 the secondary market and can be provided by shippers on the Vector system.

1       c) *Increase in Presidential Permit – November 30, 2005*

2           In conjunction with the FERC facilities application, Vector has also applied for a further  
3           amendment to their Presidential Permit which will allow Vector to establish its peak flow  
4           capability for cross-border transportation to Dawn as 2,300 MMcf/d (Appendix E), which  
5           is a 1.0 Bcf increase to its existing capacity. In Vector's application for an increase in the  
6           Presidential Permit, Vector states that the increase is necessary "in order to maximize the  
7           ability of Shippers to move their gas between the United States and Canada should  
8           operational and market conditions support the need," (pages 4 & 5). The increased  
9           capacity of 1.3 Bcf from the rate flows of 1.0 Bcf is possible when lower operating  
10          pressures at Dawn allow greater quantities of physical gas to move from Michigan  
11          storage to Dawn. Using the requested Presidential Permit maximum export quantity of  
12          2,300 MMcfd (approximately 2,325,000 Dth) and deducting the seasonal winter  
13          deliverability (which is the total contracted capacity into Dawn) of 1,533,100 Dth (page  
14          11 of Appendix B) Vector has the ability to sell supplemental services of up to 791,900  
15          Dth/d under certain operating and market conditions.

16  
17          Further, it is important to note that Vector's recent expansion includes the addition of two  
18          large compression units (this expansion does not involve pipeline looping). The first  
19          compressor is located at Joliet, Illinois at the commencement of Vector's pipeline  
20          facilities. The second compressor is located at Romeo, Michigan, near the Washington  
21          10 storage facility. This location is very strategic to both Vector and Washington 10 in  
22          that it allows Vector to sell a Washington 10 to Dawn service (the incremental capacity  
23          of 235,200 Dth/d as noted above). Clearly, the current expansion resulted in the sale of

1 an additional 235,200 Dth/d of firm capacity linking Washington 10 and Dawn, and with  
2 the approval of the increase of the Presidential Permit, Vector will have the ability to  
3 further transport an additional 791,900 Dth/d under certain operating and market  
4 conditions.

5  
6 In addition, much of capacity on Vector serves markets on the western end of the Vector  
7 service. Pipeline flow data indicates that Vector has been flowing near capacity where it  
8 crosses the Illinois/Indiana state border, but substantially below capacity on the eastern  
9 end of the pipeline closer to Ontario. The current and proposed future pipeline  
10 expansions will both relieve any constraints on the eastern end of the Vector pipeline, and  
11 increase the amount of available capacity into Ontario.

12  
13 In light of the above, Mr. Stauff's claim on page 50 of this report that

14 *"Vector's system, has been designed and installed for the primary purpose of*  
15 *delivering required annual quantities of gas to Ontario, not quantities of gas*  
16 *storage in U.S. storage facilities..."*

17  
18 is not supported by and is inconsistent with the facts. Vector is very much designed to  
19 deliver storage quantities from Washington 10 to Dawn, and is currently doing so. As  
20 well, Mr. Stauff's outlines on page 56 that

21 *"...[Vector's] expansion that will increase the mainline capacity from 1.0 Bcf to*  
22 *1.2 Bcf in 2007. It appears that the expansion is underpinned by long term*  
23 *contractual commitments, so that the system can be expected to remain fully*  
24 *subscribed..."*

25  
26 is also not supported by and is inconsistent with the facts. First, although the long haul  
27 capacity is increasing from 1.0 Bcf to 1.2 Bcf, Vector has contracted for an additional



1 235,000 Dth/d of capacity between Washington 10 and Dawn. Second, Vector will have  
2 the ability to flow an additional 791,900 Dth under certain operating conditions to  
3 provide an even greater connectivity between Michigan and Ontario. Finally, a  
4 significant portion of Vector shippers are marketers that can and do provide a number of  
5 valuable secondary market services.

6  
7 **iv) Recent Washington 10 Storage Expansions in Michigan**

8 Vector's expansion, in part, is supported by both Union's 2006 and 2007 Dawn to Parkway  
9 expansions and additional demands resulting from the expansion of Washington 10's storage  
10 facilities. Appendix F is a presentation by Mark Bering, Manager, Business Development to the  
11 LDC Forum in Chicago, September 2005 titled DTE Gas Storage Company. On Slide 8 of the  
12 presentation, DTE indicates that they have expanded the Washington 10 storage facility from one  
13 customer with 42.5 Bcf of contracts in 2004 to 22 customers and 65 Bcf of storage contracts by  
14 April 1, 2006. As a result, Washington 10 storage has increased the amount of storage capacity  
15 available to customers by 39 Bcf in a period of less than three years.

16  
17 The recent Washington 10 storage expansions, in part, were facilitated by storage open seasons.  
18 The latest Washington 10 storage open season closed June 5, 2005. In this offering, Washington  
19 10 was selling storage services with a start date of April 1, 2006 or April 1, 2007. In the open  
20 season documents (Appendix G), Washington 10 indicates that one of the key benefits of its  
21 storage facility is the ability to access both the Chicago and Dawn hubs through use of  
22 Washington 10's connection with Vector. It is also important to note that Washington 10 would  
23 consider requests for deliverability levels different than their two standard offerings. For

1 example, if a power customer needs higher deliverability, they could include the higher  
2 withdrawal requirements as part of their bid.

3

4 v) **Secondary Market Options Connecting Washington 10 and Dawn**

5 Secondary market options also exist to transport gas to Washington 10 from Chicago or Dawn  
6 for injections and between Washington 10 and Dawn for withdrawals. Shippers who hold  
7 storage capacity at Washington 10 can contract in the secondary market for either a gas exchange  
8 or for secondary transportation. Both services will facilitate injecting gas into and withdrawing  
9 gas out of storage and delivering the gas to downstream markets.

10

11 A case in point is Yankee Gas Services. Yankee Gas has contracted for capacity on Union's  
12 Dawn to Parkway expansion for M12 Transportation service commencing in both 2006 and  
13 2007. In addition, they have contracted for transportation on TCPL connecting Parkway to  
14 Waddington (export point into Iroquois Gas Transmission) commencing in both 2006 and 2007.

15 As discussed earlier, they have also contracted on Vector for both long haul capacity from  
16 Chicago to Dawn and short haul service from Washington 10 to Dawn starting in November,  
17 2007. Attached as Appendix H is an RFP issued by Yankee Gas on January 27, 2006. In the  
18 RFP, Yankee Gas was seeking the secondary market to provide an exchange service connecting  
19 Washington 10 to either Dawn (Case 1) or Waddington, NY (Case 2).

20

21 Because Yankee's Vector services do not start until November 1, 2007, they were asking the  
22 secondary market to provide a temporary bridge (April 1, 2006 to October 31, 2007) to allow  
23 Yankee to have full access to their Washington 10 storage. This secondary market agreement

1 will terminate upon commencement of the new Vector contracts. This type of transaction would  
2 not be reported in any publicly filed documents as it does not necessarily result in a capacity  
3 release. Yankee Gas did confirm that they have found a service provider, but for commercial  
4 reasons, they have not released any of the details related to this RFP.

5  
6 Secondary market activity may also take the form of gas supply and asset management  
7 agreements. Some contract holders may elect to assign their contractual rights to another party  
8 in order to reduce the need for daily management and optimization of the contracted assets. For  
9 example, Bay State Gas Company has recently conducted RFP's to contract for gas supply and  
10 management services of their Washington 10 storage contracts (Appendix I).

11  
12 In the case of Bay State (proposal #3), they were looking for a gas supplier and asset manager for  
13 their Washington 10 storage contract for the period of April 1, 2006 to October 31, 2006. Bay  
14 State does hold transportation from Chicago to Washington 10 or Dawn, as well as transportation  
15 from Washington 10 to Dawn with backhaul rights. By finding a gas supplier and asset manager,  
16 Bay State provides a marketer with a temporary opportunity to optimize assets and has the ability  
17 to share in any proceeds of the optimization. This type of activity is common and provides  
18 marketers the ability to rebundle assets and provide secondary market services. Again this type  
19 of secondary market activity involving Washington 10 and Vector is not reported. Bay State also  
20 confirmed that they were successful in finding an asset manager.

21  
22 In both of these examples, the asset manager will have the ability to utilize and optimize the  
23 storage and transportation assets to provide secondary market services.

1 This case study only looked at one pool and one pipeline – both expanding to respond to market  
2 needs. It is an example that clearly demonstrates how shippers have linked Washington 10 to  
3 Dawn and clearly shows some of the underlying options and flexibility of the robust secondary  
4 market around the Dawn Hub.

5

6 **B) DESCRIPTION OF THE ALTERNATIVES TO UNION STORAGE**

7 In Section 3.3 of Union's Exhibit C, Tab 1, Union lists six alternatives to Union storage. Those  
8 alternatives are:

- 9 1. Storage services from third party providers available at the Dawn hub
- 10 2. Storage services from other storage providers available at other locations within the  
11 market area (ie Michigan)
- 12 3. Winter supply and upstream pipeline capacity to move supply to Dawn
- 13 4. Winter Spot purchases at Dawn
- 14 5. Dawn delivered service (ie winter peaking services)
- 15 6. Financial options to hedge winter gas deliveries

16 During the technical conference, there were questions and perhaps some misunderstanding  
17 surrounding the description of the storage alternatives and what these services entailed. The  
18 purpose of this section of evidence is to provide a more detailed description of each of these  
19 options, and how each of the options could be used as substitutes for storage services.

20

21 **i) Storage Services from Third Party Service Providers at Dawn**

22 Most of the large wholesale natural gas marketing organizations in Canada are active at the  
23 Dawn Hub. For example, companies such as BP Canada, Nexen Marketing, Coral Energy

1 Canada, Encana, Husky Energy Marketing, Conoco Phillips, and Powerex, are all active at the  
2 Dawn Hub. Each of these marketing companies manage a “book of business” which includes a  
3 portfolio of assets that will facilitate transactions at the major trading locations (ie AECO,  
4 Chicago, Dawn, etc) and many of the smaller trading locations (ie Parkway, Union NDA,  
5 Niagara, Chippawa, etc.). This portfolio of assets may include storage contracts with various  
6 storage operators, transportation contracts with transporters across North America, and a series  
7 of purchase and sale agreements at trading locations across North America. Using this diverse  
8 collection of assets, marketing companies can offer a variety of services, including storage  
9 services to interested companies at different trading locations, including the Dawn Hub.

10

11 For example, if Marketer A has a storage contract at Dawn, Marketer A can sell a storage service  
12 to Customer B and facilitate the receipts from Customer B and the deliveries to Customer B  
13 using the injection and withdrawal parameters of the storage contract at Dawn.

14

15 However, it is not imperative that these marketing companies hold storage at the Dawn Hub in  
16 order to resell a Dawn storage service. Specifically, these marketing companies can use their  
17 asset portfolio to provide a synthetic or storage like service at Dawn. For example, if Marketer A  
18 has a storage contract in Michigan and Vector transportation capacity connecting Michigan  
19 storage and Dawn, Marketer A can continue to sell a storage service to Customer B at Dawn.  
20 Marketer A can facilitate the receipts from Customer B at Dawn with a backhaul transportation  
21 contract from Dawn to Michigan to inject gas into storage. For the delivery of the gas in  
22 Michigan storage to Customer B at Dawn, Marketer A can use a forward haul contract from  
23 Michigan storage to Dawn.

1 Marketers can provide storage services on either a firm or interruptible basis. Through the use  
2 of either a physical storage contract or through the use of their diverse portfolios of assets,  
3 marketers can provide the injection and withdrawal parameters that match the unique needs of  
4 each of their customers. Customers will compare the cost and commitment of a Dawn storage  
5 service from a third party provider or marketer to the cost and commitment required to contract  
6 for storage services directly from Union.

7

8 **ii) Storage Services from Other Storage Providers**

9 In the first option described above in Section i), third party service providers offered a packaged  
10 service including all of the services required to move gas commodities between Dawn and the  
11 ultimate storage location. In this second case, if a customer contracts for storage at a location  
12 other than Dawn, the customer will also need to arrange transportation between the storage  
13 operator and Dawn. This can be arranged either directly with a pipeline company (ie Vector,  
14 Great Lakes, ANR, etc. (dependent on location of the storage operator)), or it can be arranged  
15 with a marketer. Appendix H (Yankee Gas Services RFP) is a good example of how a customer  
16 may initially acquire transportation from a marketer or other third party provider to facilitate  
17 injections and withdrawals for ultimate delivery to Dawn. At a later date, the customer may  
18 arrange a direct pipeline service from the storage provider to Dawn (ie Vector transportation).  
19 Customers will compare the cost of a third party storage services along with the transportation or  
20 exchange cost to Dawn from an alternate storage operator to the cost and commitment required  
21 to contract for storage services directly from Union.

22

23

1 **iii) Winter Supply and Upstream Pipeline Capacity**

2 As an alternative to seasonal storage, customers may choose to contract for additional upstream  
3 pipeline capacity and winter gas supply and deliver that supply to Dawn in order to satisfy their  
4 winter consumption needs. Since the Dawn Hub is well connected to several major supply  
5 basins (Gulf, Western Canada Sedimentary Basin, and Rockies) and to several major trading  
6 locations (Chicago, AECO, etc.), customers have many choices associated with winter supply  
7 and upstream pipeline capacity.

8

9 On page 60 of Mr. Stauff's evidence, he states that

10 *“... the fact that Ontario's supply still comes from predominantly western Canada*  
11 *suggests that there is no economic advantage to using U.S. sourced supply, and in fact*  
12 *probably an economic disadvantage to doing so.”*  
13

14 Contrary to Mr. Stauff's view, purchasing gas supplies at a major liquid hub such as Chicago or  
15 Dawn does not put the customer at a disadvantage due to the large number of transactions and  
16 the number of parties trading at that location. The recognized liquidity at Dawn, supported by an  
17 active secondary market and numerous market participants was clearly a significant factor in the  
18 Ontario Power Authority's decision to choose Dawn as the pricing point for the CES Ontario  
19 power generation contracts. Also, purchasing gas supplies from a portfolio of trading hubs and  
20 supply locations allows gas buyers to mitigate the impacts of price variations that may occur at  
21 any one location, thus providing an economic advantage to purchasing gas at locations outside of  
22 western Canada.

23

1 As an example of contracting for incremental winter gas supplies and upstream transportation,  
2 customers may choose to contract for additional winter gas supplies at Chicago and additional  
3 annual transportation from Chicago to Dawn on the Vector pipeline. By purchasing gas supplies  
4 in Chicago, the annual pipeline transportation demand charges, or fixed costs, are much lower  
5 than the fixed costs associated with holding annual long haul transportation from Alberta to  
6 Ontario. Other factors to consider will be the secondary market value of the unused summer  
7 capacity which will aide in offsetting the fixed annual pipeline costs. In this example, it is likely  
8 that the shipper will sell the unused summer capacity into the secondary market. This capacity  
9 then becomes available to facilitate other secondary market transactions and services.

10

11 Customers will compare the cost of additional pipeline capacity and projected costs of winter gas  
12 supplies associated with this option to the cost and commitment required to contract for storage  
13 services directly from Union.

14

15 iv) **Winter Spot purchases at Dawn**

16 Ontario customers also have the option of forgoing storage and upstream transportation and  
17 simply purchasing winter supplies at Dawn. As stated in Union's evidence, Dawn is a very  
18 liquid hub. Customers can purchases supplies as spot gas supplies or as a Dawn delivered  
19 services (see v) below).

20

21 For example, if Customer A has determined that it requires an incremental 1,000 GJ/d of gas  
22 supplies delivered at Dawn for January to cover a winter peak need, Customer A can arrange to  
23 purchase gas supplies at Dawn several months in advance. Customer A can negotiate with a



1 marketer to fix all of the costs for the 1,000 GJ/d of gas supplies by calculating the future value  
2 of natural gas as traded on NYMEX and the future value of basis at Dawn. Choosing to fix the  
3 cost of gas supplies at a point in time has the same value as seasonal storage as the same point in  
4 time, as both result in the determination of the actual cost of gas supplies prior to the actual date  
5 of consumption. Customers can also elect to purchase gas at Dawn on days they need it. This  
6 type of spot purchase would also reduce the customer's need to contract for storage and  
7 represents an option to contracting for physical storage directly with Union.

8

9 v) **Dawn Delivered Service (Winter Peaking Services)**

10 Purchases of gas supplies at Dawn are not limited to predictable or firm even daily purchases.  
11 Customers also have the option of acquiring variable purchases at Dawn to offset unexpected  
12 consumption requirements. Customers can arrange to contract for a winter peaking service at  
13 Dawn where a marketer will deliver up to a specified quantity of gas at Dawn on a pre-  
14 determined number of days.

15

16 For example, Customer B has negotiated an arrangement with Marketer A whereby Marketer A  
17 will provide an additional 2,000 GJ/d of gas supplies at Dawn for any 10 days of the winter  
18 season (November 1 to March 31). It is likely that Customer B will be required to pay a demand  
19 charge or fixed cost for the right to request delivery on any 10 days, but Customer B will have  
20 the assurance of firm gas supply on the days that it is most needed. This service will simulate a  
21 10% deliverability storage service without the need for the customer to actually contract for a  
22 storage service directly with Union or other third party storage providers.

23

1 **vi) Financial Options to Hedge Winter Gas Deliveries**

2 As discussed by Ms. McConihe on page 18 of her evidence, one of the uses of seasonal storage is  
3 “... to reduce the commodity risk of fluctuations in the price of gas between the seasons...”.  
4 Reducing the risk of commodity fluctuations can also be accomplished through the use of  
5 financial options.

6  
7 The easiest financial option is to simply buy the winter “strip”<sup>1</sup>. Seasonal storage values  
8 generally reflect the difference between the winter strip and summer strip commodity prices.  
9 Therefore, at any point in time, the cost of buying the winter strip is approximately equal to the  
10 cost of purchasing the summer strip plus the cost of storage.

11  
12 A second example would have the customer purchasing a quantity of gas at Dawn for delivery  
13 each day over the winter but not locking in the price. In this case, the price the customer pays  
14 would change based on the fluctuations of NYMEX. To provide some price protection, the  
15 customer could purchase a “call option” with a strike price of \$ X/Dth over the same winter  
16 months. The call option provides a financial guarantee that the customer would never pay more  
17 than \$ X/Dth. This example is similar to storage in that it provides the customer with some price  
18 certainty (that is, never paying more than \$ X/Dth). It also provides an additional benefit in that  
19 if the price of natural gas falls, the customer would be able to participate in the falling market  
20 and would pay the lower market value all winter. If the customer had storage and filled the  
21 storage capacity in the summer, the price of gas would have been locked in as the average

---

<sup>1</sup> For example, a customer could contract with a gas supplier to sell the same quantity of gas each and every day during the period of November 1 to March 31 (the winter “strip”). The value of the gas supply would be determined by the value at which the November, December, January, February and March NYMEX futures contracts are trading at that point in time.

1 commodity cost of the summer strip plus the cost of storage. In this case, the customer would  
2 not be able to participate in the potential lower prices in the winter, since the commodity was  
3 already purchased and injected into storage.

4  
5 EEA will also provide an example in Undertaking 51 that shows that the financial instruments  
6 can approximate a 10 day (or 10% deliverability) service.

7  
8 In each of the above descriptions, customers who require storage or storage-like services have a  
9 variety of alternate services and options available. On an ongoing basis, Union's customers re-  
10 evaluate the portfolio of assets used to satisfy their gas consumption needs and select the service  
11 or collection of services that best aligns with their risk tolerance, pricing points and degree of  
12 asset management required. This secondary market activity also provides the appropriate  
13 economic signals to third party providers to develop new or enhanced services and supports the  
14 development of new storage capacity, when it is required.

15  
16 **C) COMPARISON OF MICHIGAN STORAGE TO UNION STORAGE**

17 Several intervenors have suggested that Michigan storage is more expensive or equal in cost to  
18 Dawn storage, especially when including the costs of transportation to Dawn.. This claim is  
19 outlined in Mr. Butler's evidence (filed as part of IGUA's submission) on page 18, paragraph 44,

20 *“... it is assumed that competition will ensure that market based rates for EGD, Union*  
21 *and Michigan will be similar.”*  
22  
23

24

1 Mr. Stauff, in his evidence states on line 20-22 of page 48,

2 *“... but the general result is that if unit storage costs, unit gas costs, and unit*  
3 *transportation costs per GJ-km are the same, U.S. storage will be more expensive for*  
4 *Ontario consumers than Ontario storage.”*  
5

6 As previously discussed, an alternative to purchasing storage in Ontario is purchasing storage in  
7 Michigan. However, a customer will value the two storage options differently, dependent upon  
8 the gas purchasing and transportation assumptions that the customer may utilize. In EB-2005-  
9 0551, Undertaking 16, Union illustrated one methodology for determining the value of storage at  
10 Dawn. In that example, Union assumed that the gas would be both purchased and sold at Dawn,  
11 and as a result, used the Dawn basis for both the summer and winter values of gas commodity.  
12

13 However, if a customer was purchasing storage in Michigan, the customer would be purchasing  
14 gas in Michigan and therefore the calculation should be adjusted to reflect the gas price in  
15 Michigan. MichCon City Gas basis, as an example, is available in *Platt's Gas Daily*. A  
16 worksheet outlining the Undertaking 16 valuation methodology using a MichCon basis for  
17 Michigan storage is attached as Appendix J.  
18

19 When calculating the market value of storage, Appendix J illustrates that the the natural or  
20 inherent Dawn short term storage value on close of business March 29, 2006 could be calculated  
21 as \$0.91 US/Dth while the intrinsic Michigan storage value on that same day could be calculated  
22 as \$0.81 US/Dth. The \$0.10 US/Dth difference in the two values reflects the market value at that  
23 time for transportation between Michigan and Dawn. The \$0.10 also represents only the  
24 difference in the intrinsic value of storage. As noted in Undertaking 16, market participants will

1 also assign an extrinsic value to storage. Depending on market conditions, the extrinsic value  
2 could further widen the difference between Michigan and Dawn storage, making Michigan  
3 storage even cheaper on a relative basis. Parties who are evaluating storage contracts at two  
4 different locations (ie Michigan and Dawn) will be generally seeking to pay less for storage in  
5 Michigan to offset the additional forward haul transportation costs.

6  
7 As discussed earlier, some members of the ANE group have contracted for Dawn to Parkway  
8 transportation and have chosen to supplement that transportation with a Michigan storage service  
9 and complimentary transportation to Dawn. The ANE members are sophisticated storage service  
10 buyers and would not have contracted for a more expensive storage service in Michigan than the  
11 service that could have otherwise been contracted at Dawn. In short, the conclusions reached by  
12 Mr. Butler and Mr. Stauff in their evidence are not supported by or consistent with the facts and  
13 market data.

14

15 **D) THE PROCESS OF SELLING UNION STORAGE**

16 There has been some discussion around the process by which Union sells storage into the market.  
17 For customers located within Union's franchise, they are allocated or able to acquire storage  
18 service using the aggregate excess formula. In-franchise storage in this circumstance is priced at  
19 the cost of service rates outlined on the applicable rate schedule. For those customers located  
20 outside of Union's franchise, the aggregate excess formula does not apply. As a result, they are  
21 free to contract for the quantity of storage space and injection and withdrawal parameters that  
22 address their individual needs.

23

1 One method Union employs to offer services to the market is an “open season” approach. An  
2 open season is similar to an auction. During this process, Union will advise existing and  
3 potential customers of its intention to sell storage space. Union will outline in the open season  
4 offer the parameters of its service. The open season will define the date and time when all bids  
5 are due. Union will award the capacity available for sale on that day, to those participants who  
6 bid the highest amount. During this process, Union is a “price taker” and simply awards capacity  
7 based on the highest bids received. It is important to note that the value of storage services is set  
8 by the competitive natural gas market mainly on the basis of commodity prices and the price  
9 differentials between winter and summer prices. Marketers and other market participants will  
10 not pay more for a service than the value they attribute to the service and for which they can  
11 expect to resell that service into the market.

12  
13 On occasion, Union has had the opportunity to respond to a specific customer’s RFP for storage  
14 services. For example, Enbridge has recently completed an RFP for storage services  
15 commencing April 1, 2006 (Appendix K). This RFP was publicly available and outlined the  
16 terms and conditions which Enbridge was willing to contract. Both storage operators and  
17 marketers had the opportunity to submit bids to Enbridge. In this instance, Union had the  
18 opportunity to offer a price for storage, but needed to ensure that the storage price was  
19 competitive in order to effectively compete against other storage service providers. As noted  
20 during this hearing, Union was the successful bidder in a competitive RFP process. Enbridge is a  
21 large, sophisticated and well informed purchaser of storage services, and understands its  
22 competitive options.

23

1 In some instances Union negotiates directly with the potential storage customer to determine the  
2 ultimate price for storage services. An example of this is Union's recent contracts with GMI.  
3 Union and the storage customer will each discuss the parameters of the storage service – the  
4 term, space, injection and withdrawal parameters. During this process, each participant will  
5 negotiate the appropriate price and terms for that service until agreement is reached. At any time  
6 the potential storage customer has the opportunity to negotiate a better arrangement from another  
7 service provider or to use a substitute product as previously discussed. Union is very aware of  
8 the interchangeability of storage service providers and strives to negotiate storage agreements that  
9 satisfy all participants. As discussed by Ms. Brochu on May 18, 2006 of the Technical  
10 Conference (page 85 of the transcripts), GMI has alternatives to storage from Union and  
11 analyzes those alternatives while negotiating a storage contract with Union. Further, GMI feels  
12 that the negotiations for the storage services were fair for both parties (Union and GMI).

13

14 Since Union began offering storage services at market based rates in 1989, Union has not  
15 received any complaints regarding sale of storage services into the competitive market.

16 Customers have the ability to lodge complaints with either the Board or the Competition Bureau  
17 on any part of the sale of Union's services. To date, Union is not aware of any customer who has  
18 lodged a complaint through any of the processes available. This fact, in and of itself, is an  
19 indication that Union has no market power in the sale of natural gas storage services in Ontario.

20

21 **E) THE HISTORICAL VALUE OF STORAGE**

22 A high level indication of the market value of storage is the simple winter/summer differential.

23 Using the NYMEX values for seven summer months and five winter months is a simple

1 calculation and approximates the intrinsic value of storage. Using this winter/summer  
2 methodology to calculate price differentials for seven summer months and five winter months,  
3 and ignoring the impact of Dawn basis, fuel and time value of money, the chart attached as  
4 Appendix L, illustrates the historical changes in the valuation of storage from prior to the  
5 injection season through October of each year.

6  
7 During the 2001/02 storage season, and again during the 2003/04 storage season, the values of  
8 storage (without including the impacts of basis, fuel costs and time value of money) dipped  
9 below the cost-based level and at times had a negative value. During the summer of 2004/05, the  
10 impact of high gas inventories and the late season impacts of hurricane activity both resulted in a  
11 widening of the summer and winter spreads. This widening translated into higher values for  
12 storage. Last year, the continued impact of hurricanes and the uncertain gas inventory levels  
13 resulted in volatile storage values.

14  
15 Over time, the value of storage (without including the impacts of basis, fuel costs and time value  
16 of money) are impacted by North American gas inventories, weather and the overall availability  
17 of natural gas. Storage valuation is derived, in part, based on the differences between gas prices  
18 at two different points in time. The variations of storage values are expected to continue into the  
19 future, with no assurances that today's storage levels will continue.

20



1 **CONCLUSION**

2 Throughout this evidence, Union has responded to several key issues that were identified both in  
3 the evidence filed during this proceeding and that were discussed during the Technical  
4 Conference.

5  
6 First, both Mr. Stauff and Ms. McConihe concluded that for Ontario gas consumers, there was no  
7 availability of storage services outside of Ontario and no access to transport storage quantities  
8 from locations outside of Ontario to Ontario. The case study included in this evidence confirms  
9 that many market participants have been successful in acquiring storage in the state of Michigan  
10 and transporting that storage to at least Ontario, and in the case of ANE, further east. The case  
11 study also highlights that there has been significant storage development in the Michigan area for  
12 parties who are willing to make the necessary contractual commitments. Similar evaluations of  
13 other areas within the geographic competitive market would yield similar results and  
14 conclusions.

15  
16 Second, Union provided a more detailed description of the storage alternatives available to  
17 market participants. The evidence included some illustrative examples of how market  
18 participants may facilitate the transactions associated with the storage service alternatives and the  
19 key factors that customers will consider when making contracting decisions.

20  
21 Both the case study and the storage alternatives made references to transactions available in the  
22 secondary market. There is robust trading activity at Dawn which provides a strong foundation  
23 for secondary market activity. Marketers are able to use their diverse portfolio of assets to offer

1 customized storage services to address the diverse needs of the gas markets. Both the RFP's of  
2 Yankee Gas and Bay State illustrate how market participants can acquire secondary market  
3 services.

4  
5 Third, both Mr. Butler and Mr. Stauff concluded that the cost of storage in Michigan would be  
6 the same cost or more expensive than the cost of storage in Ontario. This evidence illustrates  
7 that there is actually a discount to the intrinsic value of Michigan storage when compared to the  
8 intrinsic value of Ontario storage. This discount represents the value of transportation from  
9 Michigan to Dawn. Furthermore, customers who are making rational economic decisions have  
10 already contracted for Michigan storage in lieu of Ontario storage.

11  
12 Fourth, this evidence also provides a summation of Union's storage service sale process. Union  
13 has been selling storage services at market based rates since 1989. During that period, Union is  
14 unaware of any customers who have raised concerns regarding market power or the process by  
15 which Union offers storage services to the ex-franchise market.

16  
17 Lastly, Union has provided a graphical representation of the intrinsic storage values. While  
18 storage values have been increasing during the past several months, historically, storage values  
19 have been much closer to the cost of providing storage service.



**Vector Pipeline™**  
**NEWS RELEASE**

**Vector Pipeline L.P. announces binding Open Season  
for mainline expansion in 2007**

**LIVONIA, Mich., April 19, 2005** – Citing favorable changes in market conditions, Vector Pipeline L.P. today announced a binding Open Season, commencing April 19, 2005, for a 2007 expansion of its mainline natural gas transmission pipeline system. The expansion will involve the construction of additional compressor stations on Vector Pipeline L.P.'s system, which can increase Vector's capacity up to 1.5 Bcf/d from its current capacity of about 1 Bcf/d.

"The results of our non-binding Open Season in fall 2004 were encouraging," said Craig R. Fishbeck, Vector Pipeline president. "Recent favorable changes in market conditions – including increasing demand downstream of Dawn, the ongoing conversion of coal-fired power plants to natural gas in Ontario and continued East Coast interest in natural gas sourced from the Midwest – clearly support the need for the diversified supply that this expansion will offer.

"We believe that bringing this additional capacity on line by November 2007 will offer an economical, direct route for delivery of natural gas sourced from the Chicago Hub to storage and markets in the Midwest, southwest Ontario and to the East Coast via interconnecting pipelines," he added.

Binding bids for firm capacity will be accepted until 4 p.m. (EDT), June 1, 2005. Vector will make a final determination of incremental capacity after the conclusion of the binding Open Season.

The Vector Pipeline System – constructed in 2000 – consists of 349 miles of mainline transmission between the Chicago Hub and the storage complex at Dawn, Ontario. Vector Pipeline L.P.'s system begins in Joliet, Ill., and terminates at the international border at St. Clair, Mich., where it interconnects with the Vector Pipeline Limited Partnership system, which provides service to the Dawn, Ontario, storage facilities. The System has multiple interconnections, which include Alliance, Northern Border, Guardian, ANR, NIPSCO, Crossroads, Consumers Energy, MichCon, DTE Washington 10 Storage, Bluewater Gas Storage and Union Gas. Two power plants also are tied into the Vector system: Crete Energy Ventures and Kinder Morgan-Jackson.

Parties interested in this binding Vector Pipeline Open Season should contact John Donaldson at (734) 462-0238 or Matt Malinowski at (734) 462-0236 for additional information, which also will be posted April 19, 2005, at [www.vector-pipeline.com](http://www.vector-pipeline.com).

Vector Pipeline L.P. is a joint venture between Calgary-based Enbridge Inc. (NYSE/TSE: ENB), with a 60 percent interest, and Detroit-based DTE Energy Company (NYSE: DTE), with a 40 percent interest. Information about Vector is available on the web at [www.vector-pipeline.com](http://www.vector-pipeline.com). Information about Enbridge and DTE Energy is available at [www.enbridge.com](http://www.enbridge.com) and [www.dteenergy.com](http://www.dteenergy.com) respectively.

###

**Vector media contact:**  
Larry Springer  
(713) 821-2253  
[larry.springer@enbridge.com](mailto:larry.springer@enbridge.com)

Attached are the cover letter and certificate application to Vector Pipeline L.P.'s Compression Expansion Project filed with the Federal Energy Regulatory Commission (FERC) on November 30, 2005 (Docket Nos. CP06-29-000 & CP98-133-007). Vector contemporaneously filed an amendment to its Presidential Permit in Docket No. CP98-131-006.

To view the balance of the Volume I (Public) filed materials to Vector's Compression Expansion Project or Vector's Presidential Permit amendment, please refer to FERC's website at [www.ferc.gov](http://www.ferc.gov). To view the filed materials, click on "eLibrary" in the top right corner. Then click on "Docket Search." Enter the applicable Docket Number of the filing (e.g., "CP06-29" or "CP98-131") and in the date range enter "11/30/2005" to "11/30/2005." Then click "Submit" at the bottom and scan the results for Vector's filed materials which may be contained in more than one entry line.

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**November 30, 2005**

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Ms. Magalie R. Salas, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Re: Vector Pipeline L.P. Request for Clarification of Certificate and Abbreviated Application for Construction of Facilities

Dear Ms. Salas:

Vector Pipeline L.P. (Vector), pursuant to Rules 212 and/or 207, or in the alternative, Section 7 of the Natural Gas Act, 15 U.S.C. § 717f(c), and Part 157A of the Federal Energy Regulatory Commission's (Commission) Regulations, 18 C.F.R. § 157, Subpart A, hereby submits for filing with the Commission an original and seven (7) copies of (i) a request for clarification (or in the alternative amendment) of the certificate issued in Docket No. CP98-133-000 (Clarification), and (ii) an application for authority to construct and operate certain new compression facilities (Compression Expansion Project). These requests are being submitted in one filing as the Expansion Project as the two components are related and interdependent, as explained more fully in the narrative.

Vector is requesting that the Commission take separate, expedited action on the Clarification – by no later than March 1, 2006 – since that request involves no new facilities or any change to existing facilities, and because expedited action by the Commission will allow Vector to offer additional long-haul capacity in response to general market requests, and specifically in time for customers to use this capacity as part of the storage injection season that begins on or about April 1, 2006. With respect to the Compression Expansion Project for authority to construct new compressor stations, Vector asks that the Commission issue an order granting the requested certificate authorization by no later than November 1, 2006 in order to meet an anticipated in-service date of November 1, 2007.

Pursuant to Commission direction in response to security concerns, Vector is submitting this request for Clarification and the Compression Expansion Project application in the following parts:

Volume I: Public (Original and seven copies)

	Letter of Transmittal
	Clarification Request and Section 7(c) Abbreviated Application Text
Exhibit C	Company Officials
Exhibit D	Subsidiaries and Affiliation
Exhibit F-1	Resource Report 1
	Resource Report 2
	Resource Report 3
	Resource Report 4
	Appendix 4A Illinois SHPO Consultations
	Appendix 4B Michigan SHPO Consultations
	Appendix 4C Plan for the Unanticipated Discovery of Historic Properties or Human Remains During Construction in Illinois
	Appendix 4D Plan for the Unanticipated Discovery of Historic Properties or Human Remains During Construction in Michigan
	Resource Report 5
	Resource Report 6
	Resource Report 7
	Resource Report 8
	Resource Report 9
	Resource Report 10
	Resource Report 11
	Resource Report 12
	Resource Report 13
Exhibit I	Market Data
Exhibit K	Cost of Facilities
Exhibit N	Revenues, Expenses & Income
Exhibit Z	Federal Register Notice

Volume II: Non-Internet Public (Original and seven copies)

Exhibit F	System Map showing the location of the Project facilities
Exhibit F-1	Appendices to the Resource Reports, including
	Appendix A Mapping Supplement
	Appendix B Affected Landowners/Local Public Official Consultations
	Appendix C Wetland Survey Reports
	Appendix D Agency Correspondence Regarding Special Status Species
	Appendix E Tribal Consultation Letters
	Appendix F Air Dispersion Modeling Analysis
	Appendix G Noise Survey Reports

Volume III: CEII      **DO NOT RELEASE**      (Original and two copies)  
Exhibit Z-1              Flow diagrams applicable to the Clarification  
Exhibits G, G-I, G-II      Flow Diagrams applicable to the Compression Expansion  
Project

Volume IV: Privileged      **DO NOT RELEASE**      (Original and two copies)  
Exhibit F-1  
Resource Report 4      Cultural Resource Survey Report for Illinois  
Resource Report 4      Cultural Resource Survey Report for Michigan

Vector respectfully requests that the Volume II information not be placed on the Internet, and that the Volumes III and IV information not be released to the public as they are submitted on a privileged and confidential basis pursuant to 18 C.F.R. § 388.112 and 18 C.F.R. §§ 380.12(c)(iii) and (d)(4). Pursuant to the latter two sections of the Regulations, Vector is providing Staff by hand delivery contemporaneously with this filing copies of the topographic/aerial maps and the National Wetland Inventory maps, which have been combined for purposes of this filing.

If there are any questions concerning the enclosed filing, please address them to the undersigned.

Very truly yours,

ON BEHALF OF VECTOR PIPELINE L.P.

/s/ Kim M. Clark  
Kim M. Clark  
John & Hengerer  
1200 17<sup>th</sup> Street, N.W.  
Suite 600  
Washington, D.C. 20036

Counsel for Vector Pipeline L.P.





to as the Expansion Project). Vector's proposal is designed to respond to current market demands for long-haul service beyond that which Vector can render through its existing facilities.

Although this filing is presented under two dockets, the Expansion Project involves a single related and interdependent proposal that responds to market demands for additional long-haul firm capacity on the Vector system. In an effort to meet this demand in the most economically efficient manner, Vector has requested a Clarification of its existing design levels used to set zone boundaries combined with a certificate application to expand its mainline capacity through the addition of compression (Compression Expansion Project).

Because the proposed Clarification involves changes to the zone design levels but requires no facility modifications or new construction, and thus has no adverse impact on existing shippers or on the environment, the Commission may act on this request without delay. Vector, therefore, asks that the Commission take action on the Clarification as expeditiously as possible but no later than March 1, 2006. Action by that date will give Vector the ability to sell additional long-haul firm capacity in response to current market demands and specifically, to assist customers who may require transportation in order to fill storage during the injection season that begins in April 2006.

With respect to the Compression Expansion Project, Vector requests the Commission issue the necessary authorizations as soon as practicable but no later than November 1, 2006, so that construction can begin in time to complete the new facilities by the anticipated in-service date of November 1, 2007.

## **EXECUTIVE SUMMARY**

Vector is a hub-to-hub pipeline certificated under the optional expedited procedures with facilities commencing near Joliet, Illinois, traversing the States of Illinois, Indiana, and Michigan,

and terminating at the United States-Canada border connection with Vector Pipeline Limited Partnership, an affiliated entity, with continued service in Ontario.<sup>2</sup> At the Joliet hub, Vector interconnects with Alliance Pipeline LP, Guardian Pipeline L.L.C., and Northern Border Pipeline Company, and further downstream with ANR Pipeline Company. At Dawn, Vector Pipeline Limited Partnership terminates at an interconnection with Union Gas Limited, a Canadian LDC and owner of the Dawn storage complex.

Based on historical operational experience and recent indications from current and prospective shippers, it became apparent to Vector that there was a market demand for additional long-haul transportation service above the currently effective 925,200 Dth/d design level for Zone 2 service to Michigan and to the international border. *See* the discussion below with respect to the response to Vector's Binding Open Season.

The question for Vector, then, was how best to satisfy this demand with the lowest possible capital expenditure and thus the least future cost of service impact on its customers. The answer is the Expansion Project proposed herein, which is comprised of a change to existing zone design levels and the construction of new compressor stations. Both of these actions are necessary to meet the market demands expressed in the Precedent Agreements entered into in response to the Binding Open Season. While the proposed Clarification can and should, in Vector's view, be processed and approved by the Commission in a shorter time frame, because it involves no facility changes or additions, Vector emphasizes that **both** the Clarification and the

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<sup>2</sup> Vector Pipeline Limited Partnership, which is regulated by the National Energy Board of Canada, transports gas approximately 15 miles from the border to the major natural gas hub at Dawn, Ontario.

Compression Expansion Project components of the overall Expansion Project are necessary if Vector is to meet the market demand for additional long-haul transportation service.

Clarification

Vector has in effect two rate zones: Zone 1 runs from the start point of the Vector pipeline near Joliet, Illinois, to a delivery point at Crown Point, Indiana (a distance of 43 miles), while Zone 2 runs from Joliet, Illinois to the international border at the St. Clair River in Michigan (a distance of 333.4 miles).<sup>3</sup> The initial design level used to delineate Zone 1 was 404,000 Dth/d. This level of delivery capability reflected a negotiated rate contract with Northern Indiana Public Service Company (NIPSCO) for a short-haul service with a MDQ of 200,000 Dth/d plus then anticipated additional demand.<sup>4</sup> With this Zone 1 design level, pipeline hydraulics resulted in an assumed long-haul delivery capability at the international border of 925,200 Dth/d for Zone 2.<sup>5</sup>

Since commencing operations in December 2000, the anticipated demand for Zone 1/short-haul mainline firm service (*i.e.*, the increment of deliverability above the NIPSCO contract's MDQ) has never materialized, and Vector sees no likelihood that such demand will arise in the future. In light of this change in circumstance, instead of maintaining in place outdated zone design levels, Vector proposes to change the design levels for both Zone 1 and

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<sup>3</sup> To understand the zone structure better, Zone 1 is subsumed in Zone 2 and thus the zones are not additive.

<sup>4</sup> The NIPSCO contract provides primary delivery rights of 150,000 Dth/d in Zone 1 and 50,000 Dth/d at a nearby point in Zone 2 downstream of the Zone 1 boundary. Thus, the NIPSCO agreement is effectively a short-haul service.

<sup>5</sup> These zone parameters are explained in a June 27, 2000, certificate amendment filed by Vector in Docket Nos. CP98-133-004 and CP98-134-003 and were acknowledged and accepted in a letter order issued November 8, 2000, 93 FERC ¶ 61,129.

Zone 2 in order to increase the long-haul delivery capability to the end of Vector's system in Michigan.

If the requested Clarification to the existing zone design levels is granted to reduce the Zone 1 design level from 404,000 Dth/d to 200,000 Dth/d, the result is an added 40,200 Dth/d of long-haul capability to Zone 2. With that added long-haul capacity in place, Vector will be able to meet a portion of the market demand for long-haul capacity that is reflected in the Precedent Agreements. This change in zone design levels does not require the addition or removal of any existing facilities, and thus the requested change in design assumptions would be without any cost to Vector or to its customers.

Vector requests herein that the Commission allow a reduction in the Zone 1 design level from 404,000 Dth/d to 200,000 Dth/d and a resultant increase in the Zone 2 design level from 925,200 Dth/d to 965,400 Dth/d. Vector asks the Commission to proceed by clarifying its original certificate, or in the alternative, by granting an amendment thereto.

#### Compression Expansion Project

The Clarification described above serves to satisfy only a portion of the demand for additional long-haul service on Vector. To meet the rest of this need, Vector is proposing to add compression to increase mainline capacity in Zone 2 by approximately 205,200 Dth per day through the construction of two new compressor stations and the installation of approximately 45,000 horsepower of compression at an estimated cost of \$70.4 million. One of the proposed compressor stations would be located in Will County, Illinois, and the other in Macomb County, Michigan.

## Summary

Vector's Expansion Project is a response to the commitment of nine shippers to long-term, long-haul transportation service on the Vector system. The shipper-requested new long-haul capacity can be met in the most efficient and effective manner by a combination of (i) additional capacity freed up by changes in the Zones 1 and 2 design levels (Clarification), and (ii) capacity resulting from adding compression (Compression Expansion Project). These changes to Vector's mainline deliverability will facilitate the movement of gas in the United States and Canada in a pro-competitive, market-responsive manner.

Should the Commission approve both requests, the annual (*i.e.*, summer) capacity levels of the system would be 200,000 Dth/d for Zone 1 and 1,170,600 Dth/d for Zone 2.<sup>6</sup> As explained below, while the total additional physical long-haul firm deliverability proposed herein exceeds the amount covered by the shipper commitments in the Precedent Agreements, Vector is prepared to take the risk, as an optional certificate pipeline, that it can sell this as yet unsubscribed firm capacity in the future.

In support of this application, Vector submits the following:

### **I. CORRESPONDENCE AND COMMUNICATION**

Correspondence and communications concerning this application should be addressed as follows:

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<sup>6</sup> The Zone 2 total is comprised of the following increments: Current long-haul capacity of 925,200, long-haul capacity resulting from the Zone 1 change of 40,200, and long-haul capacity resulting from the Compression Expansion Project of 205,200.

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Vector requests that both of the listed persons be included on the Commission's official service list.

## II. INTRODUCTION

Vector's exact legal name is Vector Pipeline L.P. Vector is a limited partnership organized and existing under the laws of the State of Delaware. The general partner and operator of Vector is Vector Pipeline, LLC. Vector's principal office is located at 38705 Seven Mile Road, Suite 490, Livonia, Michigan 48152.

Vector is a natural gas company within the meaning of the Natural Gas Act and is subject to the Commission's regulatory jurisdiction. Vector was authorized as an optional certificate pipeline to provide open-access transportation pursuant to a certificate issued by the Commission in Docket No. CP98-134-000<sup>7</sup> and the Commission's Regulations at 18 C.F.R. Part 284. Pursuant to that authority, Vector transports natural gas on behalf of various shippers in the States of Illinois, Indiana, and Michigan.

## III. BACKGROUND

The Vector system went into service on December 1, 2000 with an annual long-haul design capacity of 925,200 Dth/d. Of that amount, 700,000 Dth/d was subscribed under long-term firm negotiated rate contracts for Zone 2 service. Vector also entered into the NIPSCO

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<sup>7</sup> 87 FERC ¶ 61,225 (1999).

short-haul negotiated rate firm agreement, which had a five-year term at the time of the commencement of service. Further, since February, 2003 Vector has been able to sell all of its unsubscribed annual Zone 2 long-haul capacity to other firm shippers for varying terms at discounted rates, and anticipates continuing to sell this capacity in the future.

As noted earlier, the demand for additional short-haul firm service from Joliet, Illinois that was expected in 2000 has never materialized and likely never will. However, based on market interest in transportation from Joliet, Illinois to Michigan and to the international border, Vector believed there would be interest in an expansion of the Vector system to accommodate new, firm capacity commitments. To that end, Vector posted on its web site a Binding Open Season commencing on April 19, 2005 and closing on June 1, 2005 soliciting bids for expansion capacity and seeking offers of the turnback of capacity by existing shippers.<sup>8</sup>

In response to the Binding Open Season bids, Vector entered into Precedent Agreements for new recourse service under Rate Schedule FT-1 at rates that are lower than the applicable maximum tariff rates, as follows:

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**TABLE I - PRECEDENT AGREEMENTS**

<u>Shipper</u>	<u>Volume</u>	<u>Term</u>	<u>Form of Service</u>
The Brooklyn Union Gas Company d/b/a KeySpan Energy Delivery New York	12,500	10 years	Annual capacity
KeySpan Gas East Corporation d/b/a KeySpan Energy Delivery Long Island	12,500	10 years	Annual capacity

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<sup>8</sup> Vector did not receive any acceptable offers for the turnback of existing capacity.

Connecticut Natural Gas Corporation	9,700	10 years	Winter (Eastern End) capacity <sup>9</sup>
Southern Connecticut Gas Company	18,300	10 years	Winter (Eastern End) capacity
BP Canada Energy Marketing Corp.	50,000 100,000	10 years	Annual capacity Winter (Eastern End) capacity
Yankee Gas Services Company	20,000 3,000 37,200	10 years	Annual capacity Winter capacity Winter (Eastern End) capacity
Peoples Energy Wholesale Marketing, LLC	25,000 25,000	10.4 years	Annual capacity Winter backhaul
DTE Energy Trading, Inc.	70,000 70,000	10 years	Annual capacity Winter (Eastern End) capacity
Nexen Marketing USA Inc.	25,000	10 years	Annual capacity

Total shipper commitments under the Precedent Agreements are as follows:

Annual Capacity	215,000 Dth/d	
Winter Capacity	3,000 Dth/d	
Winter (Eastern End) Capacity	235,200 Dth/d	[Washington 10 to Dawn]
Winter Backhaul	25,000 Dth/d	[Dawn to Northern Border]

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<sup>9</sup> This service involves the segment of the Vector system in Michigan, which is the eastern end of the system, and consists of receipts at the Washington 10 storage facility and deliveries to Dawn, Ontario.



As explained above, Vector determined that it could meet this market demand in the most effective and efficient manner by: (i) reducing the Zone 1 design level to 200,000 Dth/d in order to free up an additional 40,200 Dth/d of currently unavailable long-haul capacity in Zone 2 using existing facilities (*see* Exhibit Z-1), and (ii) adding two new compressor stations to increase the overall capacity of the system to deliver volumes in Zone 2 (*see* Exhibit G-I). Both of these aspects of the Expansion Project are necessary to achieve the goal of meeting the market demand demonstrated by the Precedent Agreements.

The change to the zone design levels requested in the Clarification requires no modification to existing facilities (and thus no costs will be incurred). The proposed Compression Expansion Project does involve the cost of additional compression. Combined, these design changes to the Vector mainline respond to market demand and are fully supported by new long-term firm contracts, such that the revenues derived from the expansion will exceed the estimated cost of the two compressor facilities (*see* Exhibit N). Further, with respect to the rates applicable to all additional Zone 2 capacity, Vector will continue to utilize its existing rates for the expansion service, pending filing of a general Section 4 rate case on or before February 2009, pursuant to the settlement in Docket No. RP03-489-000 that was accepted by Commission order issued January 29, 2004.<sup>10</sup>

Based on the executed Precedent Agreements, Vector has decided to go forward with a proposal that would increase its existing long-haul annual (*i.e.*, summer or every-day) capacity from 925,200 Dth/d to 1,170,600 Dth/d. The resultant seasonal winter deliverability would rise

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<sup>10</sup> *Vector Pipeline L.P.*, 106 FERC ¶ 61,071 (2004).

to 1,533,100 Dth/d.<sup>11</sup> The size of the proposed Expansion Project meets the commitments by shippers in their respective Precedent Agreements, as set forth above, and to the extent the Expansion Project produces as yet unsubscribed capacity, Vector expects to enter into additional service agreements for that capacity.<sup>12</sup> In any event, as an optional certificate pipeline, Vector assumes the risk of any unsubscribed capacity on its system.

#### **IV. DESCRIPTION OF NEW FACILITIES**

By this application, Vector seeks authority to construct, own, and operate two new compressor stations. Each station will be built on land owned by Vector and located at points adjacent to the existing Vector mainline. The total estimated construction cost for the Compression Expansion Project is \$70.4 million (*see* Exhibit K).

The proposed compressor stations and facilities are summarized below:

##### Joliet Compressor Station

This station will be situated at Milepost 0.0 in the City of Joliet, Will County, Illinois. The land for this compressor station was part of the parcel acquired by Vector in connection with its initial construction. The location chosen for the new compressor station was selected for

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<sup>11</sup> Of the new shipper long-haul requirements of 215,000 Dth/d, 205,200 Dth/d would be met through capacity resulting from the expansion, and 9,800 Dth/d would be met from the changes in the Zones 1 and 2 design levels. The remaining 30,400 Dth/d (40,200 - 9,800) of capacity added due to changes to the zonal design levels would be posted on the Vector bulletin board – once the Commission gives approval for the requested change – to be sold to interested shippers at rates acceptable to Vector and in a manner consistent with the terms of the Vector Tariff.

<sup>12</sup> See *CenterPoint Energy Gas Transmission Co.*, 111 FERC ¶ 61,273 at 62,221 (2005).

operational reasons to allow for efficient use of the increased compression and to minimize the environmental impact.

Vector plans to add a single unit, 15,000 horsepower natural gas driven turbine compressor at this site. The compressor unit will be enclosed in its own building to promote efficiency and safety. In addition, Vector will build at the site a separate control building that will encompass office space for operating personnel, as well as space for tools, spare parts, and maintenance equipment.

#### Romeo Compressor Station

This station will be situated at Milepost 305.6 in Washington Township, Macomb County, Michigan. The land for this compressor station will be purchased from a subsidiary of DTE Energy (DTE), which has maintained a storage field and accompanying above-ground facilities at this site for many years. The location for this compressor site was selected for operational reasons to allow for efficient use of the increased compression and to minimize the environmental impact.

Vector proposes to install two 15,000 horsepower natural gas fueled turbine compressor units at this new site. The compressor units will be enclosed in their own building to promote efficiency and safety. Vector also will build at the site a separate control building that will encompass office space for operating personnel, as well as space for tools, spare parts, and maintenance equipment. In addition, Vector will install at this site gas cooling equipment in order to meet temperature delivery specifications of interconnecting entities.

## Summary

Taken together, the Joliet and Romeo compressor stations will add a total of 45,000 horsepower to the Vector system, increasing Vector's total annual deliverability to the international border (combined with the changes to the Zones 1 and 2 design levels) to 1,170,600 Dth/d in the summer and 1,533,100 Dth/d in the winter, as shown on Exhibits G and G-I.

## **V. PUBLIC CONVENIENCE AND NECESSITY**

Vector maintains that the instant Expansion Project, comprised of a change in the Zone 1 and Zone 2 design levels for the existing facilities coupled with the addition of two new compressor stations to increase the overall deliverability of the system, is fully justified and supported herein as consistent with the public convenience and necessity.

## Clarification

Vector asks that the requested change in the Zone 1 and Zone 2 design levels be allowed through a clarification of the existing certificate authorization. Vector suggests that the Commission may act through clarification because the proposed changes to Zone 1 and Zone 2 design levels would result in a long-haul capacity of 965,400 Dth/d, which is lower than the originally certificated long-haul deliverability of 1.01 MMDth/d.<sup>13</sup> However, if the Commission requires instead a formal amendment application in order to modify the existing zone design levels, this filing is intended to satisfy the Commission's filing requirements.

Changing the Zone 1 and Zone 2 design levels requires no additional facilities nor the modification of existing facilities, and thus there will be no immediate cost or rate impact on customers and no impact on adjacent landowners or on the environment. Further, the proposed

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<sup>13</sup> See e.g., *Vector Pipeline L.P.*, 87 FERC ¶ 61,225 at 61,905 (1999).

change will have no adverse impact on existing shippers. In fact, making this change would be beneficial to customers, particularly if the Commission grants this aspect of the filing expeditiously as requested by Vector, by allowing Vector to meet anticipated market demand for transportation service during the later stages of the 2005-2006 winter heating season and 2006 storage injection season. Furthermore, the additional 40,200 Dth/d of capacity in Zone 2 (together with the mainline capacity resulting from added compression) is necessary to accommodate long-haul, long-term shipper commitments resulting from the Binding Open Season.

Since no facility costs are associated with the zone level changes, there is no adverse impact on existing shippers, adjacent landowners, or other interested parties. Vector thus maintains that the elements of the 1999 Certificate Policy Statement have been satisfied (to the extent such requirements apply hereto).<sup>14</sup> Vector, therefore, asks that the Commission issue the requested Clarification, or in the alternative, grant an amendment to the existing certificate, by no later than March 1, 2006, so that Vector can accommodate anticipated market requests for additional long-haul transportation service.

#### Compression Expansion Project

Vector's Compression Expansion Project is clearly required by and consistent with the public convenience and necessity, including the requirements of the 1999 Certificate Policy Statement. On that basis, the Commission should grant the requested certificate authorization.

The 1999 Policy Statement provides that in reviewing new pipeline construction applications, the Commission will consider the impact of the proposal on (i) existing shippers, (ii)

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<sup>14</sup> 88 FERC ¶ 61,227 (1999), *order clarifying*, 90 FERC ¶ 61,128 (2000), *order further clarifying*, 92 FERC ¶ 61,094 (2000).

adjacent landowners, and (iii) other interested parties. With respect to the first category, impact on existing shippers, the threshold question is whether those shippers are subsidizing the new service. In this case the answer clearly is no, because the annual revenues to be derived from the shippers using expansion capacity exceeds the projected annual cost of service of the new facilities, as shown on Exhibit N.

Exhibit N demonstrates that estimated annual revenues from the expansion capacity will exceed estimated costs. The expansion capacity should produce revenues for the first three years of \$47.58 million from firm shipper commitments, plus an estimated \$6.729 million derived from the sale of as yet unsubscribed firm capacity, for a total of \$54.309 million. By comparison, the estimated three year cost of the Project is \$42.864 million. Thus, total revenues will exceed estimated costs for the first three years of operation by \$11.445 million.<sup>15</sup> Finally, as shown on Exhibit N, page 7 of 7, the impact of rolled-in rate treatment on Vector's U.S. rates should reduce Vector's existing zone rates by approximately 7.6 % for Zone 1 and 8.2% for Zone 2 for the Year-1 cost of service.

In light of the fact the Expansion Project will not result in an increase to the Tariff rates, and because projected revenues will outweigh the projected cost, Vector hereby requests a preliminary determination that the costs of the Expansion Project may be rolled-in with Vector's existing facility costs in Vector's next general Section 4 rate case.<sup>16</sup>

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<sup>15</sup> It is likely that under maximum load factor throughput conditions the post-expansion fuel reimbursement percentage will exceed current levels, although overall the level of system fuel use will remain relatively low.

<sup>16</sup> See *CenterPoint Energy Gas Transmission Co.*, 111 FERC ¶ 61,273 at 62,222 (2005). See also, *Transwestern Pipeline Co.*, 90 FERC ¶ 61,032 (2000).

Once the threshold question of subsidization is satisfied, the Policy Statement inquires whether there are adverse effects on existing customers of Vector. As noted above, Vector is not proposing to change its existing rates, and thus the rates paid by such customers will not change when the expansion facilities go into service, nor will the quality of service. In fact, the addition of compression will benefit existing shippers by improving system reliability and flexibility. Further, if the cost of the new facilities is rolled-in with existing rate base in Vector's next general Section 4 rate case, the maximum recourse rates will be lower than they otherwise would be because of the relatively low incremental cost of the added capacity.

With respect to the effects of the proposed system deliverability expansion on existing pipelines, Vector is unaware that the Expansion Project will capture any customers of existing pipelines, and thus Vector is unaware of any adverse impact on the customers of existing pipelines and/or such pipelines. Finally, landowners and communities surrounding the new facilities will experience no adverse impact because the new compressor stations will be built on land owned in fee by Vector and which previously has been set aside for natural gas service related purposes. Additionally, Vector has designed the compressor stations to reduce the visual impact and to incorporate appropriate sound and air quality mitigation measures.

In order to provide local landowners and public officials advance knowledge of the Project, Vector has been proactive by mailing on October 26, 2005 – to adjacent landowners, residents, local officials, and permitting agencies -- materials that explain the Vector certificate filing and provide the names of persons to contact about the Expansion Project. In addition, Vector has held meetings with public officials on November 2-3, and 16, 2005 to discuss the Expansion Project. More such meetings are scheduled for December, 2005. Finally, Vector will

provide the official notice required by § 157.6(d)(2) to all adjacent landowners, residents, all affected landowners, and all towns, communities, and local, state, and federal government agencies that may have an interest in the Expansion Project. These persons and entities are identified in Exhibit F-1.

Because the Compression Expansion Project involves adding compression rather than looping a portion of the system, there is a limited effect on the environment, but it is restricted to the two compressor station sites. Exhibit F-1, the Environmental Resource Reports, shows the measures Vector has taken to minimize the impacts of its Compression Expansion Project on landowners, the surrounding communities, and the environment in general.

Vector submits that considerable benefits will result from the proposed Expansion Project, including meeting expanded market demand as demonstrated by the willingness of nine shippers to commit to long-term firm transportation contracts.<sup>17</sup> Moreover, the Expansion Project will facilitate the transportation of gas from the U.S. into Canada and from Canada into the U.S., as market conditions warrant. Further, the added compression and resultant increased long-haul capacity will improve deliverability, flexibility, and reliability on the system for all shippers. The addition of two new compressor stations will increase the ability of Vector to receive gas for shippers and to deliver that gas to the desired market(s). The operational flexibility added by the two new stations also will increase the optimization of the pipeline facilities during varying flow conditions. Finally, additional compression will help to minimize the impact on system deliveries that might result from scheduled or unscheduled downtime of the current compressors, and this factor provides a high level of system reliability for Vector shippers.

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<sup>17</sup> See e.g., *Northern Border Pipeline Co.*, 112 FERC ¶ 61,196 (2005).



In addition to these market-oriented and operational benefits, a mainline system expansion coupled with added firm capacity commitments will operate to reduce the maximum recourse rates in Vector's next general Section 4 rate case, assuming – as requested herein – that the costs of the new facilities are rolled-in for ratemaking purposes. Finally, Vector has taken significant steps in designing the compressor stations so there will be no adverse impact on landowners and surrounding communities. Therefore, the Commission is requested to find that the construction and operation of the proposed facilities serves the public convenience and necessity.

## **VI. MARKETS AND SERVICE AGREEMENTS**

The demand for new firm transportation capacity between the Joliet and Dawn hubs of Vector is demonstrated by the response to the Binding Open Season and the commitment of nine shippers to Precedent Agreements for long-term firm service (*see* Exhibit I). Pursuant to these Precedent Agreements, each shipper will enter into a recourse transportation service agreement (consistent with the applicable rate schedule) in the form set forth in the Vector tariff.<sup>18</sup> Vector therefore requests the Commission to approve the Expansion Project consistent with the terms set forth in the Precedent Agreements.<sup>19</sup>

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<sup>18</sup> As required by the terms of the Precedent Agreements, those shippers that have requested service to Dawn, Ontario, also will enter into transportation service agreements with Vector's Canadian affiliate, Vector Pipeline Limited Partnership, to cover the Canadian portion of the overall service. Please note that for purposes of comparing project revenues with costs in Exhibit N, the Canadian portion of the revenues has been excluded. In addition, Vector advises that because there will be no change to the Canadian facilities, no NEB facilities application is required.

<sup>19</sup> Consistent with Commission policy, the Precedent Agreements provide for an allocation/assignment of project risk should the Compression Expansion Project go forward but a prospective shipper fails to abide by its commitments in its Precedent Agreement.

With respect to the added capacity that will result from Commission approval of a change in design capacity for Zones 1 and 2, that capacity – to the extent not required to meet the needs of expansion shippers – will be posted on Vector’s web site for sale to interested shippers. Vector anticipates, based on informal inquiries to Vector and an analysis of recent market developments, that interest in the market for this capacity will lead to new transportation contracts. Moreover, as an optional certificate pipeline, Vector is at risk for any unsubscribed capacity.

## **VII. SAFETY AND ENVIRONMENT**

Vector confirms, consistent with the Natural Gas Pipeline Safety Act of 1968, that the facilities proposed to be constructed will be built, operated, and maintained in accordance with the requirements of Title 49, Part 192, Code of Federal Regulations and any other applicable federal or state safety code applicable to such facilities.

In compliance with Part 380 of the Commission’s Regulations, submitted herewith is Exhibit F-1, which is the Environmental Resource Reports containing the data required in connection with the Compression Expansion Project. Finally, Vector will comply with all relevant and applicable environmental and safety regulations.

The proposed Joliet Compressor Station will be constructed on land acquired by Vector (and reviewed by the Commission) in connection with its original construction. The proposed Romeo Compressor Station will be constructed on land purchased from DTE, which has held the property in connection with gas storage operations for many years. While these sites are, in the opinion of Vector, the best possible locations for new compressor stations – from both an

operational and environmental perspective – to the extent there were other viable sites, those alternatives are discussed in Exhibit F-1.

Based on the environmental data provided herewith, Vector submits that because of the limited nature of the facilities proposed as well as the location of such facilities, the Compression Expansion Project will not have a significant environmental impact, and that the requested authorization will not constitute a major federal action significantly affecting the quality of the human environment. Therefore, the Commission is requested to proceed with an Environmental Assessment in its review of the proposed Compression Expansion Project.

#### **VIII. DESCRIPTION OF EXHIBITS**

With respect to the requested Clarification to revise the Zone 1 and Zone 2 design levels, those changes require no new construction or any modification to or removal of any existing facilities, and thus there is no environmental impact. Vector therefore requests that the Commission either waive the filing requirements of Section 157.7, to the extent applicable, or, utilize the exhibits submitted herewith that support the Compression Expansion Project part of the instant filing. In addition, Vector has included for the Commission's consideration flow diagrams that show the effects of the change in Zone 1 and Zone 2 design levels sought in the Clarification (*see* Exhibit Z-1, which appears in Volume III of the filing).

With respect to the Compression Expansion Project, pursuant to the rules for abbreviated applications under Section 157.7 of the Commission's Regulations, 18 C.F.R. § 157.7, the following lists the exhibits required for this application. Such exhibits are attached, omitted for stated reasons, or incorporated by reference from previous filings, as explained below.

**EXHIBIT A** ARTICLES OF INCORPORATION AND BYLAWS

Incorporate by reference the Exhibit A submitted in Docket Nos. CP98-133-000, *et al.*

**EXHIBIT B** State Authorization(s)

Incorporate by reference the State Authorizations submitted in Docket Nos. CP98-133-000, *et al.* Subsequently, Vector has qualified to do business in the State of Wisconsin under authorization issued on August 4, 2003 by the Wisconsin Department of Financial Institutions.

**EXHIBIT C** Company Officials

Provided in Volume I.

**EXHIBIT D** Subsidiaries and Affiliation

Provided in Volume I.

**EXHIBIT E** Other Pending Applications

Vector has filed a companion application in Docket No. CP98-131-006 to amend Vector's existing Presidential Permit to accommodate the increase in authorized volumes at the international border that may result from the proposed expansion.

**EXHIBIT F** Location of Facilities

Provided in Volume II to be treated as Non-Internet Public.

**EXHIBIT F-1** Environmental Report

Provided in part in Volume I (public), in part in Volume II (Non-Internet Public), and in part (Resource Report 4, Appendices 4G and 4H) in Volume IV (Nonpublic Privileged). Vector will follow the guidelines in Section 2.69 of the Commission's General Policy and Interpretations in constructing the proposed facilities, and will instruct all contractors and construction personnel accordingly.

**EXHIBIT G** Flow Diagrams Showing Daily Design Capacity and Reflecting Operation With and Without Proposed Facilities

Provided in Volume III to be treated as CEII Nonpublic.

**EXHIBIT G-I** Flow Diagrams Reflecting Maximum Capabilities

Provided in Volume III to be treated as CEII Nonpublic.

**EXHIBIT G-II** Flow Diagram Data

Provided in Volume III to be treated as CEII Nonpublic.

**EXHIBIT H** Gas Supply Data

Omitted. Vector is an open-access pipeline not engaged in merchant activity. Vector's shippers contract for gas supplies accessible to the Vector system.

**EXHIBIT I** Market Data

Provided in Volume I, comprised of copies of the supporting Precedent Agreements.

**EXHIBIT K** Cost of Facilities

Provided in Volume I.

**EXHIBIT L** Financing

Omitted. Vector will finance the cost of the Project through a combination of internally generated funds, partner equity, and increased borrowing.

**EXHIBIT M** Construction, Operation, and Management

Omitted. Construction will be performed under the supervision of Vector's general partner and one or more independent construction firms under the direct supervision of Vector personnel. Vector will manage and operate the facilities once they are placed in service.

**EXHIBIT N** Revenues-Expenses-Income

Provided in Volume I.

**EXHIBIT O** Depreciation and Depletion

Omitted. Vector will depreciate the facilities proposed herein using its then existing depreciation rate for transmission plant.

**EXHIBIT P** Tariff

Omitted. Vector will provide service for expansion shippers pursuant to its existing tariff provisions, as in effect from time to time. Vector does not propose in this filing any changes to its currently effective tariff.

**EXHIBIT Z** Notice of Application

Provided in Volume I.

**IX. REQUEST FOR SHORTENED PROCEDURE**

Vector asks that the Commission act expeditiously with respect to the proposed Clarification to allow the Zone 1 design level to be changed from 404,000 Dth/d to 200,000 Dth/d, resulting in an immediate increase in the long-haul deliverability in Zone 2 from 925,200 Dth/d to 965,400 Dth/d. In order to accommodate current market demand for additional long-haul capacity, Vector requests that the Commission take action by no later than March 1, 2006.

Vector requests that its Compression Expansion Project application for new construction be considered and processed in accordance with the shortened procedures provided by Rules 710, 801, and 802 of the Commission's Rules of Practice and Procedure, 18 C.F.R. §§ 385.710, 385.801, and 385.802. Pursuant to Rule 710, Vector hereby requests that the intermediate decision procedure be omitted and waives hearing and the opportunity for filing exceptions to the decision of the Commission, but reserves the right to apply to the Commission for rehearing and to petition for judicial review of the Commission's decision if this Compression Expansion Project

application is heard under the shortened procedure provided for in the Commission's Regulations, particularly Rules 801 and 802 thereof.

#### **X. FILING REQUIREMENTS**

Pursuant to Rule 2011, 18 C.F.R. § 385.2011, Vector is making this filing in electronic format, and the undersigned certifies that the paper copy contains the same information as the electronic format. No other Commission applications relating to the transactions are described herein, with the exception of the application to amend Vector's Presidential Permit, which is being filed contemporaneously with this application in a separate docket.

A form of notice suitable for publication in the Federal Register is attached as Exhibit Z hereto and a diskette is enclosed containing that notice.

#### **XI. STATEMENT OF ISSUES**

Pursuant to Order No. 663 and Section 385.203(a)(7) of the Commission's regulations, Vector hereby sets forth a Statement of Issues with respect to the instant requests.

##### Clarification

1. Whether the Commission should clarify its prior certificate orders or grant an amendment to such orders in order to modify the existing zone design levels?

The Commission may act to clarify a matter with respect to an issued order (*see e.g., ANR Pipeline Company*, 112 FERC ¶ 61,286 (2005)) or resolve an uncertainty in response to a request under Rule 207(a)(2) or (a)(5) (*see e.g., Nicole Gas Production Ltd.*, 103 FERC ¶ 61,328 (2003)). The Commission may amend an issued certificate pursuant to Part 157 Subpart A, as the Commission did with respect to Vector's certificate in its November 8, 2000, order, 93 FERC

¶ 61,129, amending the Preliminary Determination, 85 FERC ¶ 61,083 (1998) and the final certificate order, 87 FERC ¶ 61,225 (1999).

### Compression Expansion Project

2. Whether the Commission should grant under Section 7 of the NGA the requested certificate authorization to permit the construction and operation of new compressor facilities.

3. Whether the Commission should provide a preliminary determination that the costs of the proposed Project may be rolled-in with Vector's existing facility costs in its next general Section 4 rate case.

For both these issues, Vector would refer the Commission to the recent decision in *CenterPoint Energy Gas Transmission Co.*, 111 FERC ¶ 61,273 at 62,221 (2005).

## **XII. CONCLUSION**

For the reasons stated above, Vector respectfully requests that the Commission: (i) issue no later than March 1, 2006, an order authorizing a change in the Zone 1 and Zone 2 design levels to 200,000 Dth/d and 965,400 Dth/d, respectively, (ii) issue an order no later than November 1, 2006, authorizing Vector to construct and operate two additional compressor stations on its mainline in Will County, Illinois, and Macomb County, Michigan, (iii) determine that Vector may roll-in the costs of the two compressor stations into its rates in its next general rate case, absent a material change in circumstances, and (iv) grant such other authority and approvals as may be necessary and appropriate to effectuate the intended authorizations and to permit Vector to provide service in accordance with the proposed agreements.

Vector submits that the proposed zone design modifications and the installation of new compressor facilities will provide increased capacity on the mainline system needed to satisfy the



incremental demand of many shippers and enhance Vector's ability to provide reliable and competitive natural gas deliveries to existing customers. Therefore, the Vector proposal is in the public interest and thus should be authorized as expeditiously as possible in accordance with the applicable regulations.

Respectfully submitted,

ON BEHALF OF VECTOR PIPELINE L.P.

/s/ Craig R. Fishbeck  
Craig R. Fishbeck  
President of Vector Pipeline, LLC  
General Partner of Vector Pipeline L.P.

Of Counsel:

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John & Hengerer  
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Suite 600  
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Certificate of Service

I hereby certify that I have this day served a copy of Volume I (public) of the foregoing upon each person designated on the official service list for Docket No. CP98-133-000 compiled by the Secretary in that proceeding.

Dated at Washington, D.C. this 30<sup>th</sup> day of November, 2005.

/s/ Kim M. Clark  
Kim M. Clark

**Vector Pipelines  
Index of Customers**

Shipper	Agent	Shipper ID	Transportation MDQ	Negotiated Rate	M2	Point ID	Zone	Quantity	MQ	Point ID	Zone	Quantity	Point Qualifier	Affiliate	Rate Schedule	Contract ID	Start	End
BP Canada Energy Marketing Corp.		248799413	15,000	N	Alliance Interconnect	287415	Zone 1	15,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	15,000	29	N	FT-1	FT1-BP-038/FT1-BPC-0001	01/11/2004	31/03/2007
BP Canada Energy Marketing Corp.		248799413	95,000	N	Washington 10 Receipt	316065	Zone 2	95,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	95,000	29	N	FT-1	FT1-BP-039/FT1-BPC-0002	01/11/2004	31/03/2007 (1)
Consumers Energy Company		6959803	50,000	N	Alliance Interconnect	287415	Zone 1	50,000	Ray Interconnect	378975	Zone 2	50,000	29	N	FT-1	FT1-CEC-029/FT1-CNS-0003	01/01/2004	31/03/2007
Crete Energy Venture LLC		40065091	108,000	Y	Crete Interconnect	316078	Zone 1	108,000	Crete Interconnect	316078	Zone 1	108,000	29	Y	FT-1	FT1-CEV-009/FT1-CRE-0004	01/02/2002	31/01/2027
DTE Energy Trading Inc.		179989231	200,000	Y	Alliance Interconnect	287415	Zone 1	200,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	200,000	29	Y	FT-1	FT1-DTE-002/FT1-DTE-0005	01/12/2000	30/11/2015
DTE Energy Trading Inc.		179989231	11,200	Y	Alliance Interconnect	287415	Zone 1	11,200	St. Clair (US Canada IC) Delivery	287424	Zone 2	11,200	29	Y	FT-1	FT1-DTE-040/FT1-DTE-0007	01/11/2004	31/03/2007 (2)
DTE Energy Trading Inc.		179989231	34,890	N	Milford Junction Receipt	287420	Zone 2	34,890	Guardian Delivery	395745	Zone 1	34,890	29	Y	FT-1	FT1-DTE-041/FT1-DTE-0006	01/04/2004	31/03/2007 (3)
Enbridge Gas Distribution Inc.	Enbridge Operational Services Inc.	246667372	96,000	Y	Alliance Interconnect	287415	Zone 1	75,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	96,000	29	Y	FT-1	FT1-ECG-003/FT1-EGD-0010	01/12/2000	30/11/2015
					Northern Border Interconnect	282410	Zone 1	21,000										
Enbridge Gas Distribution Inc.		246667372	79,000	Y	Alliance Interconnect	287415	Zone 1	25,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	79,000	29	Y	FT-1	FT1-ECG-006/FT1-EGD-0009	01/12/2000	30/11/2015
	Enbridge Operational Services Inc.				Northern Border Interconnect	282410	Zone 1	54,000										
Enbridge Gas Services (U.S.) Inc.		4598699	85,000	Y	Alliance Interconnect	287415	Zone 1	50,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	85,000	29	Y	FT-1	FT1-EGS-001/FT1-EGU-0011	01/12/2000	30/11/2015
	Enbridge Gas Services Inc.				Northern Border Interconnect	282410	Zone 1	35,000										
	Enbridge Operational Services Inc.																	
Enbridge Gas Services (U.S.) Inc.	Enbridge Gas Services Inc.	4598699	12,000	N	Alliance Interconnect	287415	Zone 1	12,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	12,000	29	Y	FT-L	FTL-EGU-0006	01/04/2006	30/04/2006
	Enbridge Operational Services Inc.																	
Michigan Consolidated Gas Company		6958540	-	Y	Belle River Mills Receipt	316070	Zone 2	-	Milford Junction Delivery	316118	Zone 2	-	29	Y	FT-1	FT1-MCG-007/FT1-MCG-0013	01/01/2001	30/11/2020 (4)
Michigan Consolidated Gas Company		6958540	50,000	N	Alliance Interconnect	287415	Zone 1	50,000	Belle River Mills Delivery	287422	Zone 2	50,000	29	Y	FT-1	FT1-MCG-026/FT1-MCG-0014	01/11/2003	31/03/2012
Nexen Marketing U.S.A. Inc.		254171267	11,600	N	Alliance Interconnect	287415	Zone 1	11,600	St. Clair (US Canada IC) Delivery	287424	Zone 2	11,600	29	N	FT-1	FT1-NEX-0125	01/04/2006	31/10/2006
Northern Indiana Public Service Company		6937585	200,000	N	Alliance Interconnect	287415	Zone 1	200,000	Crown Point Interconnect	285077	Zone 1	200,000	29	N	FT-1	FT1-NIP-0124	01/03/2006	31/03/2016 (5)
ONEOK Energy Services Company L.P.		157641445	50,000	N	Alliance Interconnect	287415	Zone 1	50,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	50,000	29	N	FT-1	FT1-ONK-043/FT1-ONK-0018	01/11/2004	31/03/2009
ONEOK Energy Services Company L.P.		157641445	50,000	N	Washington 10 Receipt	316065	Zone 2	50,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	50,000	29	N	FT-1	FT1-ONK-044/FT1-ONK-0019	01/11/2004	31/03/2009 (6)
Peoples Energy Wholesale Marketing LLC		135257843	15,000	N	Northern Border Interconnect	282410	Zone 1	15,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	15,000	29	N	FT-1	FT1-PEW-046/FT1-PEO-0020	01/11/2004	31/03/2007 (7)
Sempra Energy Trading Corp.		609746565	50,000	N	Alliance Interconnect	287415	Zone 1	50,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	50,000	29	N	FT-1	FT1-SET-031/FT1-SMT-0022	01/04/2004	31/03/2007
Sempra Energy Trading Corp.		609746565	17,000	N	Alliance Interconnect	287415	Zone 1	17,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	17,000	29	N	FT-1	FT1-SET-042/FT1-SMT-0021	01/11/2004	31/03/2007
Tenaska Marketing Ventures		624240628	10,000	N	Washington 10 Receipt	316065	Zone 2	10,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	10,000	29	N	FT-1	FT1-TEN-055/FT1-TMV-0023	01/11/2005	31/03/2008 (8)
Union Gas Limited		200408144	80,000	Y	Alliance Interconnect	287415	Zone 1	80,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	80,000	29	N	FT-1	FT1-UGL-004/FT1-UGL-0024	01/12/2000	30/11/2015
Westcoast Energy U.S. Inc.		247342892	160,000	Y	Alliance Interconnect	287415	Zone 1	120,000	St. Clair (US Canada IC) Delivery	287424	Zone 2	160,000	29	N	FT-1	FT1-W-005B/FT1-WES-0026	01/12/2000	30/11/2015
					Northern Border Interconnect	282410	Zone 1	40,000										

- (1) Winter MDQ 95,000 Dth/d - November-March and Summer MDQ 0 Dth/d - April-October.
- (2) Winter MDQ 11,200 Dth/d - November-March and Summer MDQ 0 Dth/d - April-October.
- (3) Winter MDQ 33,469 Dth/d - November-March and Summer MDQ 34,890 Dth/d - April-October.
- (4) Contracted Capacity is equal to the capacity of a single 36-inch 1000 psig MAOP pipeline between Belle River Mills and Milford Junction as determined by a maximum delivery pressure of 1000 psig from MichCon to Vector at the Primary Receipt Point and a delivery pressure of 550 psig from Vector to MichCon at the Primary Delivery Point.
- (5) Various MDQs 200,000 Dth/d 03/31/06-04/30/06, 75,000 Dth/d 05/01/06-10/31/06, 30,000 Dth/d 11/01/06-03/31/16.
- (6) Winter MDQ 50,000 Dth/d - November-March and Summer MDQ 0 Dth/d - April-October.
- (7) Winter MDQ 15,000 Dth/d - November-March and Summer MDQ 0 Dth/d - April-October.
- (8) Winter MDQ 10,000 Dth/d - November-March and Summer MDQ 0 Dth/d - April-October.

**2006 & 2007 Union Dawn to Parkway/Kirkwall Open Seasons**

**Open Season 2006 - Dawn Trafalgar**

<b>Party</b>	<b>Receipt</b>	<b>Delivery</b>	<b>Max</b>	<b>Units</b>	<b>Term</b>	<b>Start Date</b>
Enbridge Gas Distribution Inc.	Dawn	Parkway	106,000	GJ	12	Nov 1/06
TransAlta Cogeneration LP	Dawn	Parkway	11,809	GJ	10	Nov 1/06
Connecticut Natural Gas Corp	Dawn	Parkway	18,077	GJ	11	Nov 1/06
Southern Connecticut Natural Gas Corp	Dawn	Parkway	34,950	GJ	11	Nov 1/06
Brooklyn Union Gas Company	Dawn	Parkway	12,953	GJ	11	Nov 1/06
Keyspan Gas East Corporation	Dawn	Parkway	17,160	GJ	11	Nov 1/06
Boston Gas Company	Dawn	Parkway	9,282	GJ	11	Nov 1/06
Colonial Gas Company	Dawn	Parkway	6,475	GJ	11	Nov 1/06
Essex Gas Company	Dawn	Parkway	2,158	GJ	11	Nov 1/06
EnergyNorth Natural Gas	Dawn	Parkway	4,317	GJ	11	Nov 1/06
Bay State Gas Company	Dawn	Parkway	27,803	GJ	11	Nov 1/06
Northern Utilities Inc	Dawn	Parkway	6,333	GJ	11	Nov 1/06
Yankee Gas Services Co	Dawn	Parkway	43,116	GJ	11	Nov 1/06
Central Hudson Gas & Electric	Dawn	Parkway	10,792	GJ	11	Nov 1/06
National Fuel Gas Distribution	Dawn	Kirkwall	10,791	GJ	11	Nov 1/06
Energy Source Canada Inc.	Dawn	Parkway	2,500	GJ	10	Nov 1/06
Energy Source Canada Inc.	Dawn	Parkway	2,500	GJ	15	Nov 1/06
UBS Energy Canada Inc.	Dawn	Parkway	10,000	GJ	10	Nov 1/06
Stelco Inc.	Dawn	Parkway	17,351	GJ	12	Nov 1/06
TransCanada Pipelines Limited	Dawn	Parkway	248,103	GJ	10	Nov 1/06
BP Canada Energy Company	Dawn	Parkway	20,000	GJ	16	Nov 1/06
City of Kitchener	Dawn	Parkway	4,000	GJ	10	Nov 1/06
Gaz Metro	Dawn	Parkway	35,000	GJ	10	Nov 1/06
<b>Total 2006</b>			<b>661,472</b>			

**Open Season 2007 - Dawn Trafalgar**

<b>Party</b>	<b>Receipt</b>	<b>Delivery</b>	<b>Max</b>	<b>Units</b>	<b>Term</b>	<b>Start Date</b>
<b>February Open Season</b>						
Keyspan Utility Services LLC, as agent for Keyspan Gas East Corporation dba Keyspan Energy Delivery Long Island	Dawn	Kirkwall	138,600	GJ	11	Nov 1/07
Southern Connecticut Natural Gas Corp	Dawn	Parkway	8,903	GJ	11	Nov 1/07
Connecticut Natural Gas Corp	Dawn	Parkway	13,490	GJ	11	Nov 1/07
Keyspan Gas East Corporation	Dawn	Parkway	22,772	GJ	11	Nov 1/07
Keyspan Gas West Corporation	Dawn	Parkway	30,217	GJ	11	Nov 1/07
Yankee Gas Services Co	Dawn	Parkway	20,560	GJ	11	Nov 1/07
Enbridge Gas Distribution	Dawn	Parkway	57,100	GJ	12	Nov 1/07
Gaz Metro	Dawn	Parkway	65,000	GJ	20	Nov 1/07
<b>Total February Open Season</b>			<b>356,642</b>			
<b>October Open Season</b>						
GTAA	Dawn	Parkway	7,500	GJ	11	Nov 1/07
Vermont Gas System	Dawn	Parkway	20,000	GJ	10	Nov 1/07
Sithe Goreway	Dawn	Parkway	125,000	GJ	21	Nov 1/07
<b>Total October Open Season</b>			<b>152,500</b>			
<b>Total 2006</b>			<b>509,142</b>			

**ORIGINAL**

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**November 30, 2005**

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2005 NOV 30 A 11:09  
FILED  
OFFICE OF THE  
SECRETARY  
FEDERAL ENERGY  
REGULATORY COMMISSION

Magalie R. Salas, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Re: Vector Pipeline L.P., Docket No. CP98-131-008, Amendment to Presidential Permit.

Dear Ms. Salas:

Pursuant to Section 153.16(b) of the Commission's regulations, Vector Pipeline L.P. (Vector) hereby files an original and seven (7) copies of the Application of Vector Pipeline L.P. to Amend Presidential Permit. Vector seeks to amend its Presidential Permit to increase the maximum capacity that can flow through the authorized cross-border facilities to reflect a proposed mainline system expansion, certificate authorization for which has been filed with the Commission in a separate docket. Vector does not seek to change the physical configuration of the extant cross-border facilities.

Vector is submitting a non-public version flow diagrams in the form of system analyses as CEII information that are not to be released to the public. Copies of the flow diagrams are excluded from this public version of this filing.

Very truly yours,



Kim M. Clark  
Counsel for Vector Pipeline L.P.

cc: R. Smith

FILED  
OFFICE OF THE  
SECRETARY  
2005 NOV 30 A 11:08  
FEDERAL ENERGY  
REGULATORY COMMISSION

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**VECTOR PIPELINE L.P.**

)

**DOCKET NO. CP05-131-006**

**APPLICATION OF VECTOR PIPELINE L.P.  
TO AMEND PRESIDENTIAL PERMIT**

**ORIGINAL**

Vector Pipeline L.P. (Vector), pursuant to Section 153.16(b) of the regulations of the Federal Energy Regulatory Commission (Commission), seeks to amend the Presidential Permit issued to Vector by the order issued May 27, 1999, as amended by order issued June 13, 2001, and as further amended by order issued May 7, 2003, in the captioned docket, to establish 2300 MMcf/d as the peak flow capability of the international border facilities for which Vector received Natural Gas Act (NGA) Section 3 authorization in the order issued May 27, 1999 in the captioned docket.<sup>1</sup>

**Statement of Issues**

1. Whether it is appropriate to amend Vector's existing Presidential Permit to increase the peak flow capability.

The Commission previously has authorized an increase to the peak day flow capability in *Vector Pipeline L.P.*, 95 FERC ¶ 61,393 (2001) and *Vector Pipeline L.P.*, 103 FERC ¶ 61,146 (2003).

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<sup>1</sup> *Vector Pipeline L.P.*, 87 FERC ¶ 61,225.

## **I. Background**

On December 15, 1997, Vector applied for NGA Section 3 authority and a Presidential Permit to build, construct, and operate certain facilities at the international border between Canada and the United States in connection with the planned construction of the Vector pipeline system. The Commission granted the requested authorizations in its May 27, 1999 order. Article 2 of the Presidential Permit stated that the authorized facilities would have a maximum capacity of 1 MMDth of gas per day. Based on this authority, Vector built the border facilities and placed its pipeline system into service as of December 1, 2000.

On March 2, 2001, Vector requested an amendment to the Presidential Permit to allow gas to flow from Canada to the United States. An amended Presidential Permit was granted in an order issued June 13, 2001.<sup>2</sup> On November 22, 2003, Vector requested an amendment to the Presidential Permit to establish 1330 MMcf/d as the peak day flow capability of the international border facilities. An amended Presidential Permit was granted in an order issued May 7, 2003.<sup>3</sup>

## **II. Reason For The Amendment**

Vector is now proposing, in a separate certificate application, to revise existing design levels and to add compression, both of which are intended to expand Vector's mainline system delivery capability to accommodate shipper requests for service at levels reflected in the attached flow diagrams (CEII - not for public release). This proposed system deliverability increase will not require any change to the existing border facilities, or to the downstream facilities of Vector's Canadian affiliate, Vector Pipeline Limited Partnership, with which Vector interconnects at the

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<sup>2</sup> *Vector Pipeline L.P.*, 95 FERC ¶ 61,393.

<sup>3</sup> *Vector Pipeline L.P.*, 103 FERC ¶ 61,146.

*international border. However, the proposed expansion through Vector's mainline facilities (in the U.S.) will allow, based on updated flow analyses, for volumes to move through the border facilities at a level greater than the currently authorized 1330 MMcf/d.*

Vector estimates the potential post-expansion maximum flow at the border to be 2300 MMcf/d, under certain specified conditions and for certain limited periods of time.<sup>4</sup> Vector, therefore, requests that its Presidential Permit be amended to reflect 2300 MMcf/d as the authorized maximum capacity at the border facilities.

*As noted above, the proposed system expansion will be achieved by changing existing zone design levels and by adding compression to the existing U.S. mainline. No change to the physical configuration of the cross-border facilities themselves would be necessary to achieve the increased physical flow. Therefore, there will be no environmental impact as a result of the requested change to the Presidential Permit.*

### **III. Information Regarding The Applicant**

Pursuant to Section 153.7(a), Vector provides the following information:

1. *The exact legal name of the applicant is Vector Pipeline L.P.*

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<sup>4</sup> This possible flow level cannot be achieved on a sustained basis, since it reflects optimal operational conditions that occur only at limited times during the year coupled with a market demand for service at those times. The operational factors that can influence the level of gas movement through the border facilities include: (i) the throughput in the pipe coming from Joliet, Illinois for delivery into Canada, (ii) the pressure at the Belle River, Michigan interconnect with Michigan Consolidated Gas Company (MichCon), (iii) the delivery pressure of Vector's Canadian affiliate in Ontario, (iv) the amount of gas received at the Belle River interconnect, and (v) the demand for storage withdrawals from the MichCon storage fields at Belle River and the maximum demand for gas deliveries in Ontario. Since these conditions have occurred only sporadically in the past, Vector does not expect such conditions to occur on any more regular basis in the future. In any event, such conditions clearly will not occur on a day-to-day basis.

2. The names, titles, and post office addresses of the persons to whom correspondence in regard to this application are to be addressed are:

Robert F. Smith  
Manager, Regulatory and Administration  
Vector Pipeline, LLC  
Suite 490  
38705 Seven Mile Road  
Livonia, Michigan 48152  
Phone: (734) 462-0234  
Fax: (734) 462-0231  
[bob.smith@vector-pipeline.com](mailto:bob.smith@vector-pipeline.com)

Kim M. Clark  
John & Hengerer  
1200 17<sup>th</sup> Street, N.W.  
Suite 600  
Washington, D.C. 20036  
Phone: (202) 429-8800  
Fax: (202) 429-8805  
[kclark@jhenenergy.com](mailto:kclark@jhenenergy.com)

3. Vector Pipeline L.P. is a limited partnership organized and existing under the laws of the State of Delaware with its principal place of business in Livonia, Michigan. Vector Pipeline L.P. also is authorized to do business in the states of Illinois, Indiana, Michigan, and Wisconsin.

All other aspects of the issued Presidential Permit and the NGA Section 3 authorization remain intact and are not proposed to be changed or modified by this amendment application. Consequently, Vector has not provided the Exhibits listed in Section 153.8 of the regulations, which Exhibits can be found in Vector's December 15, 1997 application. However, a proposed notice of the requested amendment has been provided, and flow diagrams also are included.

#### IV. Conclusion

The requested amendment would change the maximum daily capacity authorized for the natural gas facilities located at the St. Clair River at the international border between the United States and Canada from 1330 MMcf/d to 2300 MMcf/d in order to reflect an increase in the design capacity of the Vector pipeline. Vector is seeking this amendment to its Presidential Permit so that Vector will have in place the necessary authorizations in order to maximize the ability of shippers to move their gas between the United States and Canada should operational and



market conditions support that need. Therefore, Vector's requested amendment is clearly in the public interest, since it will allow, where operational and market conditions permit, additional cross-border capacity that can be used by market participants in both the U.S. and Canada.

WHEREFORE, Vector respectfully requests that the Commission amend the Presidential Permit issued by the May 27, 1999 order (as amended in the June 13, 2001 order and as further amended in the May 7, 2003 order), to change the authorized maximum capacity of the border facilities and for NGA Section 3 purposes from 1330 MMcf/d to 2300 MMcf/d. Vector asks that the Commission approve this amendment by no later than November 1, 2006, consistent with the request of Vector in its contemporaneous certificate filing covering the proposed expansion of the Vector pipeline.

Respectfully submitted,



Kim M. Clark  
Counsel for Vector Pipeline L.P.

Dated: November 30, 2005

**CERTIFICATE OF SERVICE**

I hereby certify that the foregoing document has been this day served on each person designated on the official service list compiled by the Secretary in this proceeding.

**UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION**

**Vector Pipeline L.P.**

**Docket No. CP98-131-006**

**NOTICE OF PROPOSED AMENDMENT  
TO PRESIDENTIAL PERMIT  
(December \_\_, 2005)**

Take notice that on November 30, 2005, Vector Pipeline L.P. (Vector), filed an application to amend the Presidential Permit issued to Vector in the Commission's May 27, 1999 order in the captioned proceeding, as amended in an order issued June 13, 2001 and as further amended in an order issued May 7, 2003. Vector states that the proposed amendment would add to the extant authority to transport gas between the United States and Canada by increasing the maximum capacity permitted to flow through the existing border facilities from 1330 MMcf/d to 2300 MMcf/d resulting from a proposed system expansion for which Vector has sought authorization from the Commission in a separate docket. No additional border facilities would be constructed to implement this requested change.

Any questions regarding this application should be directed to Robert F. Smith, Manager, Regulatory and Administration, Vector Pipeline L.P., 38705 Seven Mile Road, Suite 490, Livonia, Michigan 48152, phone (734) 462-0234; or Kim M. Clark, Esq., John & Hengerer, 1200 17th Street, N.W., Suite 600, Washington, D.C. 20036-3013, phone (202) 439-8808.

There are two ways to become involved in the Commission's review of this project. First, any person wishing to obtain legal status by becoming a party to the proceedings for this project should, on or before the comment date stated below, file with the Federal Energy Regulatory Commission, 888 First Street, NE, Washington, D.C. 20426, a motion to intervene in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 385.214 or 385.211) and the Regulations under the NGA (18 CFR 157.10). A person obtaining party status will be placed on the service list maintained by the Secretary of the Commission and will receive copies of all documents filed by the applicant and by all other parties. Unless filing electronically, a party must submit 14 copies of any paper filing made with the Commission and must mail a copy to the applicant and to every other party in the proceeding. Only parties to the proceeding can ask for court review of Commission orders in the proceeding.

However, a person does not have to intervene in order to have comments considered. The second way to participate is by filing with the Secretary of the Commission, as soon as possible, an original and two copies of comments in support of or in opposition to this project. The Commission will consider these comments in determining the appropriate action to be taken, but the filing of a comment alone will not serve to make the filer a party to the proceeding. The Commission's rules require that persons filing comments in opposition to the project provide copies of their protests only to the party or parties directly involved in the protest.

**Persons who wish to comment only on the environmental review of this project should submit an original and two copies of their comments to the Secretary of the Commission. Environmental commenters will be placed on the Commission's environmental mailing list, will receive copies of the environmental documents, and will be notified of meetings associated with the Commission's environmental review process. Environmental commenters will not be required to serve copies of filed documents on all other parties. However, the non-party commenters will not receive copies of all documents filed by other parties or issued by the Commission (except for the mailing of environmental documents issued by the Commission) and will not have the right to seek court review of the Commission's final order.**

Comments, protests and interventions may be filed electronically via the Internet in lieu of paper. See, 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's web site under the "e-Filing" link.

Comment Date: \_\_\_\_\_

**Magalie R. Salas  
Secretary**

**VECTOR PIPELINE L.P.**

**Application to Amend Presidential Permit**

**Docket No. CP98-131-006**

**FLOW DIAGRAMS**

**[Critical Energy Infrastructure Information - Do Not Release]**

**CRITICAL ENERGY INFRASTRUCTURE INFORMATION**

**Removed From Public Copies**

# DTE Gas Storage Company

Mark Bering

Manager, Business Development

The LDC Forum – Chicago

September 2005

**DTE Energy®**



# DTE Gas Storage Overview

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- Wholly owned subsidiary of DTE Energy Company (NYSE: DTE)
- Manages and develops non-utility natural gas storage assets
  - Washington 10 – 65 Bcf (as of Apr. 2006)
  - Washington 28 – 9 Bcf
- Affiliate of DTE Gas Storage, Pipelines and Processing Company
  - Manages DTE's non-utility natural gas assets
  - 40% ownership of Vector Pipeline [www.vectorpipeline.com](http://www.vectorpipeline.com)
  - 10.5% ownership of Millennium Pipeline [www.millenniumpipeline.com](http://www.millenniumpipeline.com)
  - 6 CO<sub>2</sub> processing plants in northern Michigan

# Location of Current Storage Assets





# Washington 10 Storage Services

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Offer various storage services to meet your needs:

- Firm & Interruptible
- Short & Long Term
- Interstate & Intrastate
- Parks & Loans
- Hub Services
- In field transfers
- Customizable services

Variety of services sold:

- Injection profiles from 91 day to 200 day, flat and ratcheted services
- Withdrawal profiles from 55 day to 130 day, multi-ratcheted services
- Estimated fuel of 0.72% on injection, 0.5% on withdrawal

# Washington 10 Storage Project Update

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## Phase I Expansion (In service April 2005)

- 8.3 Bcf of incremental storage
- Delta pressure field from 1,448 to 1,900 psig
- Addition of 4,750 hp compressor
- New gathering pipeline to operate Washington 10 as two independent fields
- Open season held November/December 2004
- Storage was all sold with 3 year terms

SOLD OUT

# Washington 10 Storage Project Update

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## Phase II Expansion (In service April 2006)

- 14 Bcf of incremental storage
- Delta pressure field from 1,900 to 2,122 psig
- Addition of 2 - 4,750 hp compressors
- New pipeline lateral to Vector/MichCon
- Addition of 3 horizontal wells
  
- Open season held May/June 2005
- Storage was all sold with an average term of 7 ½ years
- Average price was \$0.15 - \$0.20 greater than Phase I prices

SOLD OUT

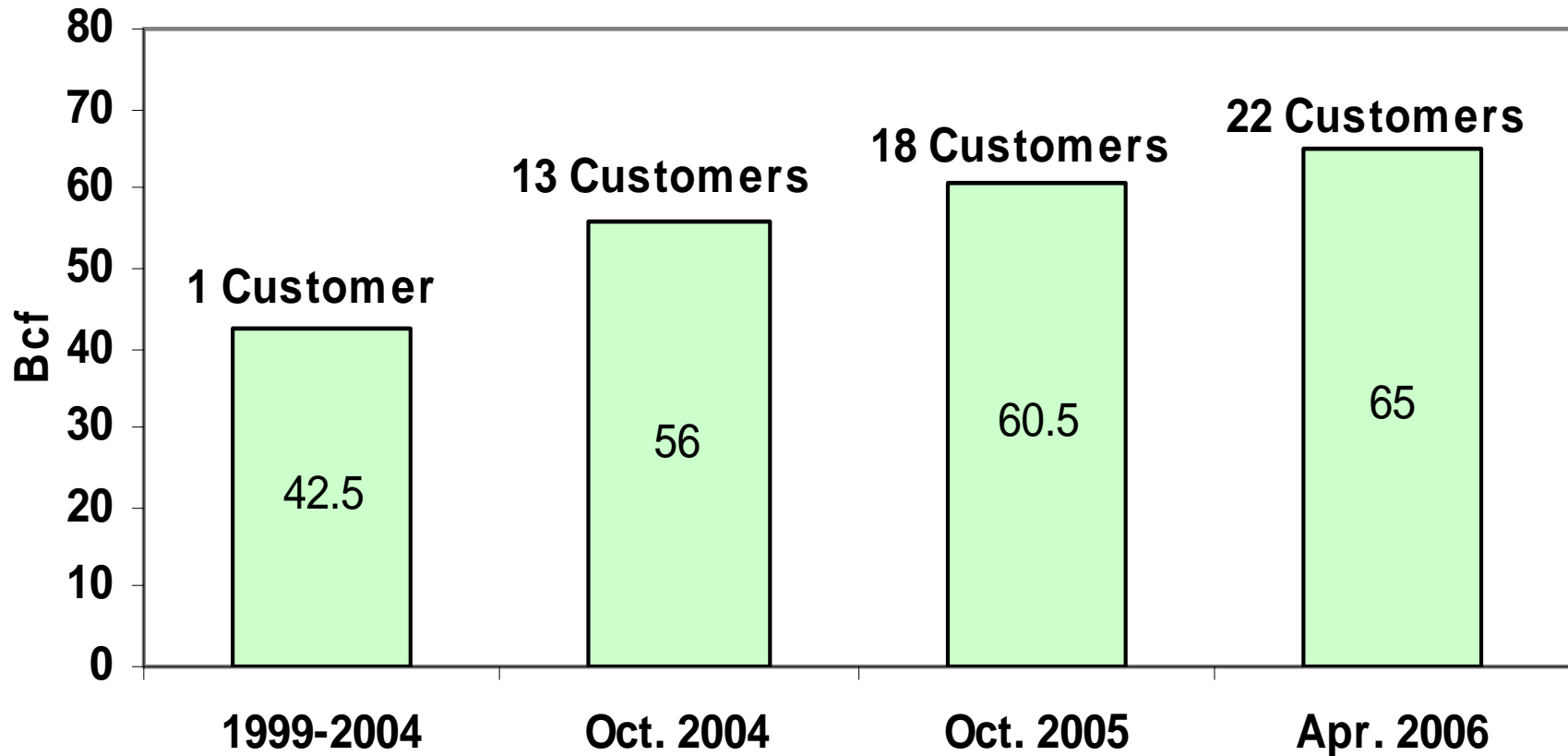
# Washington 10 Storage Project Update

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## Phase III & IV Expansions (Phased in through April 2008)

- Projects have not been publicly announced yet
- Physically connect new fields to create a “Washington 10 Storage Hub”
- Already receiving market interest for this storage

# Serving New Customers at Washington 10



# DTE Gas Storage Development Strategy

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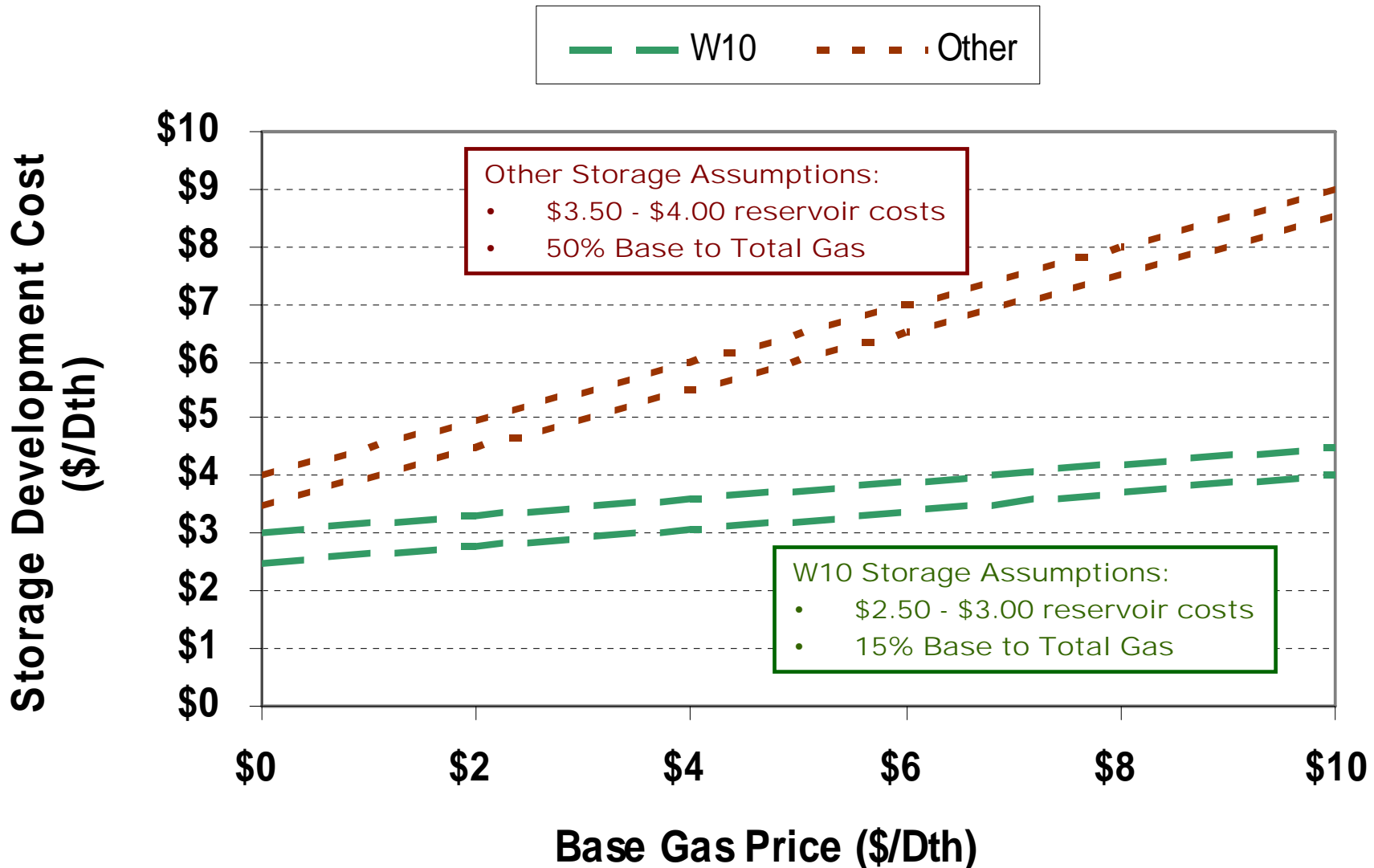
Optimize and expand existing storage fields

Keep development costs below \$4.00 per Dth of capacity

Look for good operating characteristics

- 100-180 days to inject, 50-100 days to withdraw
- Low Base Gas to Total Gas ratio
  - W10 has 11.5 Bcf of Base Gas and 65 Bcf of Working Gas
  - W10 Base Gas to Total Gas ratio of 15%

# Base Gas Cost Impact on Storage Development



# DTE Gas Storage Development Strategy (Cont'd)

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Utilize existing facilities when developing new fields

- Shared compression and/or gas processing

Build near major transportation paths

- Minimize transportation cost between storage and nearest liquid hub
  - Vector Pipeline connects W10 to Chicago and Dawn
  - Vector Pipeline is offering firm backhauls to Chicago

Sell the majority of storage as long term, multi year services

- Lock in the project rate of return, develop the next project
- Short term services sold only to optimize the assets



# Vector Pipeline



# Conclusions

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- Demand for storage is strong and growing
- Customers are paying more and committing to longer term deals
- Cost of Base Gas is becoming a significant cost of developing additional storage and driving up the hurdle rates for new projects
- DTE Gas Storage has expanded its Michigan storage significantly and is well positioned to bring additional storage to market

# Washington 10 Storage Corporation

## Storage Open Season – General Information

April 1<sup>st</sup> 2006 or  
 April 1<sup>st</sup> 2007  
 In Service



DTE Gas Storage is conducting an open season for storage services at the Washington 10 (W10) facility in Michigan to support our Phase 2 expansion. In addition, there is an opportunity for existing long term storage customers to turn back capacity if their needs have changed - contact your DTE Gas Storage representative.

**Washington 10 Storage Corporation** has been in service since 1999, is MPSC regulated and holds a FERC operating statement.

**DTE Gas Storage Company** is responsible for Operating, Managing and Marketing W10. DTE Gas Storage is a wholly-owned subsidiary of **DTE Energy Company**.

More information on DTE Energy is available at [www.dteenergy.com](http://www.dteenergy.com)

**Washington 10 Advantages:**

**Location.** W10 is well connected to the Chicago and Dawn hubs through its Vector interconnect. W10 also offers easy access to Michigan markets through its MichCon interconnect.

**Growth.** W10 working capacity has been expanded from 42.5 Bcf to almost 65 Bcf (by 4/2006).

**Liquidity.** There are now over 20 customers conducting business at Washington 10.

**Customization.** W10 has the flexibility to offer customized services to meet your unique needs.

Being offered is firm storage with a flexible start date of either April 1, 2006 or April 1, 2007, for a minimum term of 5 years and a maximum term of 20 years. Customers have the choice between two different standard injection profiles and two different standard withdrawal profiles, although customized services are possible.

Interested parties must submit a bid by fax by 4pm EDT on June 3, 2005. DTE Gas Storage will notify successful parties for April 2006 service by June 10, 2005 and for April 2007 service sometime thereafter. Precedent agreements will be signed as soon as possible, with all conditions satisfied by September 30, 2005. Conditions shall include MPSC regulatory approval and parties' respective management approvals.

Contact Pete Cianci at 313-235-6445 [ciancip@dteenergy.com](mailto:ciancip@dteenergy.com) or Mark Bering at 313-235-6531 [beringm@dteenergy.com](mailto:beringm@dteenergy.com), for additional information.

Washington 10 offers a variety of storage services to meet your needs:

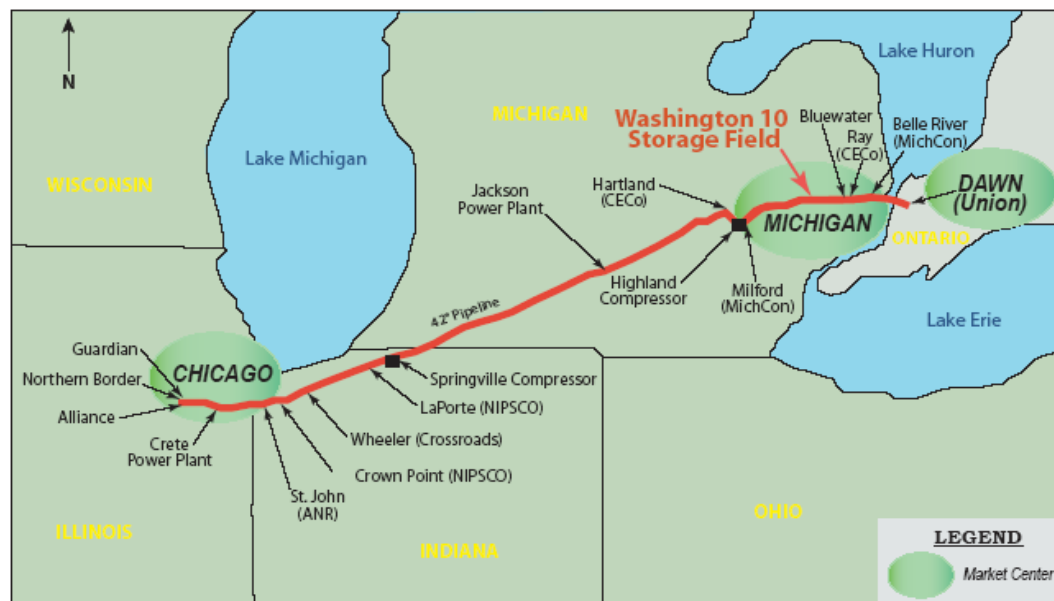
- o Firm & Interruptible
- o Short & Long Term
- o Parks & Loans
- o In field transfers
- o Hub services – Wheeling & Title Transfers
- o Interstate & Intrastate services

Washington 10 offers the following Receipt & Delivery Points:

- W10/Vector**  
**W10/MichCon**
- o Point specific on injection
  - o MichCon major generic point on withdrawal

No cycling restrictions or minimum balance requirements exist.

Authorized Overrun and Interruptible services are permitted when available. The Authorized Overrun/Interruptible Commodity Rate will apply.



# Washington 10 Storage Corporation

## Storage Open Season – Service Parameters

April 1<sup>st</sup> 2006 or  
 April 1<sup>st</sup> 2007  
 In Service

### Injection & Withdrawal Parameters

#### Maximum Daily Injection Quantity (MDIQ)

**Option A: Single ratchet 142 day service through September 30th**  
 If Inventory < 20%, MDIQ is 1.0% of MSQ (10,000 Dth/d per Bcf)  
 If Inventory >= 20%, MDIQ is 0.66% of MSQ (6,600 Dth/d per Bcf)

**Option B: Non-ratcheted 200 day service through October 31st**  
 MDIQ is 0.5% of MSQ (5,000 Dth/d per Bcf)

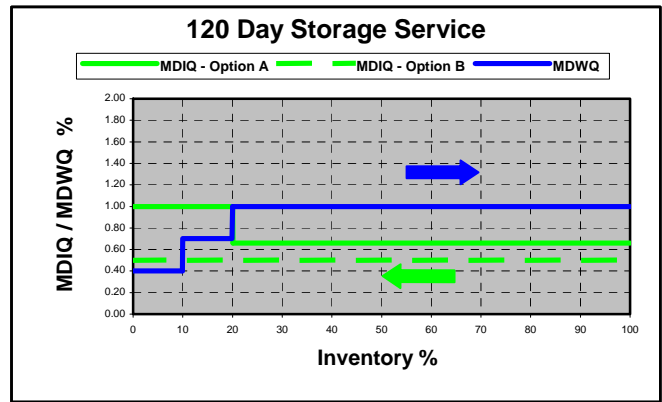
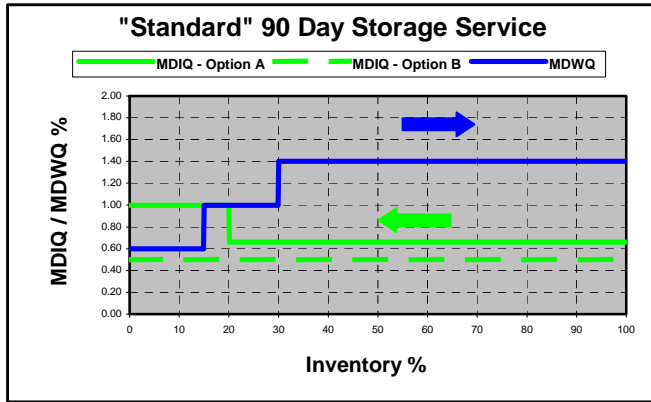
#### Maximum Daily Withdrawal Quantity (MDWQ)

##### 90 Day Service

If Inventory >= 30%, MDWQ is 1.4% of MSQ (14,000 Dth/d per Bcf)  
 If Inventory >= 15%, MDWQ is 1.0% of MSQ (10,000 Dth/d per Bcf)  
 If Inventory > 0%, MDWQ is 0.6% of MSQ (6,000 Dth/d per Bcf)

##### 120 Day Service

If Inventory >= 20%, MDWQ is 1.0% of MSQ (10,000 Dth/d per Bcf)  
 If Inventory >= 10%, MDWQ is 0.67% of MSQ (6,700 Dth/d per Bcf)  
 If Inventory > 0%, MDWQ is 0.4% of MSQ (4,000 Dth/d per Bcf)



### Fuel

Fuel is posted twice a year – at the beginning of the injection season and the beginning of the withdrawal season.

As per W10's tariff, the fuel rate is based on actual fuel used. Fuel is estimated for the upcoming season and adjusted for any previous over or under collection.

**Estimated Fuel Rates:**  
 0.72% on Injection, 0.50% on Withdrawal

### Demand Charges

Demand Charges will be calculated as the Bid Rate times the MSQ divided by 12 and billed monthly over the term.

The Standard Services will have a 1% per year escalator for a 5 year term and 0.6% per year escalator for a 10 year term (based on Year 1 bid rate).

Minimum Bid is \$0.62/Dth for 90 Day Service and \$0.55/Dth for 120 Day Service.

### Commodity Charges

Injection and Withdrawal Commodity Charges are currently \$0.00/Dth as per the Washington 10 tariff.

The Authorized Overrun and Interruptible Rate shall be set at \$0.02/Dth for these long term storage contracts.

**Customized storage services are available.** Design your own service by filling out the attached Bid Request Form or by calling to discuss your specific needs.

**Capacity Turnback Opportunity.** Existing W10 long term storage customers interested in turning back capacity for April 2006 or April 2007 should contact their DTE Gas Storage representative.

For more information, please contact:

Pete Cianci      313-235-6445      [ciancip@dteenergy.com](mailto:ciancip@dteenergy.com)      313-235-6450 Fax  
 Mark Bering      313-235-6531      [beringm@dteenergy.com](mailto:beringm@dteenergy.com)      313-235-6450 Fax



All services provided by Washington 10 Storage Corporation are subject to the rates, terms and conditions of Washington 10's regulatory tariffs.

**WASHINGTON 10 STORAGE CORPORATION  
OPEN SEASON BID REQUEST**

1. Company (exact legal name): \_\_\_\_\_

2. Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. State or Province of Incorporation: \_\_\_\_\_

4. Contact Information:

Primary

Invoices

Nominations

Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

5. Service Type (check one):             Interstate             Intrastate

6. Requested Maximum Storage Quantity (MSQ): \_\_\_\_\_ Dth

7. Type of Service:

Standard 90 Day Service (Skip Sections 8 & 9 below)

w/ Injection Option "A"

w/ Injection Option "B"

**OR**

Standard 120 Day Service (Skip Sections 8 & 9 below)

w/ Injection Option "A"

w/ Injection Option "B"

**OR**

Custom Service (Fill in Sections 8 & 9 below)

8. Requested Maximum Daily Injection Quantity (MDIQ):

Month and/ or % of MSQ	Maximum Daily Injection Quantity

9. Requested Maximum Daily Withdrawal Quantity (MDWQ):

Month and/ or % of MSQ	Maximum Daily Withdrawal Quantity

10. Requested Term of Service:

Start Date:  April 1, 2006    **OR**     April 1, 2007

End Date: \_\_\_\_\_    **Note:** Minimum term of 5 years.

11. Receipt and Delivery Points

Primary Receipt Point:             W10 / MichCon             W10 / Vector

Secondary Receipt Point:         W10 / MichCon         W10 / Vector

Primary Delivery Point:            W10 / MichCon            W10 / Vector

Secondary Delivery Point:         W10 / MichCon         W10 / Vector

12. Terms and Conditions:

- a) W10 must obtain regulatory approval or waive its regulatory out clause within the latter of 10 business days after receiving regulatory approval or September 30, 2005.
- b) Shipper and W10 must obtain approval of their respective senior management or Board of Directors or any other organizational approvals on or before September 30, 2005.

**Year 1 Bid Rate:** \$\_\_\_\_\_ per Dth

**Notes:** Minimum bid of \$0.62/Dth for 90 Day Service.  
Minimum bid of \$0.55/Dth for 120 Day Service.  
1% escalator per year for a 5 year term.  
0.6% escalator per year for a 10 year term.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Phone

\_\_\_\_\_  
Title

\_\_\_\_\_  
Fax

\_\_\_\_\_  
Company

\_\_\_\_\_  
Email

DTE Gas Storage reserves the right to reject any and all bids, at its sole discretion.

Please submit bid via fax at **(313) 235-6450** by 4pm EDT on June 3, 2005.

**PRECEDENT AGREEMENT**

**THIS PRECEDENT AGREEMENT** ("Precedent Agreement") is made this \_\_\_\_ day of \_\_\_\_\_, 2005 by and between Washington 10 Storage Corporation ("Transporter"), a Michigan corporation, and \_\_\_\_\_, a \_\_\_\_\_ corporation ("Shipper"). Transporter and Shipper may sometimes be referred to separately as "Party" or jointly as "Parties" in this Precedent Agreement.

**RECITALS**

Transporter operates the Washington 10 storage field.

Shipper has requested, and Transporter has agreed to provide, firm natural gas storage service, pursuant to the terms and conditions described in this Precedent Agreement and the Gas Storage Service Agreement attached hereto as Attachment A.

In the event that the conditions precedent set forth in Section 3 are satisfied, Transporter will provide service and Shipper will receive service in accordance with the provisions of the effective Statement of Operating Conditions and the General Terms and Conditions ("GT&C") contained therein on file with the Federal Energy Regulatory Commission ("Commission"), as they may be amended or superseded from time to time in accordance with the Commission's rules and regulations, and the Rate Book on file with the Michigan Public Service Commission ("MPSC"), as it may be amended or superseded from time to time in accordance with the MPSC's rules and regulations.

Therefore, Transporter and Shipper agree as follows:

1. **Firm Storage Service Obligation**

Transporter shall provide firm storage service with an MSQ of \_\_\_\_\_ Dth. The rates and parameters of the storage service are set forth on Attachment A.

The storage service will be for a term of \_\_\_\_\_ years, commencing on April 1, \_\_\_\_\_.

2. **Service Agreement**

The Parties agree to execute a Gas Storage Service Agreement substantially in the form attached as Attachment A, after all of the conditions precedent set forth in Section 3 have been satisfied.

3. **Conditions Precedent**

The Parties' obligations to execute the Gas Storage Service Agreement pursuant to Section 2 are subject in all respects to the satisfaction of all of the following conditions precedent:



- a. Transporter needs regulatory approval for its storage field expansion, which will be on file with the MPSC by May 2005.
- b. Shipper must obtain regulatory approval or waive its regulatory out clause per this section within the latter of 10 business days after Transporter has received regulatory approval or September 30, 2005. It is estimated that Transporter will receive regulatory approval by August or September of 2005.
- c. Shipper and Transporter obtaining the approval of their respective senior management or Board of Directors or any other organizational approvals on or before September 30, 2005.

The terms contained in this Section 3 may be extended or modified by mutual written agreement between the Parties.

#### 4. **Termination**

Either Party may terminate this Precedent Agreement if any condition precedent in Section 3 is not satisfied by the date specified for the satisfaction of such condition precedent. Such termination will be effective upon ten days written notice to the other Party. A Party's notice of termination for failure to satisfy a condition precedent shall not become effective if such condition precedent is satisfied prior to the expiration of the 10-day notice period.

This Precedent Agreement will automatically terminate upon execution of a Gas Storage Service Agreement in the form of Attachment A and thereafter the rights and obligations of the Parties shall be as provided for in the Gas Storage Service Agreement, as amended and in effect from time to time.

If this Precedent Agreement is terminated pursuant to this Section 4, such termination shall be without liability, damages, costs or expenses of either Party to the other Party or to any of the other Party's shareholders, directors, officers, employees, agents, or representatives; and the Parties shall have no further rights or obligations whatsoever pursuant to this Agreement.

NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE.

5. **Assignment**

Any entity that shall succeed by purchase, merger, consolidation, or other transfer to the properties of either Transporter or Shipper, either substantially or as an entirety, shall be entitled to the rights and shall be subject to the obligations of its predecessor in interest under this Precedent Agreement. Either Party may, without relieving itself of its obligations under this Precedent Agreement, assign any of its rights hereunder to a company with which it is affiliated, but otherwise no assignment of this Precedent Agreement or any of the rights or obligations hereunder shall be made, unless there first shall have obtained the written consent thereto of the other party to this Precedent Agreement, which consent shall not be unreasonably withheld. If this Precedent Agreement is assigned to an affiliate of Shipper, Shipper shall remain liable for any obligations under this Precedent Agreement unless such affiliate is, in the reasonable opinion of Transporter, creditworthy. Once the Gas Storage Service Agreement is executed, it is agreed that any assignment of such Gas Storage Service Agreement is subject to the effective Statement of Operating Conditions and the General Terms and Conditions contained therein on file with the Commission and the Rate Book on file with the MPSC and the terms of this Precedent Agreement shall no longer control.

6. **Modification or Waiver**

No modification or waiver of the terms and provisions of this Precedent Agreement may be made except by the execution of a written amendment to this Precedent Agreement.

7. **Supersedes Other Agreements**

This Precedent Agreement and Attachment A hereto reflect the whole and entire agreement among the Parties with respect to the subject matter hereof and supersede all prior agreements and understandings among the Parties with respect to the subject matter hereof.

8. **Notices**

Notices under this Precedent Agreement must be sent

**If to Transporter:**

Washington 10 Storage Corporation  
2000 Second Avenue, 2005 WCB  
Detroit, MI 48226  
Attention: President  
Facsimile: (313) 235-6450

**If to Shipper:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Any Party may change its address by written notice to that effect to the other Party. Notices given under this Section are deemed to have been effectively given upon the third (3rd) day following the day when the notice properly addressed and postpaid is placed in the United States mail. It is expressly understood and agreed, however, that any notices referred to in this Precedent Agreement must first be delivered by telex, facsimile or other similar means, in accordance with the dates and times provided in this Precedent Agreement and must be mailed as soon as practicable thereafter.

9. **Governing Law**

THIS PRECEDENT AGREEMENT SHALL BE INTERPRETED, PERFORMED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF MICHIGAN. IT IS AGREED THAT ANY AND ALL LITIGATION RELATED TO THIS AGREEMENT MUST BE BROUGHT IN EITHER A STATE OR FEDERAL COURT LOCATED IN THE STATE OF MICHIGAN, AND EACH PARTY, FOR PURPOSES OF ANY SUCH LITIGATION, SUBMITS TO THE EXCLUSIVE JURISDICTION AND VENUE OF THAT COURT.

10. Both parties agree that there is no third party beneficiary to this Precedent Agreement.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Precedent Agreement to be duly executed in counterparts by their duly authorized officers as of the date first written above.

**WASHINGTON 10 STORAGE CORPORATION**

By: \_\_\_\_\_

Title: \_\_\_\_\_

\_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

## **GAS STORAGE SERVICE AGREEMENT**

This Firm Gas Storage Agreement (“Agreement”) is made and entered into as of the \_\_\_\_ day of \_\_\_\_\_, 200\_, by and between Washington 10 Storage Corporation, a Michigan corporation (“Transporter”), and \_\_\_\_\_, a \_\_\_\_\_ corporation (“Shipper”).

### **INTRODUCTION**

The parties agree that Transporter shall perform and Shipper shall receive service in accordance with the provisions of the effective Statement of Operating Conditions and the General Terms and Conditions (“GT&C”) contained therein on file with the Federal Energy Regulatory Commission (“Commission”), as they may be amended or superseded from time to time in accordance with the Commission’s rules and regulations, and the Rate Book on file with the Michigan Public Service Commission (“MPSC”), as it may be amended or superseded from time to time in accordance with MPSC’s rules and regulations.

### **ARTICLE I: TYPE OF SERVICE**

- The service requested is intrastate service.
- The service requested is interstate service. Transporter agrees to provide firm storage service in accordance with this Agreement and Transporter’s General Terms and Conditions contained in its Statement of Operating Conditions pursuant to Section 284.224 of the Federal Energy Regulatory Commission’s Regulations, as they may be revised from time to time, and that Shipper:
  - is an “interstate pipeline” within the meaning of NGPA Section 2(15); or
  - is a “local distribution company served by an interstate pipeline” within the meaning of NGPA Section 2(17) and Section 311; or
  - is authorized to arrange transportation service under Section 311 on behalf of such interstate pipeline or local distribution company.

### **ARTICLE II: RATES**

The rate to be paid by Shipper to Transporter for the Firm Storage service provided hereunder shall consist of a Monthly Deliverability Rate, a Monthly Capacity Rate, an Injection Rate, a Withdrawal Rate and an Authorized Overrun Rate as specified in Exhibit I below, and a fuel component as posted on Transporter’s EBB.

Maximum rates, charges, and fees shall be applicable for the entitlements and quantities delivered pursuant to this Agreement unless Transporter has advised Shipper in writing that it has agreed otherwise. It is further agreed that Transporter may seek authorization from the Commission and/or other appropriate body at any time and from time to time to change any rates, charges,

or other provisions in the Statement of Operating Conditions, and Transporter will have the right to place such authorized changes in effect. This Agreement shall be deemed to include such changes and any changes which become effective by operation of law and Commission order.

### **ARTICLE III: TERM OF AGREEMENT**

This Agreement shall become effective beginning \_\_\_\_\_, 200\_, and this Agreement shall terminate on \_\_\_\_\_, 200\_.

### **ARTICLE IV: CONTRACT QUANTITIES**

Stated in Exhibit I.

### **ARTICLE V: RECEIPT AND DELIVERY POINTS**

Stated in Exhibit I.

### **ARTICLE VI: INCORPORATION BY REFERENCE**

The provisions of Transporter's Statement of Operating Conditions are specifically incorporated herein by reference and made a part hereof.

### **ARTICLE VII: NOTICES**

All notices can be given by telephone or other electronic means. However, such notices shall be confirmed in writing at the addresses below. Shipper and Transporter may change the addresses below by written notice to the other without the necessity of amending this Agreement.

#### **TRANSPORTER:**

WASHINGTON 10 STORAGE CORPORATION  
2000 Second Avenue  
2429 WCB  
Detroit, Michigan 48226-3405  
Attention: Vice-President, Washington 10 Storage Corporation  
Telephone: (313) 235-6444  
Fax: (313) 235-6450

**SHIPPER:**

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**INVOICES AND STATEMENTS**

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**NOMINATIONS**

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**ALL OTHER MATTERS**

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**ARTICLE VIII: FURTHER AGREEMENT**

Article II is amended to add the following sentence at the end of the first paragraph:

The Monthly Deliverability Rate and Monthly Capacity Rate shall be paid in the form of a monthly demand charge of \$\_\_\_\_\_.

IN WITNESS THEREOF, the parties hereto have caused this Agreement to be signed by their respective Officers and Representatives there unto duly authorized to be effective as of the date stated above.

**SHIPPER:** \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**TRANSPORTER: WASHINGTON 10 STORAGE CORPORATION**

By: \_\_\_\_\_

Title: Vice President \_\_\_\_\_

Date: \_\_\_\_\_







**The Northeast Utilities System**

January 27, 2006

Dear Sir or Madam,

Yankee Gas Services Company ("Yankee") invites you to bid on this Request for Proposal ("RFP") for firm supplies and services for the period of April 1, 2006 through October 31, 2007 (the "Contract Period"). Yankee is soliciting firm supplies and services under the following scenarios:

**SCENARIO 1: Washington 10 Storage Injection and Withdrawal Management with Deliveries at Dawn, Ontario**

Yankee requires a storage injection service for the summers of 2006 ("Summer 2006") and 2007 ("Summer 2007") at its Washington 10 storage in Michigan. Yankee also requires a withdrawal service as outlined below for the months of November 2006 through March 2007 (the "Winter Period"). Yankee's requirements for this service are as follows:

- 1) Yankee will release to the supplier the rights to its Washington 10 storage contract. The parameters of the storage contract are as follows:
  - o MSQ: 4,230,000 Dth.
  - o MDIQ: 22,000 Dth/day [REDACTED].
  - o MDWQ: 37,200 Dth/day [REDACTED].
- 2) Injections shall be made into Yankee's Washington 10 storage, which must be physically filled to 100% by the end of October.
- 3) Yankee shall have the ability to call on withdrawals from its storage on any day during the Winter Period for a volume anywhere between 0% and 100%, at Yankee's sole option. Yankee will notify the supplier [REDACTED] of its withdrawal nomination. [REDACTED].
- 4) On any day in which Yankee nominates a withdrawal, supplier shall cause a volume of gas, reduced for the applicable withdrawal fuel and for fuel on Vector Pipeline, to be delivered to Dawn, Ontario.
- 5) [REDACTED]
- 6) All capacity released reverts back to Yankee on November 1, 2007.

**SCENARIO 2: Washington 10 Storage Injection and Withdrawal Management with Deliveries at Waddington, NY**

Yankee requires a storage injection service for the summers of 2006 ("Summer 2006") and 2007 ("Summer 2007") at its Washington 10 storage in Michigan. Yankee also requires a withdrawal service as outlined below for the months of November 2006 through March 2007 (the "Winter Period"). Yankee's requirements for this service are as follows:

- 1) Yankee will release to the supplier the rights to its Washington 10 storage contract, as well as the corresponding transportation rights from Dawn, Ontario to Waddington, NY on Union Gas and TransCanada. The parameters of the storage contract are as follows:
  - o MSQ: 4,230,000 Dth.
  - o MDIQ: 22,000 Dth/day [REDACTED].
  - o MDWQ: 37,200 Dth/day [REDACTED].
- 2) Injections shall be made into Yankee's Washington 10 storage, which must be physically filled to 100% by the end of October.
- 3) Yankee shall have the ability to call on withdrawals from its storage on any day during the Winter Period for a volume anywhere between 0% and 100%, at Yankee's sole option. Yankee will notify the supplier [REDACTED] of its withdrawal nomination. [REDACTED].
- 4) On any day in which Yankee nominates a withdrawal, supplier shall cause a volume of gas, reduced for the applicable withdrawal fuel and for fuel on Vector Pipeline and on TransCanada, to be delivered to Waddington, NY.
- 5) [REDACTED]
- 6) All capacity released reverts back to Yankee on November 1, 2007.

Reliability is a critical concern to Yankee. We would expect all proposals to be on a firm basis, detailing the specific reliability measures that will ensure deliveries each day that they are requested.

Yankee intends to contract with companies that have executed a NAESB purchase and sales agreement with Yankee. All proposals submitted must include your company's current bond ratings from either S&P or Moody's. If your subsidiary is unrated, please provide the above bond ratings and most recent audited financials of your parent company. In addition, all finalized contracts must include appropriate credit protections, as deemed necessary by Yankee.

We would appreciate your response by the close of business on February 10, 2006. Please mail and fax your completed response to me at the following address and fax number:

Lisa Cullen, Supply Portfolio Analyst  
Yankee Gas Services Company  
107 Selden Street  
Berlin, CT 06037  
Phone (860) 665-5935  
Fax (860) 665-6296  
E-Mail: Cullelm@nu.com

Yankee looks forward to doing business with your company and to cultivating a mutually beneficial relationship. If you have any questions at all, please call me at the number listed above.

Sincerely,

Lisa Cullen  
Supply Portfolio Analyst  
Yankee Gas Services Company



Bay State Gas Company  
*A NiSource Company*

## **REQUEST FOR PROPOSALS**

### **INTRODUCTION**

Bay State Gas Company (“Bay State,” or the “Company”) invites proposals from organizations capable of and interested in managing certain of the Company’s storage and transportation assets.

### **COMPANY BACKGROUND**

Bay State is a subsidiary of NiSource Inc., a holding company with headquarters in Merrillville, Indiana., whose operating companies engage in natural gas transmission, storage and distribution, as well as electric generation, transmission and distribution. NiSource companies serve a high-growth energy corridor from the Midwest to the Mid-Atlantic to New England. With approximately 3.3 million natural gas customers, NiSource is the third largest gas company in the nation. Bay State serves approximately 280,000 natural gas customers.

## REQUEST FOR PROPOSAL – PACKAGE #1

### OBJECTIVE

The purpose of this Request for Proposal (“RFP”) is to solicit a third party asset manager for Bay State’s Tennessee Gas Pipeline (“TGP”) FSMA storage and associated transportation assets.

### DESCRIPTION OF THE TGP STORAGE CONTRACT

<b>Term:</b>	May 1, 2006 – April 30, 2007
<b>TGP FSMA Storage Capacity:</b>	1.22 BCF
<b>Max. Daily Injection Quantity (MDIQ):</b>	8,151 Dth
<b>Max. Daily Withdrawal Quantity (MDWQ):</b>	19,755 if inventory exceeds 30% 16,618 if inventory is between 20% & 30%, else 12,547 (ratchet 2 quantity)
<b>Primary Injection Meter:</b>	#060018 (Ellisburg)
<b>Primary Withdrawal Meter:</b>	#070018 (Ellisburg)

Bay State cannot withdraw an average of more than 110% of its ratchet 2 quantity (12,547) throughout any month, unless an equivalent offsetting injection or storage transfer is made. During the winter, winning bidder must allow for intraday injections/withdrawals as requested by Bay State during the November 1, 2006 to April 30, 2007 period. . Bay State will use all available pipeline OBA prior to nominating intraday storage activity.

### DESCRIPTION OF THE TRANSPORTATION CONTRACTS

Bay State will assign or agency the following transportation capacity on TGP:

#### SUMMER CAPACITY

**Type of Transportation Capacity:** TGP FT-A

**Term:** May 1, 2006 – Oct. 31, 2006

**MDQ:** 10,000 Dth total:

**Primary Receipt Point** 4,050 Dth TGP zone 0 (35%)  
5,100 Dth TGP Zone 1 500 leg (45%)  
2,400 Dth TGP Zone 1 800 leg (20%)

Primary Delivery Point: #020107 (Agawam)

The winning bidder will be required to deliver a total volume of 900,000 Dth of natural gas to Tennessee meter #060018, the Ellisburg injection meter, for storage injection into Bay State's FSMA storage account. Bay State will use commercially reasonable efforts to facilitate storage transfers or overinjections as long as the incremental costs of such actions are borne by the winning bidder. Regardless of when gas is physically delivered for injection into storage, Bay State will pay for the gas as if it were injected ratably over the May, 2006 through October, 2006 term, or 150,000 Dth per month. The commodity price of the gas shall be the weighted average monthly price (35% from TGP zone 0, 45% from TGP zone 1 500 leg, and 20% from TGP zone 1 800 leg) as reported by Inside FERC's Gas Market Report from the applicable TGP receipt zones plus all applicable weighted average FT-A commodity charges and fuel required to transport the gas to the Ellisburg injection meter.

### YEAR-ROUND CAPACITY

**Type of Transportation Capacity:** TGP FT-A: Zone 4 to Zone 6

**Term:** May 1, 2006 – April 30, 2007

**MDQ:** A) 12,547 Dth  
B) 5,000 Dth

**Primary Receipt Point:** A) (#070018) Ellisburg  
B) (#070012) Ellisburg

**Primary Delivery Point:** A) #020107 (Agawam) or #020206 (Pleasant St.)  
B) #020107 (Agawam)

Winning bidder must deliver to meter #020107 the lower of the combined TGP 4-6 capacity MDQs or the TGP FSMA MDWQ, including storage ratchets and intraday nomination changes subject to TGP's restrictions. Bay State will reimburse the asset manager for all variable commodity and fuel charges associated with delivery of storage gas to Bay State's citygate, just as if Bay State were nominating the gas itself.

On April 30, 2007, the winning bidder must ensure that the amount of storage gas left in the facility corresponds to the beginning inventory as of May 1, 2006, plus the 900,000 Dth of purchases made for injection (less injection fuel), minus the net of all BSG nominated and scheduled injections and withdrawals during the November 1, 2006 – April 30, 2007 term.

Bay State recognizes that the assets being agencied/released to the winning bidder would provide the winning bidder with opportunities to make off-system sales on the days that the assets are not being fully utilized for injections. Bay State wishes to share in that revenue stream. The winning bidder should express the value it would be willing to pay Bay State as a guaranteed revenue payment:

Value paid to Bay State \_\_\_\_\_

## REQUEST FOR PROPOSAL – PACKAGE #2

### OBJECTIVE

The purpose of this Request for Proposal (“RFP”) is to solicit a third party asset manager for Bay State’s Dominion GSSTE Storage facility.

### DESCRIPTION OF THE DOMINION GSSTE STORAGE CONTRACT

**Term:** May 1, 2006 – April 30, 2007

**Capacity:** 1,441,753 Dth of capacity

#### Maximum Daily

**Injection Quantity (MDIQ):** 8,010 Dth if inventory is below 50%  
6,737 Dth if inventory is above 50%

#### Maximum Daily

**Withdrawal Quantity:  
(MDWQ)** 14,758 Dth if the storage inventory is above 430,000 Dth.  
13,577 Dth if inventory is between 230K and 430K Dth.  
10,331 Dth if inventory is between 140K and 230K Dth.  
9,298 Dth if the storage inventory is below 140,000 Dth.

**Primary Receipt Points:** #40208 (Oakford),  
#40206 (Leidy – Tetco),

**Primary Delivery Points:** #40206 (Leidy – Tetco),  
#40301 (Leidy – Transco),  
#40208 (Oakford),  
#40201 (Chambersburg),  
#10002 (storage point)

During any one month, total withdrawals cannot exceed the following formula:  $[87.5\% \times \text{MDWQ} \times (\# \text{ of days in a given month})]$ . During the winter 65% of the Nov 1, 2005 inventory balance must be withdrawn by April 15, 2006. During this period injections are allowed and do not negatively impact the 65% must turn requirement.

### DESCRIPTION OF THE TRANSPORTATION CONTRACTS

Bay State will assign or agency the following transportation capacity:

**SUMMER TRANSPORTATION CAPACITY**

**Type of Transportation:** No-Notice CDS  
**Term:** May 1, 2006 – October 30, 2006  
**MDQ:** 36,369 Dth,  
**Primary receipt meters:** STX: 6,000  
ETX: 4,500  
WLA: 9,000  
ELA: 16,869  
**Primary delivery meters:** Lambertville/Hanover (M3)

This capacity is to be used for storage withdrawal:

**YEAR-ROUND CAPACITY**

**Type of Transportation:** TETCO FT  
**Term:** May 1, 2006 – April 30, 2007  
**MDQ:** 4,235  
**Primary receipt meter:** Leidy (meter # 75931)  
**Primary delivery meter:** Lambertville (meter # 70087)

**TRANSCO TRANSPORTATION:**

**Type of Transportation:** FT  
**Term:** May 1, 2006 – April 30, 2007  
**MDQ:** 1,254 Dth



**Primary receipt meter:** Wharton (interconnect of Transco and National Fuel)

**Primary delivery meter:** Centerville (interconnect of Transco and Algonquin)

**ALGONQUIN TRANSPORTATION:**

**Type of Transportation:** AFT-5

**Term:** May 1, 2006 – April 30, 2007

**MDQ:** 13,504 Dth

**Primary Receipt Point:** Lambertville (meter # 210)

**Primary Delivery Point:** Brockton (meter # 024)

**ALGONQUIN TRANSPORTATION:**

**Type of Transportation:** AFT-1 Transportation

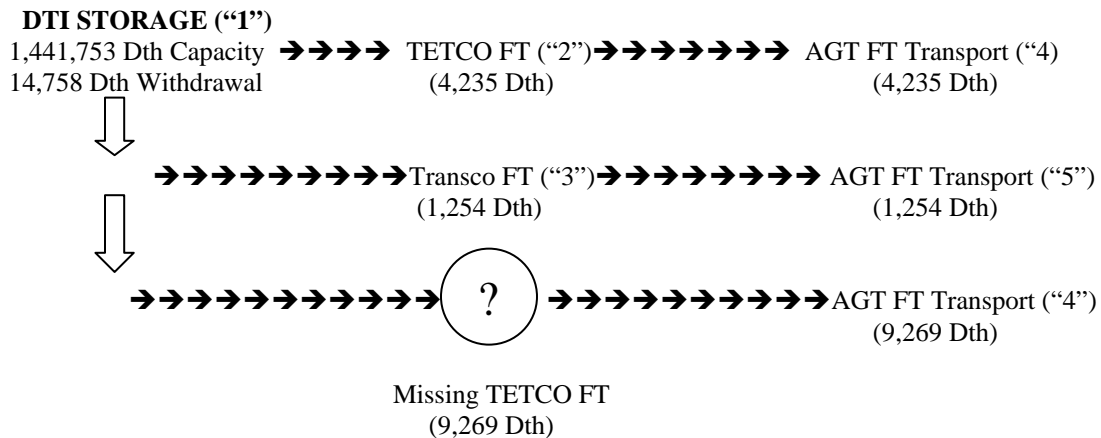
**Term:** May 1, 2006 – April 30, 2007

**MDQ:** 1,254 Dth/D

**Primary Receipt Point:** Centerville (meter # 220)

**Primary Delivery Point:** Brockton (meter # 024)

**PATH DIAGRAM**



The asset manager will be required to deliver for injection 948,000 Dth at the primary receipt points for Bay State's GSSTE storage account by October 31, 2006. Bay State will use commercially reasonable efforts to facilitate storage transfers or overinjections as long as the incremental costs of such actions are borne by the winning bidder. Regardless of when gas is physically delivered for injection into storage, Bay State will pay for the gas as if it were injected ratably over the May 2006 through October 2006 term, or 158,000 Dth per month. The commodity price of the storage injection gas shall be the average monthly price as reported by Inside FERC's Gas Market Report from TETCO ELA plus all applicable TETCO CDS variable transportation and fuel charges required to deliver the gas into the storage facility at Oakford.

Bay State would also like to partner with the asset manager to seamlessly ensure that Bay State's storage gas be delivered to Bay State's Brockton citygate on days in which Bay State nominates storage withdrawals. The asset manager would be required during the winter to deliver the MDWQ (less fuel) to Bay State's AGT citygate, meter #24. Intraday request must be honored, but Bay State would utilize its OBA and SS-1 storage deliverability prior to making any intraday changes. In order to ensure that the full storage withdrawal quantities are delivered to Bay State's citygate, the winning bidder would need to either swap out 9,269 Dth of DTI storage withdrawals for Lambertville or AGT deliveries, or obtain 9,269 Dth of M3 transportation from Leidy to Lambertville on TETCO (see diagram above). Bay State will reimburse the winning bidder for all variable commodity transportation charges and fuel loss incurred to deliver the gas to its citygate. Bay State would be seeking to pay for the 9,269 Dth of capacity separately. Below is a suggested response format to this RFP:

:

Value to acquire M3-M3 capacity \_\_\_\_\_

Bay State recognizes that the assets being agencied/released to the winning bidder would provide the winning bidder with opportunities to make off-system sales on the days that the assets are not being fully utilized for injections. Bay State wishes to share in that revenue stream. The winning bidder should express the value it would be willing to pay Bay State as a guaranteed revenue payment:

Value paid to Bay State (excluding the M3-M3 charges) \_\_\_\_\_

Bay State will reimburse the winning bidder for all variable commodity transportation charges and fuel loss incurred to deliver the gas to its citygate, assuming the first (9,269 + 4,235=) 13,504 Dth of withdrawals flow on TETCO FT capacity, with the remaining 1,254 flowing on Transco FT as shown in the above diagram.

On April 31, 2007, the winning bidder must ensure that the amount of storage gas left in the facility corresponds to the beginning inventory as of May 1, 2006, plus the 800,000

Dth of purchases made for injection (less injection fuel), minus the net of all BSG nominated and scheduled injections and withdrawals during the November 1, 2006 – April 30, 2007 term.

### **REQUEST FOR PROPOSAL – PACKAGE #3**

#### **DESCRIPTION OF THE DTE WASHINGTON 10 STORAGE CONTRACT:**

**Term:** May 1, 2006 – October 31, 2006

**Capacity:** 1,821,500 Dth of capacity

**Maximum Daily Injection Quantity (MDIQ):** 10,000 Dth (Firm)

**Maximum Daily Withdrawal Quantity (MDWQ):** 26,500 Dth (interruptible).

**Primary Receipt Points:** W10/Michcon Interconnect  
W10/Michcon Interconnect (Secondary)

**Primary Delivery Points:** Washington 10/Vector Interconnect  
W10/Michcon Interconnect (Secondary)

#### **SUMMER TRANSPORTATION CAPACITY**

##### **VECTOR TRANSPORTATION (#1):**

**Type of Transportation:** Firm

**Term:** May 1, 2006 – October 31, 2006

**MDQ:** 10,000 Dth

**Primary Receipt Point:** Alliance (Joliet)

**Primary Delivery Point:** Washington 10

This transportation path includes secondary points within the primary path and out of path secondaries (backhaul) from Washington 10 to Crown Point, Wheeler, LaPorte, Guardian, ANR, Northern Border or Alliance

**VECTOR TRANSPORTATION (#2):**

**Type of Transportation:** Firm  
**Term:** May 1, 2006 – October 31, 2006  
**MDQ:** 5,730 Dth/d  
**Primary Receipt Point:** Alliance (Joliet)  
**Primary Delivery Point:** Dawn

This transportation path includes secondary points within the primary path and out of path backhauls.

**VECTOR TRANSPORTATION (#3):**

**Type of Transportation:** Firm  
**Term:** May 1, 2006 – October 31, 2006  
**MDQ:** 20,915 Dth/d  
**Primary Receipt Point:** Washington 10  
**Primary Delivery Point:** Dawn

This transportation path includes secondary points within the primary path, and out of path backhaul to Washington 10 storage.

During the May – October timeframe, the asset manager will be required to deliver 1,821,498 Dth for injection into Washington 10 storage. Regardless of when gas is physically delivered for injection into storage, Bay State will pay for the gas as if it were injected ratably over the May 2006 through October 2006 term, or 303,583 Dth per month. The commodity price of the storage injection gas shall be the average monthly price as reported by Inside FERC's Gas Market Report from Joliet plus all applicable Vector fuel and variable transportation charges required to deliver the gas into the Washington 10 storage facility.

Bay State recognizes that the assets being agencied/released to the winning bidder would provide the winning bidder with opportunities to make off-system sales on the days that the assets are not being fully utilized for injections. Bay State wishes to share in that revenue stream. The winning bidder should express the value it would be willing to pay Bay State as a guaranteed revenue payment:

Value paid to Bay State \_\_\_\_\_

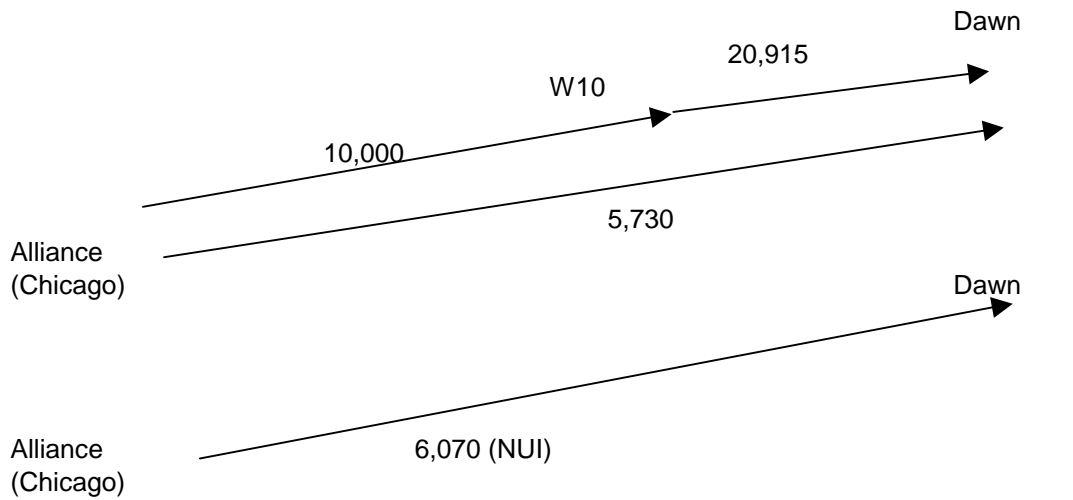
**REQUEST FOR PROPOSAL – PACKAGE #4**

Northern Utilities, Inc. will have the following capacity to release:

- Type of Transportation:** Firm
- Term:** May 1, 2006 – October 31, 2006
- MDQ:** 6,070 Dth/d
- Primary Receipt Point:** Alliance (Joliet)
- Primary Delivery Point:** Dawn

Please provide the value to be paid to Northern Utilities for the above capacity.

Below is a visual representation of Bay State and Northern’s available transportation and storage capacity.



## **FURTHER CONSIDERATIONS**

Bay State recognizes that at times an asset manager will utilize the assets described above for its own purposes. In these instances, Bay State expects that the asset manager will pay for these incremental charges. To the extent Bay State incurs charges that relate to the asset manager's own activity, Bay State will bill those charges back accordingly.

Likewise, when Bay State assigns or agencies storage and transportation assets to an asset manager, Bay State expects services to be delivered as though the asset manager's own activities are transparent to the Company. The Company expects that the services it receives from the asset manager will be identical in nature to those it would receive if the Company were to nominate volumes strictly for its own account.

## **CONFIDENTIALITY**

A respondent may request that information be treated confidentially. The Company and their representatives shall use commercially reasonable best efforts to protect information that is clearly identified as confidential from disclosure to third parties. Bidders should understand that the Company may deem it necessary to disclose non-proprietary information regarding this RFP.

Upon request by a respondent, the Company shall request, in connection with any submission by any authority having jurisdictional oversight responsibilities for the Companies' procurement activities, that information designated as confidential by the respondent be treated as confidential and proprietary in accordance with the applicable state laws and regulations relating to confidential and proprietary materials, and that these materials be protected from disclosure to third parties.

In no event shall the Company be liable for damage resulting from any inadvertent disclosure of confidential information during the period of review and analysis of proposals or during subsequent contract negotiations.

In the event that a potential respondent requires information from the Company that the Company deem confidential, the Company may provide such information but the potential respondent shall first execute a confidentiality agreement in a form to be provided by the Company.

## **BID ANALYSIS**

The Company reserve the right to accept or reject any and/or all proposals, enter into negotiations with selected respondents, and to award the contract to bidders other than the low bidder and in such a manner as will in its sole opinion best meet the

requirements described in this RFP. The Company may elect to delay all or part of the award schedule and to request rebids if necessary.

### **REGULATORY APPROVAL**

Execution of any agreement between the Company and the successful bidder(s) may be contingent upon regulatory approval by the Massachusetts DTE.

### **SUBMISSION**

Responses are due April 17, 2006 at 5 P.M. E.S.T. Please email responses to Don Tulchinsky ([dtulchinsky@nisource.com](mailto:dtulchinsky@nisource.com)).

## Comparison of Storage at Dawn and Michigan (Washington 10)

Using formula provided in U16

Theoretical Market Value = (average NYMEX winter strip - average NYMEX summer strip ("A")) + basis ("B") - time value of money ("C")  
- variable costs ("D")

Example - March 29, 2006 (close of business)

<u>Ontario</u>				<u>Michigan</u>			
<b>A</b>	<b>NYMEX</b>	<b>November 2007 to March 2008</b>		<b>NYMEX</b>	<b>November 2007 to March 2008</b>		
		November	2007 9.911	November	2007	9.911	
		December	2007 10.496	December	2007	10.496	
		January	2008 10.901	January	2008	10.901	
		February	2008 10.891	February	2008	10.891	
		March	2008 10.666	March	2008	10.666	
	Total		52.865	Total		52.865	
	Divide by 5 months		10.573	Divide by 5 months		10.573	US/MMBtu
	NYMEX	April 2007 to October 2007		NYMEX	April 2007 to October 2007		
		April	2007 9.221	April	2007	9.221	
		May	2007 9.034	May	2007	9.034	
		June	2007 9.084	June	2007	9.084	
		July	2007 9.149	July	2007	9.149	
		August	2007 9.16	August	2007	9.16	
		September	2007 9.221	September	2007	9.221	
		October	2007 9.291	October	2007	9.291	
	Total		64.16	Total		64.16	
	Divide by 7 months		9.17	Divide by 7 months		9.17	US/MMBtu
	Average Winter NYMEX less average summer NYMEX			Average Winter NYMEX less average summer NYMEX			
			1.403			1.403	US/MMBtu
<b>B</b>	<b>Basis</b>			<b>Basis</b>			
		Dawn basis for Summer 2007 was	-0.05 (NGX)	Dawn basis for Summer 2007 was	-0.075	(Gas Daily)	
		Dawn basis for Winter 07/08 was	-0.17 (NGX)	Dawn basis for Winter 07/08 was	-0.31	(Gas Daily)	
		Winter basis - summer basis	-0.12	Winter basis - summer basis	-0.235		US/MMBtu
<b>C</b>	<b>Time Value of Money (TVM)</b>			<b>Time Value of Money (TVM)</b>			
		Prime lending rate was	5.50%	Prime lending rate was		5.50%	
		Assume that half of the gas inventory is purchased by July 16 and half of gas inventory is withdrawn by January 15, the capital required to purchase the gas is unavailable for 183 days					
		July 16-31	15	July 16-31		15	
		Aug/Oct/Dec	31x 3 93	Aug/Oct/Dec	31x 3	93	
		Sept/Nov	30x2 60	Sept/Nov	30x2	60	
		Jan 1 - 15	15	Jan 1 - 15		15	
		Total days	183	Total days		183	
		Prime lending rate is multiplied by number of days in storage					
		TVM	0.02758	TVM		0.02758	
		TVM is multiplied by the cost of gas in storage plus basis					
			0.252			0.251	US/MMBtu
<b>D</b>	<b>Variable Costs</b>			<b>Variable Costs</b>			
		Assume \$0.0037 US/MMBtu commodity costs for each of 1 injection and 1 withdrawal cycle					
			0.0074			0.0074	US/MMBtu
		Assume 0.63% injection and withdrawal fuel multiplied by the cost of gas in storage					
			0.115			0.111	US/MMBtu
	Total variable costs		0.123	Total variable costs		0.111	US/MMBtu
	<b>Value of Storage</b>		0.908	<b>Value of Storage</b>		0.806	

difference between Michigan and Ontario storage - 0.102

Difference is equal to the value of transportation & fuel between Washington 10 and Dawn





**Enbridge Gas Services Inc.**  
3000 Fifth Avenue Place  
425 – 1<sup>st</sup> Street S.W.  
Calgary, AB T2P 3L8  
Canada  
www.enbridge.com

**Jared Wells**  
Coordinator, Agency Services  
Enbridge Inc.  
Tel: 403 508 3183  
Fax: 403 231 7390  
jared.wells@enbridge.com

September 21, 2005

Dear Sir/Madam:

**Subject: Term Storage at Dawn, injections commencing April 1, 2006**

Enbridge Gas Distribution Inc. (Enbridge) requires firm natural gas storage for a term of at least 1 year, with injections commencing April 1, 2006. Enbridge requires that this storage meet the following specifications:

**Term:** At least 1 year, but not to exceed ten years (Enbridge is interested in longer term storage to the extent that this will provide savings on an annual per unit basis)

**Location:** Enbridge will deliver gas to Storage Provider at Union Dawn for Injection, and Storage Provider will re-deliver gas to Enbridge at Union Dawn for withdrawal.

**Maximum Storage Balance (MSB):** One or more contracts providing at least 5 BCF – lesser quantities may be considered

**Firm Injection Schedule:** Must include the months of June through September

**Firm Withdrawal Schedule:** Must include the months of December through March

**Firm Injection Curve:** Must allow for at least .75% of MSB per day when inventory is under 75% full

**Firm Withdrawal Curve:** Must allow for at least 1.2% of MSB per day when inventory is over 25%

**Additional Daily Injection/Withdrawal Services:** Services similar as those described above to be provided on a reasonable commercial efforts basis year-round.

**Condition Precedent:** Storage contract(s) with successful storage provider(s) will contain a condition precedent that the Ontario Energy Board (OEB) approves these contract(s) and the recovery of the associated costs from Enbridge ratepayers.

**Termination Provision (contracts longer than one year):** The OEB will be conducting a generic proceeding on storage regulation in Ontario as a part of their Natural Gas Forum. The outcome of this proceeding is expected during 2006 and may not allow for

Enbridge to recover costs associated with market priced contracts for storage. As a result, storage contract(s) with successful storage provider(s) for a period longer than one year will contain a termination provision that should the OEB decide that Enbridge should not have market priced contracts for storage, the remaining years on such contracts would terminate.

Should you be interested in supplying this storage requirement to Enbridge, please submit a proposal stating the MSB and the relevant pricing terms, including demand and commodity charges.

Please submit your proposal no later than **10:30 a.m. Mountain daylight time on Friday, September 30th, 2005** to the attention of Jared Wells at the e-mail address and/or fax number provided below.

Ph: 403 508 3183  
Fax: 403 231 7390  
Jared.Wells@enbridge.com

The successful supplier(s) of the above storage requirements will be determined primarily on the basis of delivered price and subsequent negotiations; however, Enbridge Gas Distribution Inc. may elect not to accept any proposals.

If you have any questions regarding this RFP, please do not hesitate to call me.

Yours truly,

Jared Wells  
Coordinator, Agency Services  
Enbridge Gas Services  
Agent for Enbridge Gas Distribution Inc.

### NYMEX Winter/Summer Differentials January 2001 - May 2006

